

# ***“I’M NOT SHARING MY WORK!”***

## ***An Approach to Community Building***

**David Lewis**

*University of West Florida*

**Judith Slapak-Barski**

*Nova Southeastern University*

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, 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 and 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 com-

---

• **David Lewis**, University of West Florida, 11000 University Parkway, Building 77, Room 138, Pensacola, FL 32514. Telephone: (850) 474-2278. E-mail: DavidLewis@uwf.edu

• **Judith Slapak-Barski**, Nova Southeastern University, 8000 North Ocean Drive, Dania Beach, FL 33004. Telephone: (954) 262-3639. E-mail: js3060@nova.edu

---

The Quarterly Review of Distance Education, Volume 15(2), 2014, pp. 9–20  
Copyright © 2014 Information Age Publishing, Inc.

ISSN 1528-3518  
All rights of reproduction in any form reserved.

mon interest. Lave and Wenger (1991) also described “situated learning” as situated practice by a group of learners. That is, it was felt that 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 article 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” that 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 that 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 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 Rogers’ diffusion of innovations theory (Rogers, 1962) and 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 described 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 described it, people fall into distinct categories he labeled “innovators,” “early adopters,” “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.

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 et al., 1989) because it involves cognitive apprenticeship. While apprenticeship is about skills building and the propagation of learning, it only involves a few individuals. 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 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 more 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. Professors consider 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 professor must know how a new technology is useful, more efficient, or makes one's job easier. Typical questions that a professor 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, to use Rogers' term, 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 person adopts an innovation and begins to discuss it with peers, then that professor 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 they 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 public 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 this act of altruism is called providing "open educational resources" (OERs) (Caswell, Henson, Jensen, & Wiley, 2008; Wiley & Gurrell, 2009).

Since the early 1990s, the Internet and the Web have made distribution of multimedia easy (Lewis, Moreno, & Large, 2009). Wiley and 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" 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 even today about what a lesson might be.

Dick, Carey, and Carey (2009) provide us with a set of five learning components that could be used to design learning objects—"preinstructional activities," "content presentation," "practice," "assessment," and "follow through activities" (p. 172). These components were derived from Gagné's early instructional theory describing the "conditions of learning" (Gagné, 1965). Unfortunately researchers have yet to agree upon a set of principles that 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 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, Application Programming Interface (ADL-NET, 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, is that 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 can be printed or visual—it can be anything (Institute of Electrical and Electronics Engineers, 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 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 Creative Commons (Creative Commons, 2014) they are available for others' use at a distance. "OERs are "teaching, learning, and research resources that reside in the public domain" (Atkins, Brown, & Hammond, 2007, p. 4). Atkins et al. 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).

The Web was founded on the philosophy that resources should be shared and made

available to the rest of the world 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 articles. 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 started developing the Faculty Toolbox, we encountered a lot of resistance to the 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 a change in beliefs (Lerman, Miyagawa, & Margulis, 2008). When first approached, faculty members 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 members, many had an unfavorable reaction. They did not 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 shar-

ing. 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 professors are required to publish and expect to get credit for their work. Oddly enough this idea carries over to their instruction as well (Lerman et al., 2008). There a simple solution to this dilemma: give them credit. If their names are 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. 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 examples of Web 2.0 websites, as opposed to typical Web 1.0 websites where materials are posted and managed by webmasters. Berners-Lee (2000) and others developed the first web browsers to allow users to read text-based hypertext markup language 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 allowed data entry only.

