"I'm not sharing my work!" An approach to community building

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Abstract: The faculty of a large southeastern university were brought together to form a "community of faculty." With support from a federal grant we set out to build what came to be called the Faculty Toolbox. This website serves as a public repository that brought together the faculty to share and contribute to its library of shared resources. In doing so we developed a faculty development process and trained faculty to work together to improve their technology skills to produce open educational resources (OERs), to be used in our online and campus-based courses.

Introduction

The purpose of this article is to describe the theoretical underpinnings of the faculty development process as undertaken by our School of Education. From its inception our efforts were designed to promote a learning culture, both in our online courses but also within our faculty, through the development of instructional materials. It was assumed if faculty were taught how to design and develop instructional materials, that student learning would be enhanced. Educators define learning in many ways (Ertmer & Newby, 1993); perhaps the most interesting is from a physiological perspective as changes in long-term memory (Kirschner, Sweller, & Clark, 2006). Unfortunately changes in memory are not easily observed, but learning from a successful development process may be observed as the output, or products of that process, in this case the number and quality of instructional products produced.

The School of Education, our faculty, administrators, and support staff including Instructional designers, all worked together to develop what may be described as a "community of practice" (Wenger, 1998). According to Wenger, these communities typically form naturally among individuals who have a common interest. Lave and Wenger (1991) also describe "situated learning," as situated practice by a group of learners. That is, it was felt learners "learn by doing" and communicating what they have learned. Because communication is ephemeral, the act of communicating is not as important as the long-term products of that interaction. This is why the process of Education and learning is so important for it changes human society for the better. Later in this paper we will continue this discussion of relationships and interactions within online courses.

Cognitive Anthropologists have studied human societies and have identified skilled practice as the work of professionals (d'Andrade, 1995). University faculty serve as a community, a "community of faculty" which has a common vision, mission, and set of learned skills that acts as a team to fulfill its mission. Our faculty have a common purpose -- to provide distance learning to the students of the School of Education. This community of practice required advanced technology and communication skills which group members were able to demonstrate to varying degrees. Our goal was to encourage the development of faculty skills, to ensure they were innovative and transfer their newly-learned skills to one another.

However some of our faculty lacked many of the technology skills required to fulfill their role as online educators. In addition, many of our faculty served in remote locations and worked off-site, much of the time, and were not as committed to sharing as they should be. Therefore our problem was to determine how to provide technology training at a distance and in-person, but also ensure they communicated with their fellow faculty, to share their skills and instructional materials. Our solution was to bring together a small group of faculty, the "Faculty champions,"

and trained them to use a variety of technology tools and to share and propagate their innovations throughout the larger community.

Instructional Designers have served as innovation catalysts, or "innovators." While Instructional Designers are support personnel, the development of online course materials, the direction of the technology within the course, and how that technology is used by learners remains the responsibility of the faculty. So we asked our faculty to help develop a solution. As group we drew upon the literature as our guide. Specifically the faculty suggested Roger's Diffusions of innovations theory (Rogers, 1962) but also "Situated cognition" (Brown, Collins, & Duguid, 1989) as a means of developing our faculty development process, to ensure the sharing and support of the School of Education's instructional materials.

Diffusion of Innovations

Everett Rogers was probably the first to consider how groups communicate and propagate innovations like those our faculty began to develop. In his 1962 book *Diffusion of Innovations*, he describes several subgroups within a population that were evident in our community of faculty. These individuals adopted technologies or innovations over time at varying rates. As he describes it, people fall into distinct categories which he has labeled "innovators," "early adopters," the "early majority," "late majority," and "laggards." They adopt technologies, communicate and demonstrate their newly learned skills (the innovation) over time, and to their peers. Rogers' theory provides an outline of how technologies may be accepted, adopted and propagated throughout a community. It should be noted that Rogers' theory is not a theory of learning, as much as it is a communications theory.

When Rogers' theory is considered in the context of Lave and Wenger's community of practice theory, the two show how innovators (experts) as early adopters, communicate their innovations to each other and teach others within a community (our "community of faculty") and the community as a whole "learns." It is in this way that the innovation or technology may be accepted and then "propagated." Once considered together these become a community-based cognitive theory of learning. On some level it is related to "Situated cognition" (Brown, Collins, & Duguid, 1989), because it involves cognitive apprenticeship. While apprenticeship is about skills building and the propagation of learning, it only involves a few individuals. In our case we generalized it a bit because we were working at the community level, in which an innovation begins in the head of an expert (the innovator) and then that knowledge is communicated and propagated throughout the community.

