Division of Academic Affairs
Technology Fee – ITEP Project Proposal
2016

Proposal Deadline: Friday, January 22, 2016 @ 5:00 pm

Project Proposal Type

Instructional Technology Enhancement Project (ITEP)

Project Title

Providing the "simSchool" Experience for Beginning Preservice Teachers

Total Amount of Funding Requested

$13,800

Primary Project Coordinator

Trudi Gaines
Assistant Professor, Teacher Education and Educational Leadership
College of Education and Professional Studies

1. **Project description.**

This project will consist of UWF Department of Education and Educational Leadership (TEEL) undergraduate students participating in simulated classroom experiences in which they act in the role of the teacher. The software program that will be used is "simSchool," a simulated classroom environment that supports preservice teacher practice in pedagogy and content. simSchool addresses three important factors with respect to prservice teachers' successfully entering and being retained in the teaching profession: 1) developing self-efficacy as a preservice teacher, 2) developing the belief that the teacher's efforts can contribute to developing a positive self-concept by their students, and 3) developing an understanding of and experience with the degree of flexibility needed in an actual classroom experience (Christensen, Knezek, Tyler-Wopod, & Gibson, 2011).

The simSchool user (preservice teacher) is placed into a simulated classroom that can be at any desired grade level, with any desired number of students who have either been randomly selected or have preselected profiles. The user selects from a menu of tasks and interactions with the virtual students, who then respond according to their profile and the interaction continues until the objective has been achieved or a predetermined time limit has been reached. Each student's profile is based upon those typically encountered in a classroom at the selected grade level. These simulated classroom interactions will promote effective quality learning experiences and help UWF preservice teachers identify their learning needs and objectives with virtual students before they participate in actual field experiences or in student teaching. The simSchool simulations will be a part of the EDF3234 Applied Foundations course taken by TEEL undergraduates as well as by students from other departments who are education minors or are enrolled in the Interdisciplinary Studies Teaching and Learning major. Technical issues with using or accessing the software will be addressed to me and I will coordinate identifying a resolution with the simSchool technical assistance team.

An IRB will be submitted in order to use data collected from this project as the basis for a publication.

2. **Description of project alignment with UWF Strategic Plan.**

Priority 1.1 of the UWF Strategic Plan states, " Foster student learning and development to include the knowledge, skills and dispositions that optimize students' prospects for personal and professional success." The project in the this proposal will be an important aspect of the UWF preservice teacher's experience with applying principles and concepts learned in their coursework in the simulated classrooms as a precursor to working with actual students. The measuring instrument that will be used in this project (discussed in Item 5) examines teacher beliefs that contribute to their retention in the profession.

3. **Description of benefits provided:**

a) UWF preservice teachers will learn to utilize an emerging tool for providing practice and experience with potential students in their classrooms, especially with respect to reinforcing the

numerous decision made during an interaction with a student in order to achieve a particular outcome.

b) UWF preservice teachers will have an opportunity to apply concepts and techniques learned to the simulation experience, thereby providing another dimension to their coursework as well as to their experience of what an actual classroom experience might be like.

c) Please see Item 5 below, which provides the various measurements and assessments that will be used.

d) Over the course of the project, approximately 360 UWF students will use simSchool during the EDF3234 Applied Foundations course.

e) Students with special needs and or disabilities will be able to tailor the simulation to meet such requirements as extra time to complete an assignment. They may also be allowed an additional repetition of the simulation depending on the disability. Student who are hearing impaired would not require any special accommodations. Students who are visually impaired would

f) UWF students and faculty will become familiar with using classroom simulations which will greatly broaden the scope and practice of teaching education at UWF. simSchool is not a "place bound" simulation, making it accessible to all UWF preservice teachers regardless of being enrolled in campus-based or all online courses.

4. **Description of how the initiative has a potential scope within and beyond that of the proposing unit.**

Each TEEL undergraduate as well as education minors are required to take the course EDF3234 Applied Foundations of Education early in their course of study as it is a prerequisite for Field Experience 1. A minimum of two classroom simulations using simSchool would be integrated into the activities and assignments for this course. Enrollment in this course over fall, spring, and summer semesters is approximately 180.

Upon receipt of approval from the IRB, a manuscript based on the data collected will be prepared for submission to a peer-reviewed journal and also used as a topic for a conference presentation.

5. **How will success be measured? Provide metrics.**

For each simulation, a series of metrics is offered by simSchool to evaluate each individual session. TEEL students will be asked to write a reflection piece about their experience with each session and to describe any improvements in their experience from the first to the second simulation. In addition, preservice teachers will be asked to participate in a self-report instrument, Teacher Beliefs and Preparation Survey (TPS) (Reidel, 2000) developed specifically for the purpose of measuring their development with respect to instructional self-efficacy, locus of control, and teaching skill. The instrument will be given before and after the two simSchool

experiences. The dimensions measured have been shown to be correlated with teacher retention. The instrument has been provided as an attachment.