Users wanted more. They wanted to upload images, share videos, and discuss topics. Social sites like Facebook began to become

more popular as users began to interact with one another online. 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 learning management systems were not enough, so universities began to house course materials in traditional websites with content management systems. Some of these content management systems relied on proprietary technologies like SharePoint. However the openness of the Internet evolved and spawned an "open source" movement (Wiley & 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 (2003) announced its MIT OpenCourseWare project 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 grant degrees only to those who receive 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 windmill 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 (2004) 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 professor 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 appeared on-screen in videos to provide an overview of the course content (Lewis et al., 2009) guide students through the learning management system, and show learners how the course was structured and organized (Tobin, Lewis, & Slapak-Bar-ski, 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 all heighten the engagement of online learning (Anderson, 2004). OERs supported these efforts because 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) (Berrett, 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 et al., 2009), "flipping the classroom" places the onus of "content presentation" on preinstructional activities. That is, content takes place before class either in person or in synchronous online environments. Flipped materials may be recorded, relieving faculty 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, prerecorded instruction (videos, narrated presentations or other OERs) allows for greater student engagement during synchronous activities. Given this prerecorded content, learners may be placed 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 instructor in this scenario can 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. Because it was funded by a federal grant 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, created and implemented a physical lab and a 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 3 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 loaded with a variety of instructional development software programs (Final Cut Pro, Techsmith Camtasia, Adobe Photoshop, and Adobe DreamWeaver). Pioneers were not provided additional computers.

It was expected that the Champions 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 professors 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. These were produced for multiple courses, and reusable in more than one course. These web-based narrated presentations employed Adobe Flash 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 allowed for the development of recorded course materials. Many faculty members produced "introductory course videos." These short videos (Lewis et al., 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) that 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.

Last, 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 the school. However, it should be stated that most

of the materials 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 social method of managing course materials. SharePoint was suggested, but our public resources have a single URL and are far easier to access from the learning management system. What we need is a simple, easy social tool like WordPress for faculty or others to upload and share 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 resources 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 retaining more students in the process.

## REFERENCES

- ADLNET. (2014). Advanced Distributed Learning Initiative: Project Tin Can. Retrieved from <http://www.adlnet.gov/tla/tin-can/>
- Anderson, T. (2004). *Theory and practice of online learning*. Athabasca, Alberta, Canada: Athabasca University Press.
- Anderson, T., Liam, R., Garrison, D. R., & Archer, W. (2001). Assessing teaching presence in a computer conferencing context. *Journal of Asynchronous Learning Networks*, 5(2), 1–17.
- Atkins, D. E., Brown, J. S., & Hammond, A. L. (2007). *A review of the open educational resources (OER) movement: Achievements, challenges, and new opportunities*. Retrieved from <http://www.hewlett.org/uploads/files/ReviewoftheOERMovement.pdf>
- Bannan-Ritland, B., Dabbagh, N., & Murphy, K. (2000). Learning object systems as constructivist learning environments: Related assumptions, theories, and applications. In D. A. Wiley (Ed.), *The instructional use of learning objects*. Bloomington, IN: Agency for Instructional Technology.
- Berners-Lee, T., & Fischetti, M. (2000). *Weaving the web: The original design and ultimate destiny of the World Wide Web by its inventor*. New York, NY: Harper Collins.
- Berrett, D. (2012). How “flipping” the classroom can improve the traditional lecture. *The Chronicle of Higher Education*, Retrieved from <http://chronicle.com/article/How-Flipping-the-Classroom/130857/>
- Brown, J. S., Collins, A., & Duguid, S. (1989). Situated cognition and the culture of learning. *Educational Researcher*, 18(1) 32–42. doi:10.3102/0013189X018001032
- Caswell, T., Henson, S., Jensen, M., & Wiley, D. (2008). Open educational resources: Enabling universal education. *The International Review of Research in Open and Distance Learning*, 9(1). Retrieved from <http://www.irrodl.org/index.php/irrodl>
- Cifuentes, L., Alvarez-Xochihua, O., & Edwards, J. C. (2011). Learning in Web 2.0 environments: Surface learning and chaos or deep learning and self-regulation? *Quarterly Review of Distance Education*, 12(1) 1–21.
- Clark, R. C., & Mayer, R. E. (2013). *Scenario-based e-learning: Evidence-based guidelines for online workforce learning*. San Francisco, CA: Pfeiffer.
- Creative Commons. (2014). Creative commons U. S. Retrieved from <http://us.creativecommons.org>
- Dabbagh, N., & Kitsantas, A. (2012). Personal learning environments, social media, and self-regulated learning: A natural formula for connecting formal and informal learning. *The Internet and Higher Education*, 15(1) 3–8. doi:10.1016/j.iheduc.2011.06.002
- d’Andrade, R. G. (1995). *The development of cognitive anthropology*. Cambridge, England: Cambridge University Press.
- Dick, W., Carey, L., & Carey, J. O. (2009). *The systematic design of instruction* (7th ed.). New York, NY: Allyn & Bacon.
- Dodge, B. (1995). WebQuests: A technique for Internet-based learning. *Distance Educator*, 1(2), 10–13.
- Drupal. (2014). *Drupal - Open Source CMS | Drupal.org*. [Computer program] New York, NY: Author.
- Ertmer, P., & Newby, T. (1993). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 6(4), 50–72. doi:10.1111/j.1937-8327.1993.tb00605.x
- Gagné, R. M. (1965). *The conditions of learning*. New York, NY: Holt, Rinehart & Winston.
- Kamkwamba, W., & Mealer, B. (2009). *The boy who harnessed the wind*. New York, NY: Morrow.
- Kirschner, P. A., Sweller, J., & Clark, R. E. (2006). Why minimal guidance during instruction does not work: An analysis of the failure of construc-