A more thorough review of the literature shows that the Diffusion of Innovations theory is actually a theoretical framework or a series of theories developed by Rogers and others. These theories are highlighted in the recent editions of his classic text (Rogers, 2003). The literature describes Innovation Decision Process theory, Individual Innovativeness theory, Rate of Adoption theory and Theory of Perceived Attributes. Each of these theories offers some insight into how faculty and innovators diffuse an innovation throughout the community. Instructional technologists and others study these theories to gain insight into how innovative instructional technologies are diffused, accepted, and promoted.

The "Theory of perceived attributes" was important to our faculty. This theory ponders how the individual faculty person considers an innovation. A faculty person considers several elements as they are analyzing a new innovation for their course. They consider relative advantage, compatibility, complexity, trialability, and observability (Perkins, 2011). So for instance,

narrated presentations must be compatible with the current learning management system. A faculty person must know how a new technology is useful, more efficient, or makes their job easier. Typical questions that a faculty person considers include: Is it more complex than what I'm already doing? ...or more difficult to learn than what I'm currently doing? Does it create more problems for my students? How will they use it? What is the usability of the product required to record narrated presentations? What is its ability to be tried, and tested within my course(s)? And finally and most importantly, is this doable?

In these situations there is usually an "innovator" (the person demonstrating the innovation) to the "user," learner, or in terms of Rogers theory, the "adopter" (Perkins, 2011). This transaction is something that must occur for the innovation to diffuse and be propagated through the community. It can occur via the Internet or in person, but for an innovation to be adopted, it must be communicated to the end-user. When that faculty person adopts an innovation and begins to discuss it with their peers, then that faculty member becomes the innovator. This is how these innovations propagate throughout a community.

Our application of the Diffusion of Innovation theory was to propose it at the community level to develop a "community of practice" as a collaboration of the faculty and the support staff. Instructional Designers often served as innovators, since are focused on new technologies. Designers provided guidance and support for the development of instructional materials. Faculty members were taught to produce a wide variety of educational resources, and they in turn shared lessons learned with each other. In some institutions Instructional Designers simply build the materials. Our Instructional Designers, like many, simply could not produce everything necessary. Thus our group used a "train-the-trainer" model (Orfaly, Frances, Campbell, Whittemore, Joly & Koh, 2005) to allow the faculty to become self-supporting and learn how to share educational resources. This kind of collaborative learning resulted in a professional learning community provided a medium for faculty and instructional designers to produce educational (learning objects) (Vescio, Ross, & Adams, 2008) for the enrichment of courses and to enhance learning in online courses.

Learning Objects

Benjamin Franklin's Library Company of Philadelphia (Library, 2006) – the first library founded in 1731, was perhaps one of the earliest examples of providing educational resources, free to the public at little to no cost. Today's Internet provides the same service as Franklin's early public library, for it provides a much larger repository of educational resources for free to the masses. Today with have a term for this practice, and call this act of altruism, providing "open educational resources" (OERs) (Caswell, Henson, Jensen, & Wiley, 2008; Wiley & Gurrell, 2009).

Since the early 1990s, the Internet and World Wide Web have made distribution of multimedia easy (Lewis, Moreno, & Large, 2009). Wiley & Gurrell (2009) describe the early history of the Open Education movement. It was Wiley as a graduate student in the 1990s, who popularized the term Open Educational Resource (Wiley & Gurrell, 2009). He is also well known as an advocate of learning objects. Therefore since its inception OERs have been related to the development of Learning Objects. In the 1990s, Educational technologists used the term "learning objects" (LOs) to describe a set of resources to provide instruction (Wiley, 2002). Learning objects could be course components, an entire lesson, or just a component. However there is much debate today even, about what a lesson might be.

Dick, Carey, & Carey (2009) provide us with a set of five learning components which could be used to design learning objects – "pre-instructional activities," "content presentation," "practice," "assessment," and "follow through activities" (p. 172). These components were derived from Gagne's early instructional theory describing the "conditions of learning" (Gagné, 1965). Unfortunately researchers have yet to agree upon a set of principles which describes a lesson, or what learning is for that matter. So is it any wonder that there is plenty of debate about what learning object might be?

