

PURSUING DEEP LEARNING:
DIGITAL ENGAGEMENT FOR ENGLISH PRESERVICE STUDENTS

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The PT3 program at Western Michigan University coordinated efforts between the College of Education, Fine Arts and Arts and Sciences to transform the way that preservice teachers, faculty and K-12 intern supervising teachers are learning to engage learners in highly successful, technology supported, standards based learning experiences.

Michelle wanted to be an English teacher because she loved the discussions she had in her literature classes. Intrigued by novels about other cultures, she thought about living abroad after she graduated, working in the Peace Corps or teaching English in Japan. She loved “English because of its molding quality. I can incorporate all of my interests into English and I feel that students can, and should, too.” It is unusual for an English major to be crazy about computers, but, Michelle, more than most, found herself frustrated every time she had to get one of her papers to print out right. She would so much rather be reading, or hiking outdoors, her second love. When she learned that her literature methods course, the capstone class in her program to prepare her to teach high school English, was going to be taught in a computer lab, Michelle was a little worried. She tried to tell herself that it would be all right, that it was only one class anyway. At least the lab wasn’t one of those rooms with large computers in rows. In this room

all of the desks were on wheels, the computers were laptops, and connections were without wires.

In *Teaching the Elephant to Dance*, (1990) James Belasco details the difficulties of institutional change in large organizations. Belasco claims that once an elephant has been trained to stay tied to a stake in the ground, one that they could easily pull up, nothing short of the tent on fire will get them to move beyond the stake. However, even after the equivalent of a tent burning, large organizations, including universities are often slow to change and require absolute dedication and patience to a goal. Thus, we were faced with the challenge of teaching the university with its large number of faculty to dance to the ever increasing beat of the pace of technology.

Over 4,000 preservice teachers, 480 faculty members and 160 K-12 teachers were served by the Western Michigan University (WMU) Preparing Tomorrow's Teachers to Use Technology (PT3) program (www.wmich.edu/pt3). According to an external evaluator's report, "WMU with its PT3 program has paid significant and sustained attention to both infrastructure and its internal ability to support technologically sophisticated teacher preparation. This has entailed faculty development, course and curricular innovation, hardware and software acquisition, and explicit attention to the institutional culture surrounding these advances."

The PT3 program at Western Michigan University grew out of an ambitious goal that every preservice education graduate should be able to meet or exceed the ISTE National Educational Technology Standards for Teachers (NETS-T). Thus, it not only entailed a university wide effort to reach every preservice student and faculty member, but to also reach nearly 1,000 mentor teachers at 55 Michigan school districts who work with WMU interns. Thus, four target groups

were identified: the elementary and secondary education programs, preservice faculty and the K-12 Intern program.

The PT3 staff included representatives from the College of Education, the Colleges of Arts and Science and Fine Arts, the Intern program, other faculty representatives, an Associate Dean, and the evaluator. To coordinate activities, this group met two or three times per months in a variety of committee and subcommittee assignments. Three faculty appointed managers were assigned to work with the College of Education Intern program and the Colleges of Arts and Science and Fine Arts. The WMU PT3 Director, Dr. Leneway, a university research associate, supported the three managers' activities with both students and faculty at every turn and helped to ensure continuing collaboration between the College of Education and the Colleges of both Arts and Science and Fine Arts. The managers and Project Director focused collectively on the goal of faculty development.

In the WMU College of Education, all elementary education students are required to take an introductory technology class. This course was radically redesigned around the NETS-T standards to immediately impact over 600 preservice students per year. The revised curriculum syllabus and class web can be found at www.wmich.edu/pt3. New online tools were incorporated in this model course including the use of Profiler, Homepages, NC learning style survey tool, Taskstream lesson planning, ThinkQuest for preservice teacher , Iwebfolio, Blackboard for course management and Zoomerang for online evaluation.

