

**Project Name**

Enriching Teaching Field Experience Through Technology

**Principal Investigator** Kjersti VanSlyke-Briggs

**Campus** Oneonta, State University College at

**Year of Project** 2013

**Tier** Tier One

**Overview Summary**

Experimentation with mobile apps to bridge classroom/planetarium instruction and outdoor viewing of the celestial sphere by augmenting astronomy instruction with tablet computers. Pilot includes lab assignments, reference object coordinates, and enhanced telescopic eyepiece viewing.

**Outcomes Summary**

JETS article describing pre-service teacher prep experience available [here](#).

**Project Abstract**

The field of education in New York State is changing rapidly, in part because of the State's participation in the nation-wide edTPA teacher performance initiative, which mandates changes in assessment of pre-service teachers and must be addressed in the immediate future. The edTPA assessment, completed during the course of student teaching, requires education students to video record lessons, and to submit the recordings digitally for review (SUNY Oneonta also requires submission to the instructor overseeing the student-teaching placement prior to final submission). As a result, student teachers must have access to sufficient technology in the school districts in which they are placed; this generally includes, at a minimum, a digital camera and internet access adequate to upload videos. No efficient method for collecting these videos currently exists; furthermore, many rural schools, though willing to place student teachers, are not sufficiently equipped to handle their needs. Student teachers may, therefore, not be exposed to the 21st-century teaching and learning in technology skills required by the changing field; in turn, neither are their students and/or host teachers. Furthermore, student teachers from SUNY Oneonta are placed throughout the State, creating a situation in which some students leave their placements much more prepared than others because of

exposure to technology-rich classrooms and instruction.

The SUNY Teacher Education Network (S-TEN) initiative, a newly developed network of institutions with the shared purpose of renewing and improving the preparation of teachers and educational leaders in New York, recently selected four target areas of focus. The performance assessment, mentioned above in the context of the edTPA, is one; two others addressed by this proposal's focus on student teachers are the implementation of the Common Core State Standards and the creation of clinically rich teacher preparation.

#### Partnership School Collaboration

This innovative project creates a student-teaching model that addresses the challenges outlined above by designating a "partnership school" – in the pilot, the local Morris Central School District, where an estimated 31-40% of students are from families receiving public assistance. Though the school currently places SUNY Oneonta student teachers on a regular basis, both for participation observation and student teaching, IITG funding would allow the pilot to formalize the arrangement, beginning in fall 2013 and continuing to the end of the spring student teaching placement. The selected collaborating teacher, Julene Waffle, is a secondary English teacher who currently hosts SUNY Oneonta student teachers; she has made a year-long commitment to the project. The pre-service students who will participate in the project will be selected from a pool of those who will be student teaching in the local area.

The typical senior SUNY Oneonta English Education major conducts 50 hours of field work in the fall Methods course (during which they teach four lessons), followed by student teaching in the spring (accompanied by a seminar course); students are typically not placed in the same school for both experiences. The Partnership would change this structure, placing students in a team of two during fall Methods participation to establish a basis for success to carry over into a student teaching team placement in the same classroom in the spring. Longer experience in one classroom, and using the technology to be deployed by this project, will provide benefits on two fronts: (1) simple improvement in students' comfort in and exposure to the classroom; and (2) the ability of pre-service teachers to provide 21st-century teaching and learning skill development to students in the classroom. This clinically rich experience would allow student teachers to better develop their skills, improve the experience of the secondary students, and make future placement of additional pre-service teachers more likely.

#### Distance Observation and Supervision

Another element of the pilot project's clinically rich experience is distance observation, of both the classroom and the student teachers. Student teachers are currently placed across the State, reporting to multiple supervisors. In most cases, College seminar faculty never meet the on-location host teachers. The current structure also calls for the student teaching supervisor to visit the classroom a minimum of three times in each placement; because of driving time, scheduling conflicts and the inevitable cancelling of a lesson due to weather, three times is generally the upper limit. Faculty members teaching the seminar course that coincides with student teaching typically never view the fall Methods lessons, and only see the student teaching lessons when assigned as a supervisor. In conjunction with in-class observations, distance observation via video would provide more opportunities for immediate feedback, and could be used by faculty and supervisors as a means to view students who are at a significant distance. Recorded distance observation would also allow notation by the supervisor, to be viewed by the student teacher while reviewing the video. Reflection would become much more robust: students would have more observations and would be able to see the video play out, rather than trying to recall events that occurred. The methodology could also be used to record required elements for the edTPA, and would allow collection of standardized lesson feedback data for the English Education program's accreditation by the National Council of Accreditation of Teacher Education.

#### Partnership Technology Deployment

Pre-service teachers can become frustrated when technology applications they explore in coursework on

campus cannot be implemented in the classroom, due to limitations in the support and technology available in public school buildings. Many Education courses spend a large amount of time exploring cloud-based technologies that can enhance the lesson experience (also supported by the Common Core State Standards), such as wikis, blogs, podcasts, glogs, and webquests; literacy classes spend a great deal of time exploring multimodal literacies and the digital literacy skills needed to be successful as teachers and learners. Rural school districts, in particular, often have limited capacity to allow student teachers to carry out these types of lessons. Many 7-12 schools in upstate New York, including the target Partnership School, do not possess the technology needed to support edTPA and to teach technology skills; however, students are increasingly being asked to become engaged with technology. The Partnership would nurture that engagement by allowing student teachers to provide this support to individual students, in the form of mobile devices. Student teachers will see firsthand the effective use of technology in the classroom, classroom students will receive exposure to those technologies, and even the collaborating classroom teacher will find new ways to align units and lessons to enhance student engagement.

For the model Partnership to have the greatest impact upon the collaborating institutions, a suite of technology solutions will be deployed at the Partnership School and with participating student teachers. A wall-mounted camera will allow digital recording of the classroom, and both students and teachers will be provided with an online environment (Vimeo PRO, [www.vimeo.com/pro](http://www.vimeo.com/pro)) in which to save recordings for recall and refinement of teaching prior to final submission for “official” performance assessment. The pilot will also deploy an online planning program available to the supervisor, seminar faculty member, host teacher and student teachers. This program, [www.planbookedu.com](http://www.planbookedu.com), provides ready access to lessons and materials, which is extremely beneficial in a co-teaching environment.

To enhance the secondary students’ 21st-century technology skills, and to prepare them for computer-based testing (including the upcoming Partnership for Assessment of Readiness for College and Careers, or PARCC, Assessment), the project will deploy ten Ultrabook mobile devices, capable of accessing cloud technologies, to facilitate the creation, storage, and transfer of students’ classroom work. The student teaching team will guide students through lesson plans, developed in collaboration with the Partnership School host teacher and the SUNY Oneonta faculty supervisor, that fully integrate the use of the tablets. These devices will allow students to access reference materials and provide feedback in real time, to complete assignments in a paperless fashion, and to become more familiar with an increasingly ubiquitous (and increasingly useful) technology.

Further detail regarding the technology to be deployed is presented in the accompanying budget narrative. Additional funding for expansion of the pilot project to additional schools will be sought from other sources once proof of the Partnership School concept has been established by the pilot project.

### **Reports and Resources**

- [Final project report](#)
- [Article in Journal of Educational Technology Systems](#)
- [Mid-project report](#)

### **Faculty Development**

- Faculty Digital Literacy