In 2002, the Learning Technology Standards Committee (LTC) of the Institute of Electrical and Electronics Engineers (IEEE) developed a set of metadata standards to describe learning objects. However it has been more than a decade since these standards were written. In terms of the Internet, that is a very long time for technologies to evolve, and for no revisions to these standards to be developed. At some point there was even a discussion about combining SCORM (Shareable Content Object Reference Model) with learning objects (McGreal, 2004), but now, even SCORM is obsolete, and soon to be replaced by another more up-to-date learning management system (LMS) API (Application Programming Interface) (ADL, 2014). So although there has been much discussion there is nothing resembling an accepted set of standards to describe today's Internet, learning objects, or learning in general.

The problem with learning objects as currently defined, they could be anything. One definition described learning objects "as small as a grain of sand or as large as an ocean" (Metros, 2005). According to the above mentioned Learning Technology Standards Committee, a learning object does not have to be digital, it could be printed, or visual, it can be anything (IEEE, 2002). The idea is that people can learn from anything, even from something as simple as a bottle of dishwashing liquid. This creates a real problem for those designing and developing "learning objects." So this article argues that rather than using these standards, we should simply provide freely available educational resources, or Open Educational Resources (OERs).

The Faculty toolbox is a collection of web-based open educational resources made available to the public at no cost. While these resources are not registered with the Creative Commons (Creative Commons, 2014) they are available for others use at a distance. "Open educational resources" (OERs) are "teaching, learning, and research resources that reside in the public domain" (p.4)(Atkins, Brown, & Hammond, 2007). After defining OERs these authors go on to describe examples "Open educational resources include full courses, course materials, modules, textbooks, streaming videos, tests, software, and any other tools, materials, or techniques used to support access to knowledge" (p.4)(Atkins, Brown, & Hammond, 2007).

The web was founded on the philosophy that resources should be shared and made available to the rest of the world free at no cost (Berners-Lee, 2000). It has never been considered to be a commercial only entity, and only in mid to late 1990s did commercialization of the web begin in earnest. Berners-Lee originally conceived it as a way for researchers to share research article. Thus it was in this spirit of openness that educators, researchers, teachers, students and many individuals began posting materials freely available for the public to download. Actually, many popular commercial websites like YouTube, Facebook, Twitter or other social sites freely do so as well. This leads us to our next area of discussion, which is Web 2.0. Our efforts were grant funded and included funds for producing social or Web 2.0 materials.

Web 2.0 and a culture of sharing

When we first started developing the Faculty Toolbox, we encountered a lot of resistance to sharing of instructional materials. We found that we needed to do more than simply develop a website. We needed to effect a change in the culture, or change in beliefs (Lerman, Miyagawa, & Margulis, 2008). When first approached faculty members they were enthusiastic about the potential development of resources for their courses, and proudly showed them to colleagues. However, when faculty learned that the expectation was that they would share their newly-created resources with other faculty member, many had an unfavorable reaction. They didn't appreciate that they were working so hard, while others took advantage of the fruits of their labor. One faculty member even expressed discomfort by loudly proclaiming "I am not sharing my hard work!"

The community quickly realized that effecting cultural change was going to be harder than they originally thought. With help from our administrators we were able to clarify that the OERs were to be shared. An argument was made, that learning by its very nature is sharing. Educators often believe they are solely responsible for their courses. However they work within the context of a larger university, and make use of the system that surrounds them. They are but a part of a large system, just as their course is but part of a larger curriculum.

Instructors may believe that they are producing instructional materials for themselves, but these materials are for their students and to promote learning. The argument that faculty do not wish to share their materials is immature. The problem stems from the fact that many faculty are required to publish and expect to get credit for their work. Oddly enough this idea carries over to their instruction as well (Lerman, Miyagawa, & Margulis, 2008). There a simple solution to this dilemma. Give them credit. If their name is applied to the materials, then they can be cited, eliminating and diffusing the problem. Faculty can choose not to share their materials with their fellow faculty (thus the name of the article). However if they are wise enough to do so they find these materials may be repurposed or reused (Wiley, 2000).