Because no introduction to technology course existed in the secondary program, focus was placed on working with innovative faculty in each of the 35 different content areas. Through the use of mini grants faculty developed model programs. In addition, a series of ten different

workshops were developed and offered to both Interns and their supervising teachers at the schools where they were Interning.

Michelle's story above, although unique to her, can also be considered representative of thousands of preservice students in one of the largest teacher education programs in the country. The secondary English education program alone has more than 550 majors. PT3 at WMU took aim to create technology proficient teachers from scores of academic programs. A small group of secondary English faculty were identified and supported by the PT3 program to serve as models of technology integration in the curriculum. In addition to mini grants, several faculty members were invited to participate in the ThinkQuest national training and collaborative web development program for preservice teachers, which was funded by a PT3 Catalyst grant with fourteen other university partners.

On the first day of class, Michelle's professor, Dr. Webb displayed the course syllabus with a data projector. The syllabus was on the Internet, and Michelle thought it was cool that so many online resources were a substantial part of the class reading. The syllabus featured links to professional organizations for English teachers, state and national standards, and syllabi of parallel courses at other universities. There was even an extensive website designed to help English secondary teaching. The Internet was shown to be the new media for creating and publishing their writing for a world wide audience. An audience that could eventually include her future tech savvy students.

On the second day of class Professor Webb explained that all of the students were going to make a website targeted at their future students. When he said the basic pages and framework of the sites should be finished in two weeks, a shiver went down Michelle's spine and her neck tightened up. "Do we really need to know so much about computers to teach English?" she

asked. Even though only one student in the class had ever made a web page before, the others seemed to go along with the idea as they followed the professor's instructions and started developing their home page on the classroom laptops. As luck would have it, just as she got a few links on to the page she was making in using Dreamweaver for the first time, Michelle's computer froze, had to be shut down, and her work was lost. She wanted to cry. Her professor emphasized that the technology was there to enhance good English teaching, not replace it, that envisioning a website was more an intellectual process than a technical one. The next week Michelle wrote in the class computer conference,

I have to be honest and say that there is no hard evidence that my website has made progress since Tuesday. However, it has. I have never been a huge computer person, meaning that I don't enjoy spending hours in front of a screen and searching for things. My brain gets overwhelmed easily and when I have too many choices, I seem to come up with no answers. So, rather than go to the computer and try and sift through the millions of images that are out there, I have spent some time thinking about how I want my website to look. I've decided that since I have numerous interests, I would like my background to be a world map of some sort. Then, I want each page to be a different way to "see" the world. As for doing the website, I really think that it will be very useful to know and am glad that I will be learning it.

To Michelle's surprise developing skills at web publishing came quickly. The professor showed the class models of previous student's teaching websites, but did not devote much time to demonstrating techniques of web design. Working in the university's Educational Technology Lab, a cooperative program between the Office of Informational Technology and the PT3

program with one-to-one student technology tutoring support was enormously helpful to students, Michelle included. Four days later she wrote,

I finally made some progress with my website! Wow, I was beginning to wonder if this day would ever come! On Friday, I went to the Technology Lab and got some one-on-one help. It was great, even though I was still lost by some of the computer lingo. I was able to create the outline for my page (meaning that I have a separate page for all the required sections) and I've started putting some images on my homepage. It felt so good to finally feel like I had made some progress. However, that good feeling has worn off over the weekend because I know that there is still a lot to do for my page to be completed. I am confident that it will all work out though, somehow and someday! If any of you are wondering about going to the lab, go! It was a huge help. My website is going to rock the house once I'm all finished!

Less than three weeks into the course students presented their teaching websites to each other. That evening Michelle wrote:

I have to say that I have been truly amazed by everyone's website! They all look so awesome and came together so nicely! I am anxious to get the content on all the pages and utilize what I have learned in this class, thanks to everyone!

As the semester progressed, Michelle was relieved to learn that the course would turn more to the questions of the teaching and learning of literature that she was expecting. However, during the rest of the semester students continued to develop their teaching websites, expanding the content and resources on the site with their future secondary English teaching in mind.