6. **Description of resources for the project and projected ongoing resource needs (total cost of ownership for the life of the project).**

a) With respect to hardware required for this project, UWF students will be able to use computers already available to them at various locations on campus or use their personal computers if they wish. Students who are enrolled in online sections of EDF3234 already use their personal computers for coursework.

b) The project would not require any additional software beyond access to simSchool by way of creating an individual account. The individual accounts per year would cost $6,900 for a total of $13,800 for the two-year period of the project.

c) There would be no personnel costs.

7. **Provide the proposed timeline for the project with major milestones and project end dates.**

The project will begin during Summer 2016 semester and be implemented through Spring 2017 semester.

8. **Include a plan for sustainability of the project beyond the initial project period if applicable.**

During the initial project period of 2 years, evaluation will be ongoing. Based upon those evaluations, funding will be requested through the ITEP program and or through funds that may be made available by the college or the department or a combination of the two,

9. **Provide any resource matching which might be provided by organizations with appropriate commitment authority documentation.**

None at this time.

10. **Indicate which individual or group will implement the project (to help determine any additional costs and resource restraints).**

Dr. Trudi Gaines currently is the instructor for all sections of EDF3234. It is possible that another instructor may be assigned to a section during any given semester in which case Dr. Gaines will work with that instructor in implementing the simSchool assignments and accompanying evaluations.

11. **Indicate a lead person (“Principal Investigator”) for the project for all communications and overall responsibility for reporting and fund utilization.**

Dr. Trudi Gaines, Assistant Professor, TEEL

12. **Project proposals should be succinct and submitted to the Technology Fee Committee by the deadline with a notice of submission to the chair and the dean or appropriately designated leadership in the unit (Center Director, etc.).**

Copies of this proposal have been sent to Dr. Jerry Johnson, TEEL Department Chair and to Dr. William Crawley, Dean of the College of Education and Professional Studies.

References

Christensen, Knezek, Tyler-Wood, & Gibson. (2011). SimSchool: An online dynamic simulator for enhancing teacher preparation. *International Journal of Learning Technology,6*(2), 201-220.

Riedel, E. (2000). Teacher Beliefs & Preparation Survey. Minneapolis, MN: Center for Applied Research and Educational Improvement, University of Minnesota.

Appendix

Teacher Belief and Preparation Survey (TPS)

A. TPS instructional self-efficacy scale (five items). Please choose the response that indicates how you feel about each of the following statements. The responses are on a scale of 1 = strongly disagree to 6 strongly agree.

1. If I really try hard, I can get through to even the most difficult or unmotivated students.
2. If a student in my class becomes disruptive and noisy, I feel assured that I know some techniques to redirect him/her quickly.
3. When I really try, I can get through to most difficult students.
4. If one or more of my students couldn't do a class assignment, I would be able to accurately assess whether the assignment was at the correct level of difficulty.
5. If a student did not remember information I gave in a previous lesson, I would know how to increase his/her retention in the next lesson.

B. TPS learning locus of control scale (five items)

1. A teacher is very limited in what he/she can achieve because a student's home environment is a large influence on his/her achievement.
2. When it comes right down to it, a teacher really can't do much because most of a student's motivation and performance depends on his or her home environment.
3. If students aren't disciplined at home, they aren't likely to accept any discipline.
4. If parents would do more for their children, I could do more.
5. The amount a student can learn is primarily related to family background.

C. TPS teaching skill scale (15 items)

Below is a list of different skills you may use in teaching. Please choose the response that indicates how prepared you feel currently to do each one. The responses are on a scale of 1 = strongly disagree to 6 strongly agree.

1. Describing the teaching context.
2. Stating objectives clearly.
3. Stating objectives so they are aligned with goals.
4. Selecting objectives aligned with student needs.
5. Selecting varied and complex objectives.
6. Selecting a broad array of teaching strategies.
7. Sequencing teaching strategies.
8. Allotting time for instruction realistically.
9. Developing high-quality adaptations.
10. Developing a wide array of adaptations.
11. Interpreting on-task behavior accurately.
12. Interpreting assessment results accurately.
13. Connecting teaching and learning.
14. Analyzing my own teaching performance.
15. Making decisions based on the assessment results from my students.

04 ITEP Trudi Gaines

ITS Review Comments

GENERAL COMMENTS:

COMPLIANCE WITH STANDARDS:
No comments.

INFRASTRUCTURE ISSUES:
No comments.

PRICING/COST ISSUES:
No comments.

OTHER SUPPORT ISSUES: If funded, who will students need to notify for assistance with access to software or use of software?

SUGGESTIONS TO PROPOSER:
No comments.

For questions regarding ITS comments, please contact:
Melanie Haveard, Executive Director and CTO
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