Social networking websites allow visitors to share and post materials. Facebook, Twitter, and Wikipedia are all example Web 2.0 websites, as opposed to typical Web 1.0 websites where materials are posted and managed by webmasters. Tim Berners-Lee (2000) and others developed the first web browsers to allow users to read text-based HTML pages, not be able to edit them. Remember the technology of the early 1990s was new, but web browser developers soon realized that documents became static and stale. So innovators like Marc Andreessen and others further developed browsers like Netscape to incorporate scripting languages like JavaScript (Powell, 2000; Reid, 1997). These new browsers allowed for graphics, animation, and interaction with the end user making web-based forms possible. Unfortunately forms only allowed for data entry.

Users wanted more. They wanted to upload images or share videos, and discuss topics. Social sites like Facebook began to become more popular as users began to interact with one another online. Tim O'Reilly and others began to describe these new social technologies as "Web 2.0" (O'Reilly, 2005). YouTube and other sites began to allow visitors to do more than simply visit. They could upload their own materials and comment on what others had produced.

About this same time, universities were beginning to experiment with web-based courses, certificates and degree programs. However it was felt learners needed to do more than simply read, they need to discuss and comment on each other's work (Solomon & Schrum, 2007). So

learning management systems were developed to allow learners to experience this new form of online learning (Bannan-Ritland, Dabbagh, & Murphy, 2000; Dabbagh & Kitsantas, 2012). Soon it became apparent that even learn management systems were not enough, so universities began to house course materials in traditional websites with content management systems (CMSs). Some of these content management systems relied on proprietary technologies like SharePoint. However the openness of the Internet evolved and spawned a "open source" movement (Wiley and Gurnell, 2009), allowing for new technologies like Drupal (Drupal, 2014), WordPress, and Joomla. Today course websites can be housed behind password protection, but why?

Course materials can be useful to those not enrolled in the course. In 2001, many years ago in terms of the Internet, the Massachusetts Institute of Technology (MIT) announced its MIT OpenCourseWare project (MIT, 2003) in which it posted all of its course material for free to the public. Many other universities like Harvard and Berkeley quickly followed suit. Now universities are even posting open-source textbooks (Waseem, 2013). Degree granting institutions only grant degrees to those who receiving credit by the instructor. The web makes knowledge freely accessible, at little to no cost to the institution. So why hide it within "walled gardens?"

Therefore it was felt that posting web-based instructional materials on the public web would benefit more than just our students or local community. It was recognized that people in countries around the world could benefit from the materials housed in the Faculty Toolbox website. This is the point behind open educational resources. There are many stories of the poorest of the poor, a boy born in the African country of Malawi for instance, who refused to remain without and used open educational resources to learn the engineering skills necessary to construct a wind mill to help his community (Kamkwamba & Mealer, 2009). Thus it was with this spirit of free and open communication that our "community of faculty" and the Instructional Designers posted materials on the public web and made it available, to our students and fellow faculty, but also to the world at large.

Presence within online courses

While "presence" within an online course is not easy to observe, it is measured as one's interactions with others (Rourke, Anderson, Garrison, & Archer, 1999). Learners have presence within an online course, and certainly the instructor has presence, but as Rourke et al. argue the content itself can even have presence. At first this may seem somewhat counterintuitive, but it is easy to understand when one discusses the presence provided during narrated multimedia. While we will discuss each with examples, it should be stated that teaching (or Teacher) presence, social presence, and cognitive presence are all interlinked constructs.

Anderson (2005) derives three forms of presence from Moore's interaction theory. Moore (1989) describes learner-learner interaction, instructor-learner interaction and learner-content interaction. These are then related to presence in that learner-learner interaction is social presence, while Rourke et al.'s "cognitive presence" construct is derived from Moore's learner-content interaction. Finally teacher presence (or teaching presence) is derived from learner-instructor interaction.

Learner-content interaction or cognitive presence within each of the courses was provided by the OERs. OERs featured topics and triggering events found within assigned readings. To structure and organize OERs we developed weekly modules (Tenam-Zemach & Lewis, 2012). Modules

included videos, podcasts, links to discussion board postings, WebQuests (Dodge, 1995), narrated presentations, and additional Internet resources (Tenam-Zemach & Lewis, 2012).

Faculty enticed students in the videos and other presentations to take ownership of the course by becoming active participants and engaging in frequent communication with the faculty member and fellow students. Faculty also provided recommendations of additional materials, textbooks, websites, and other resources that would help students master the course assignments and enhance the learning experience.