Components of students' professional teaching websites included their developing philosophical statements about their approach to teaching writing and reading, language arts assignments,

specific unit and lesson plans, “handouts” for students, rubrics, class newsletters for parents, and resources for colleagues. As these materials accrued, the teaching website became an electronic portfolio with its audience to include the professor, future employers, and future secondary school students and their parents – the very people Michelle and her classmates planned to teach. It was not surprising that Michelle and her fellow students found prospective employers more impressed by a working website designed for use in the real world and with real world public school students, than by a static collection of undergraduate work in a traditional portfolio.

As a way of providing a better authentic assessment of students mastery of the NETS, the WMU PT3 program decided early on to push for electronic portfolios. Each of the elementary students developed their portfolios using Dreamweaver in the introduction technology methods class. The secondary subject area faculty, like Dr. Webb, were individually encouraged and trained by the PT3 program to do the same with their students. It was explained to them that each student assignment could be woven in an Internet based, portfolio tapestry of the students’ work.

One of the links that Michelle created for her website was the Thinkquest preservice library. This site, built by other preservice students at WMU, will support her students’ development of their own content-based websites. Michelle explains:

For a link on my student web webpage, I chose Thinkquest. This web site focuses on a content-based program where students create their own web pages and submit them to be judged. Students are required to form a team and choose one area (such as humanities or sciences) to focus on for their site. This site is a great tool for both students and teachers because it provides a way for students to participate in their own learning, hands on. Not only will students become knowledgeable in the subject area that they choose, but they will also

become familiar with the software used to create a webpage. Students will become efficient in the building of a webpage and be able to utilize this technology in their future learning.

Also, I especially like the idea of having the students work in teams because it promotes process education and cooperative learning. They will benefit from the ideas and insights that each group member has to offer during the building of their websites.

During the PT3 grant, nearly 400 student teams, representing over 1,500 students at WMU worked together with students from other ThinkQuest participating universities to develop collaborative web sites, and add to the ThinkQuest library (preservice.org/projectlab). The WMU PT3 implementation grant working with the ThinkQuest Catalyst grant helped develop a program that is clearly one of the most advanced in the world in the integration of technology into language arts teacher education.

The WMU English Education program truly takes advantage of the freedom and flexibility that a wireless campus has to offer. The program has designed the English Education Lab (EEL), the classroom of the future, with partial support of the PT3 grant, modeling successful integration of multimedia tools and technology and high speed wireless access into teaching and learning. Two carts of laptops, a data projector, and printers all wirelessly connect to each other and the Internet. Desks and tables in the EEL are mounted on wheels and entirely mobile, allowing the classroom to be arranged in rows, small groups, islands, or theater seating while maintaining the functionality of a computer lab. While the room functions superbly as a traditional classroom, the resulting flexibility makes the EEL a perfect environment for students to collaborate on technology projects.

The home website for the English Education Lab, created by faculty through the support of PT3 mini grants, has emerged as a leading website for the integration of the Internet into English

teacher education. TeachEnglish (www.wmich.edu/teachenglish) has extensive resources for literature and composition instructors who seek to use the internet in their classroom. These resources include streaming video, resources for classroom websites, electronic communities, guides to Webquest development, on-line resources for teaching literature, links to digital archives of literary works, and a host for literary moos. A virtual tour of the English Education Lab documents how studentes are using this innovative learning environment.

As Michelle learned on the first day of class, English education methods courses use on-line syllabi that create a kind of electronic textbook with a wide diversity of Internet sites providing much of the basic reading material of the course. Projects such as Dr. Webb's on-line syllabi were made possible by the PT3 funded mini grants. Through Dr. Webb's on-line syllabi, links were created to professional organizations such as National Council of the Teachers of English to facilitate membership and participation in conferences. For example, students can use the NCTE Co-Learn professional development site with its extensive archive of educational publications for teaching English.

