Project Name

4C-CITI: Four-College Consortium for Innovative Technology Integration

Principal Investigator Shufang Shi

Campus Cortland, State University College at

Year of Project 2012

Tier Tier Two

Project Team

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- Chris Widdall, SUNY Cortland
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Overview Summary

Pilot of a collaborative model for using relevant digital learning tools within teacher education coursework. This work will be done through mutual mentoring (in instructional design, technical knowledge, and navigating the complexity of multi-layered P-16 institutions), as we use, demonstrate, and then compile exemplary teaching strategies.

Outcomes Summary

The project website details the resources available to assist with teacher preparation and professional development.

Project Abstract

Project Vision

Project Need: The gap in technical knowledge between digital natives and digital immigrants is problematic across the P-16 continuum. Although this gap exists in P-12 (Preschool-Grade 12) education, this gap is nowhere more evident than in institutions of higher education (IHE). IHEs tend to be unresponsive to change, where faculty often view social media associated with Web 2.0, mobile technology, and other cloudbased apps as being disruptive to both learning and teaching (Futrell, 2010). Meanwhile, the few faculty who integrate technology into their teaching are hampered by lack of access to both tools and knowledgeable peers. Sustained faculty modeling of how to effectively integrate technology into instruction is needed to develop technologically informed and adept personnel (Chai, Koh, & Tsai, 2010; Moursund & Bielefeldt, 1999; USDEOT, 2010).

For many IHE faculty, the ubiquitous computer translates into the ubiquitous PowerPoint. Students' technology use too frequently consists of viewing presentations; using proprietary software (e.g., Microsoft® Office); and accessing/submitting work via a Learning Management System. As future teachers hone their disciplines, this minimalist approach to integration reduces hands-on/minds-on embedded technology use. This is especially problematic considering the growing skill base of P-12 students (whom our graduates will teach!).

Our Vision: Our goal is to decrease cross-program insularity and capitalize on inter-campus skills, to make digital age learning a priority in teacher education programs. Our cross-campus mentoring model promotes teacher educators as integrators of interactive Web 2.0 and mobile apps, with dual goals to both deeply engage future teachers with content and pedagogy, while serving as a bridge to graduates' use of relevant technologies in their own future P-12 classrooms.

Collaborators represent 4 campuses, inclusive of community and comprehensive colleges (OCC, Cortland, and Fredonia), as well as doctoral training (UB). Collaborators' combined skillsets and experience will differentiate targeted strategies to teach functional and critical thinking skills – skills required for effective use of information, media, and technology in the 21st century (Partnership for 21st c. Skills, 2009). These will include smart use of varied publishing platforms, mobile apps, social media-based productivity apps, Universal Design for Learning-enhancing tools, digital storytelling apps, and ePortfolio tools.

Project Objectives

Our overarching goal is to pilot a collaborative model for using relevant digital learning tools within teacher education coursework (consistent with our previously cited dual intent). This work will be done through mutual mentoring (in instructional design, technical knowledge, and navigating the complexity of multi-layered P-16 institutions), as we use, demonstrate, and then compile exemplary teaching strategies. We anticipate completing several rounds of modeling and refining teaching practices, by embedding what we envision as project-identified Backpack Tools in collborators' courses (4 / collaborator/term). These instructional experiences will be compiled as project digital Strategy Backpacks during Year 1, disseminating these digital products through campus and SUNY-wide channels. At year's end, the model will be refined for use by a broader population, in Year 2. These goals will be met by achieving the following objectives, as expanded in the Activity Timeline, Assessment Plan, and Communication Plan:
1. Identify project Backpack Tools that have dual feasibility for use in IHE teacher education coursework and in P-12 classrooms, meeting standards for promoting digital age proficiency.
2. Use and document exemplary technology-integrated teaching/learning sequences in our digital Strategy Backpacks, integrating them into multiple courses by collaborators.
3. Exchange instructional exemplars among collaborators, engaging in mutual mentoring and refinement, while (a) documenting the extent they are generalizable across disciplines and programs, and (b) packaging/publishing them as digital Strategy Backpacks (i.e., transportable tools and pedagogy packages).
4. Disseminate Strategy Backpacks across the collaborating campuses, through SUNY portals, and via regional/national conferences (including CIT), communicating with campus FACT2 representatives.
5. Evaluate the project.

Justification/Significance/Funding Rationale

Four variables support the rationale for this project:

1. The project is fully supported by all administrative levels of the hosting campus, SUNY Cortland (see documentation).

2. The project builds a strong faculty team including junior and senior faculty who possess complimentary, diverse expertise from 4 campuses. The 4 campuses consist of two comprehensives (Cortland and Fredonia), with the largest SUNY teacher education program (Cortland) taking the lead; these two campuses have well-established undergraduate teacher education programs, and also grant Master's degrees in education. They are joined by an R1 special education doctoral program (UB), as well as Onondaga Community College, which serves as a feeder to comprehensives. Both UB and Fredonia contribute to the project's curriculum diversity through their special education/ inclusion programs. Building the model across this diverse collaborative expertise tests its viability for future replication.

3. The project has a sound rationale. Its focus on Backpack Strategy products is consistent with what SUNY teacher education graduates will need to know to successfully integrate digital tools in their future practice.

4. This project will establish a replicable model for use by other SUNY campuses, while informing the teacher preparation community of innovative, relevant instruction and skill mapping needed for both accreditation and credibility among P-16 stakeholders.

Reports and Resources

- [Project website](#)
- [Tech Gurus to Improve Digital Age Classrooms](#)

Faculty Development

- Faculty Digital Literacy
- Organizational Models of Faculty Support

Instructional Design

- Cloud-Based Teaching & Learning Environments