Social presence is related to the instructor-learner interaction and learner-learner interaction within the courses. This was established through a variety of asynchronous tools, like the discussion board, blogs, and wikis. In addition synchronous class discussions occurred via Blackboard's Elluminate® or Collaborate® communications tools. When a faculty person establishes a clear online presence (teacher or teaching presence) this increases affective learning (Anderson, Rourke, Archer, & Garrison, 2001) and ensures learners develop positive attitudes about the material. It also contributes to a more effective overall educational experience (Lebow, 1993).

As an example of teacher presence or cognitive presence, faculty developed appeared on-screen in videos to provide an overview of the course content (Lewis, Moreno, & Large, 2009) guide them through the learning management system, and show learners how the course was structured and organized (Tobin, Lewis, & Slapak-Barski, 2012). This made the learning modules seem to come alive. Since faculty narrated presentations and lecture-capture videos this helped establish teacher, or cognitive presence. It also promotes a sense of connectedness between the learner and the faculty person (Woods & Ebersole, 2003).

Finally it should be stated that teaching (or Teacher) presence, social presence, and cognitive presence are all heighten the engagement of online learning (Anderson, 2004). OERs supported these efforts since they served as initial content presentation, allowing for asynchronous direct instruction (learner-content interaction). This also prepared learners for synchronous interaction, allowing them to benefit from discussion of the material (learner-learner and instructor-learner interaction), providing a heightened learning experience (Anderson, 2004).

Since OERs presented the content (the flipped-course model) (Barrett, 2012), this also allowed instructors to move beyond the moderator role to answer questions and provide subject-matter expertise, via discussion groups or synchronous instruction. Therefore the OERs (videos and other narrated works) helped establish social, cognitive, and teaching presence.

From a Dick and Carey perspective (Dick, Carey, & Carey, 2009), "flipping the classroom" places the onus of "content presentation" on pre-instructional activities. That is content takes place before class either in person or in synchronous online environments. Flipped materials may be recorded relieving the faculty person from repeating themselves semester after semester. While lectures are an efficient method of presenting instruction, they make interaction more difficult, since learners must interrupt the instructor, to ask questions. Given recorded presentations learners can rewind the recording, allowing for a more personalized pace, or learning experience.

Thus pre-recorded instruction (videos, narrated presentations or other OERs) allows for greater student engagement during synchronous activities. Given this pre-recorded content learners may be paired together in small groups during synchronous classes, to discuss and engage with the

material. There is a potential drawback to this method, for it allows for the "blind leading the blind" (novices leading novices). The role of the instructor in this scenario is circumvent this problem by summarizing discussions by covering common misconceptions, and answer any questions that a learner may have.

Methodology

This project was developed as a collaborative effort between our faculty and support staff. Since it was a federal grant funded project it had several goals. First it was to strengthen graduate programs, by developing a Virtual Success Center. This center was developed as a virtual team to empower faculty to infuse technology into their courses, in order to enhance the School of Education's course experience. The "Faculty Champions" group together with our Instructional design staff resulted in the creation and implementation of a physical and virtual lab.

The mission of the project was for faculty to learn and teach one another. Recall that this project had an underlying philosophy. Given the Diffusion of innovations theory or Situated Cognition, it was hoped that by developing the Champions group, the overall School of Education faculty would be impacted and educational technologies would diffuse throughout the entire community.

Therefore the champions group needed to propagate its innovations to other interested faculty, to interest them in participate in the development of course materials. Champions were assigned partners by pairing experts with novices, and over a series of months (now three years) the group produced a wide variety of instructional materials with the support of the Instructional Design staff. In addition members of our Faculty Champions group were paired with a second group of selected faculty, "Pioneers." Both the Faculty Champions and Pioneers received training and course media-enrichment services from the support team (Instructional Designers and Media support services).

This community of faculty required resources to produce the tangible products required. The technology resources consisted of 16 MacBook Pro® (laptop computers) (one to each champion) each of which was pre-loaded with a variety of instructional development software programs [(Final Cut Pro (Apple, 2009), Techsmith Camtasia (Techsmith, 2009), Adobe Photoshop (Adobe, 2001b), and finally web pages with Adobe DreamWeaver® (Adobe, 2011a)]. Pioneers were not provided additional computers.

It was expected that each Champion would use their computers and associated programs to produce multimedia artifacts for their online courses and would "learn by doing" under the tutelage of their fellow champions, and develop a community of technically capable early adopters. Faculty Champions were invited to meet together for monthly meetings. This group discussed instructional technologies (e.g. Camtasia, Articulate, Join.me, and others). Each month a pair of faculty presented a set of instructional materials to the group.