Part of the PT3 effort also provided professional development to faculty on various forms of electronic communication with their students. For example in Dr. Webb's courses, on-line conferencing provides a forum for students to extend class discussions and reflections. Classes of undergraduate aspiring English teachers are paired with graduate classes of currently practicing teachers to discuss a wide range of issues in English education. Leading English educators and book authors have been able to join these conferences, as well. After their methods course is over, students use the conference to stay in touch with each other and their methods professor during their intern teaching.

Michelle's enthusiasm for creating websites for her future classes is typical of the aspiring teachers in the English education program. Guided by dedicated on-line resources, the websites they create offer entry points for their future students, parents, and colleagues. Acting as a digital portfolio for their English and teacher preparation work, these websites are thus designed with real world application in mind. Syllabi, Webquest, links to literary works, on-line learning activities, teaching philosophies are all available on these classroom websites.

(www.wmich.edu/~tchengl/subpages/technology/classwebsite.htm).

WMU English education students are also helping to develop a national online library of K-12 resources. A total of 378 teams of WMU students have worked together to design and publish education related web sites for the ThinkQuest for Tomorrow's Teachers (T3) library (t3.preservice.org/projectlab) The T3 Project combines the practice of the Guiding Partner Approach, a student-centered constructivist pedagogy, with a structural approach to curriculum-based, Internet-enriched activity designed to provide an ideological basis for systems change in preservice education. The emphasis is on exploration, collaboration, and facilitation as future teachers prepare electronic resources to support practicing teachers world-wide. In WMU English education courses, student teams have developed ThinkQuest collaborative sites that emphasize the teaching of literature from reader response and cultural studies perspectives. One student team developed and published a ThinkQuest site on 'Exploring Slavery Through Literature' (t3.preservice.org/T0211442/) that was independently judged as the top T3 preservice ThinkQuest web site in the nation. The ThinkQuest PT3 program sponsored a student to travel to receive the award on behalf of the team and meet with faculty members and student team representatives from the other fourteen ThinkQuest Catalyst PT3 grant participating colleges located throughout the U.S.

Among many new emerging digital engagement practices, digital storytelling is perhaps the most exciting, in that the ancient practice of storytelling is being used in combination with powerful new communication and video technologies. Thanks to support from the PT3 initiative, the English education program is effectively and creatively developing the digital literacy of future English teachers. A digital story is told not only through words, but also through music, photos, video, stock images, text, and sound effects. These media commonly include personal artifacts, i.e. family photos, home video, personal letters, a favorite coffee mug, etc. If the use of multimedia opens up this possibility of expressing oneself through a variety of modalities, it is the use of the computer that facilitates the manipulation, and collating (construction) of these pieces into a whole.

The director of the WMU Third Coast Writing Project Site of the National Writing Project, another WMU PT3 partner, helped facilitate a workshop on digital storytelling sponsored in part by the PT3 grant and held in the English Education Lab. This summer workshop developed digital story collaborations between preservice related faculty, practicing and preservice English teachers. The Writing Project emphasis on authentic expression and “writing what you know” led to the creation of moving digital stories about the teaching of English. (See www.wmich.edu/pt3/dshome.htm for examples.)

Practicing and aspiring English teachers also develop literature-based Webquests drawing on Bernie Dodge’s model. The cultural studies approach to teaching literature that guides the WMU program links literature study to historical, political, cultural, and artistic dimensions and lends itself perfectly to integrating literature study with the Internet. Professor Dodge identified Webquests made by English education students at WMU as outstanding models. One WMU

student Webquest addressed the literature of Afghanistan. It was used by Professor Dodge during the war in Afghanistan as the basis for an international on-line conference on Webquests design.

To support these and other PT3 sponsored digital engagement learning activities for English teachers, new technical support systems have been established. For example, as part of the TeachEnglish web site, an E-Community Forum has been developed (www.wmich.edu/~tchengl/subpages/community/ecommm.htm) that includes a Secondary Worlds MOO (www.wmich.edu/teachenglish/encore). This MOO has become a rich interactive text-based virtual reality learning environment where students can experience literature in new ways. Meanwhile, another PT3 mini grant supported professor in the English Education program used Wikis and other writing efforts in a Best Practices in Writing web site. (www.wmich.edu/teachenglish/subpages/composition/comp.htm) Wikis at WMU are a digital engagement tool being tested as an innovative web-based technology used in collaborative writing projects. As Dr. Bush explains:

A wiki is an open-source web page that can be modified by anyone who has a web browser and a few simple formatting commands at the ready. This may make the wiki the most democratic form of all web publishing, since no special skills are required to create and modify a web page. The wiki is the perfect tool for collaborative work, since wiki pages can be accessed and revised anywhere and anytime. The best example of a collaborative wiki may be the [wikipedia](http://www.wikipedia.org), an online encyclopedia where anyone can post entries. Though still in their early stages, wikis, like blogs, are making the web more dynamic and a little more user friendly.

Jerome McGann, literary scholar at the University of Virginia, has pointed out that “the cultural archive has moved to the web.” The model technology PT3 sponsored mini grant project

have led many more WMU's English Department faculty to work on a variety of projects and bring the enormous corpus and variety of on-line literary and historical archives into the secondary and the university literature classroom. The canon is exploded as students, independently and in groups, explore an enormous variety of literary texts previously not included in literature textbooks or anthologies. Indeed students are now designing specialized and general textbooks, compare original manuscripts and diverse translations to contemporary editions, and developing their own hypertext noted literary works. For example, graduate students in English 680, Advanced Methods of Teaching Literature, also taught in the EEL, have developed and presented classroom research projects on the integration of on-literature archives into classroom teaching MA student and public school English teacher CJ Gilbert developed a unit for her high school sophomores to explore mythology. Using freely accessible digital archives her students engaged in close comparative study of myths from around the world that otherwise would have been inaccessible to them.

The English Education lab has also facilitated the teaching of experimental English courses that allow instructors to imagine new ways to integrate the internet into English teaching. For example, "Literature on the Web" considers the impact of cyberculture on reading, writing, and learning. This innovative course critically examines hypertext writing, internet e-zine publishing, electronic text archives, on-line literature resources, cyber-science fiction and film, collaborative on-line environments, and computer games as literary narratives. The final project in this class is an open-ended opportunity for students to develop websites to experiment with writing hyperfiction, develop dedicated websites for specific literary works or authors, and/or on-line create literature teaching resources.

Another PT3 supported example of rich digital engagement that has also developed in this context is a website created by Dr. Webb and his students in a 500-level postcolonial literature course. Created largely by undergraduates, the Colonial and Postcolonial Literary Dialogues site is now one of the four or five most sophisticated sites devoted to postcolonial literature and is used by students and teachers from around the world who wish to bring multicultural perspectives to literature teaching. The site has also been designed to serve students as a free electronic textbook. (www.wmich.edu/dialogues/)

English is only one example of PT3 supported programs that have reached into many courses and programs at WMU. Its mission has been to ensure that all teacher education graduates at this 30,000 student university meet or exceed the National Educational Technology Standards for Teachers (NETS-T). The NETS-T standards serve to focus the project efforts on providing students with rigorous set of nationally recognized technology knowledge and skills measures. Taken together the PT3 program components constitute a holistic pedagogy-based approach to the integration and use of digital and Internet technologies as tools in the teaching and learning process.

In the end Michelle Ringle's dreams came true. On completion of her degree she spent a rich year teaching English in Japan. At WMU, not only is the elephant hearing the music, but it is now moving in time with the gradually increasing beat of technology. As this chapter demonstrates, the impact in English education has been profound. Many more students and faculty who previously had little conception of the possible links between language arts pedagogy and digital and internet resources now have a full vision of their integration.

References

Belasco, James A., (1990) Teaching the elephant to dance: empowering change in your organization. New York, N.Y.: Crown Press.