Instructional designers and others developed the Faculty Toolbox website which provides a rich library of supportive/instructional materials (Lewis & Slapak-Barski, 2014). This public website had the added benefit of making faculty products available to others at a distance. So, in addition to producing online course materials for the university, these web materials were available for faculty and students at other institutions.

Faculty Champions explored new software titles and produce products to be posted within the website for their peers to study and emulate. It was through this participation that our experts would teach novices and further the group's capacity to produce and develop web-based course

materials and multimedia. The Instructional Designers were essential for they supported the group, served as organizers, and also supported the Toolbox website as webmaster (Lewis & Slapak-Barski, 2014).

Faculty champions received guidance and support by the Dean of Faculty, Instructional Designers, community leaders, administrators, staff and others. In developing the Faculty Toolbox all those who contributed brought together the creativity of a community of faculty. Each of these individuals should be applauded for their actions as they developed a community of technically proficient learners. This Faculty Toolbox website serves as the centerpiece for the efforts of the faculty champions and Instructional designers.

One of the most useful types of products presented in the Faculty toolbox were Articulate presentations (Articulate, 2009). These were produced for multiple courses, and reusable in more than one course. These web-based narrated presentations (Microsoft, 2006) employed Adobe Flash (Adobe, 2014) plug-in and used timed animation techniques. Articulate Presenter® converts an existing PowerPoint® presentation into a web-based product ready for upload to a web server. Finally narrated presentations were translated into Spanish for courses taught in Puerto Rico and Latin America.

In addition videos were produced and delivered with HTML5 video. As a part of this activity faculty and staff learned to use video equipment: Teleprompters, advanced lighting, green screens, and the Tricaster® (live video switching equipment). The Tricaster® video equipment (NewTek, 2014) allowed for the development of recorded course materials. Many faculty members produced "introductory course videos." These short videos (Lewis, Moreno, & Large, 2009) provided an introduction to the course and/or course assignments, instructor expectations and course navigation. Some faculty developed other video products that served as "trigger videos" (Cifuentes, Alvarez-Xochihua, Edwards, 2011), which present common scenarios developed for scenario-based instruction (Clark & Mayer, 2013). These provide trigger events and case data via video, and are used to promote group analysis and discussion.

Lastly developers produced videos, which depicted the dissertation process and described how to do research. In addition to educational products the administration promoted the idea of producing outreach videos, which could be used to recruit new graduate students to Nova Southeastern University. However it should be stated that most of the materials produced were produced solely by the faculty and not by expert videographers.

Discussion and conclusions

We have developed a wide range of instructional products and services. In the future we hope to increase sharing of the Faculty Toolbox products among the community. We hope to establish a system in which faculty are able to single-handedly upload their final learning objects to the Faculty toolbox without the intervention of a webmaster. Unfortunately there is only one person posting course materials within the Faculty Toolbox website. This is a very "Web 1.0 method" of managing instructional materials, causing a bottleneck in the development process. Ideally the School of Education would employ a Web 2.0 tools, or a social method of managing course materials. Technical suggested SharePoint, but our public resources have a single URL and are far easier to access from the LMS. What we need is a simple easy Social tool like WordPress (WordPress, 2014) for faculty, or others to upload and share open educational resources (OERs) easily with the world or the learning management system.

The instructional products created through the collaboration of faculty and instructional designers and the lessons learned as a result of this project, all represent the beginning stages in the creation of a Learning Resource Lab. It is hoped that this lab will continue to offer a forum in which to mentor students through hands-on use of the facilities, hardware and faculty software, in the creation of new OERs that can be used as evidence of student learning and enhancement of additional online courses.

As a result, the team has reported a positive impact on many courses, across a variety of degree programs. A community of practice developed between the Faculty Champions, the Pioneers, Instructional Designers, and other professionals. Collaborative groups developed training sessions, hosted by the instructional design team for their fellow faculty, peer-to-peer training among faculty, video production and instructional design support services were developed for faculty. All of this effort was to enrich the School of Education courses, and promote student learning at a distance.

We use the collaborative process as a means to accomplish this enhanced experience. Anecdotal data from student surveys and faculty testimonials provided evidence that students appreciated their new course materials and felt the resulting course experiences were an improvement over previous semesters. Therefore we feel we have been successful in enriching our online courses and hopefully retained more students in the process.

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