- tivist, discovery, problem-based, experiential, and inquiry-based teaching. *Educational Psychologist*, 41(2), 75–86. doi:10.1207/s15326985ep4102\_1
- Institute of Electrical and Electronics Engineers. (2002). Learning object Metadata (July 2002 - final draft). Retrieved from [http://ltsc.ieee.org/wg12/files/LOM\\_1484\\_12\\_1\\_v1\\_Final\\_Draft.pdf](http://ltsc.ieee.org/wg12/files/LOM_1484_12_1_v1_Final_Draft.pdf)
- Lave, J., & Wenger, E. (1991). *Situated learning: Legitimate peripheral participation*. Cambridge, England: Cambridge University Press.
- Lebow, D. (1993). Constructivist values for instructional systems design: Five principles toward a new mindset. *Educational Technology Research and Development*, 41(3), 4–16.
- Lerman, S. R., Miyagawa, S., & Margulis, A. H. (2008). OpenCourseWare: Building a culture of sharing. In T. Iiyoshi & M. S. Vilay Kumar (Eds.), *Opening up education: The collective advancement of education through open technology, open content, and open knowledge* (pp. 213–227). Boston, MA: MIT Press.
- Lewis, D., Moreno, M., & Large, J. (2009). Introductory videos: An analysis of student use patterns. *Journal of the Research Center for Educational Technology*, 5(3), 68–79.
- Lewis, D., & Slapak-Barski, J. (2014, March). *The faculty toolbox: A tool for promoting faculty use of instructional technologies*. Paper presented at the Society for Information Technology & Teacher Education International Conference, Jacksonville, FL.
- Library. (2006). Library Company of Philadelphia. Retrieved from <http://www.librarycompany.org/>
- Massachusetts Institute of Technology. (2003). MIT publishes 500th course on OpenCourseWare. Retrieved from <http://ocw.mit.edu/about/media-coverage/press-releases/sept30OCWPDF.pdf>
- McGreal, R. (2004). Learning objects: A practical definition. *International Journal of Instructional Technology and Distance Learning*, 9(1). Retrieved from [http://www.itdl.org/Journal/Sep\\_04/article02.htm](http://www.itdl.org/Journal/Sep_04/article02.htm)
- Metros, S. E. (2005). Learning objects: A rose by any other name... *Educause Review*, 40(4), 12–13.
- Moore, M. G. (1989). Editorial: Three types of interaction. *The American Journal of Distance Education*, 3(2), 1–7. doi:10.1080/08923648909526659
- O'Reilly, T. (2005). What is Web 2.0. Retrieved from <http://oreilly.com/web2/archive/what-is-web-20.html>
- Orfaly, R. A., Frances, J. C., Campbell, P., Whittemore, B., Joly, B., & Koh, H. (2005). Train-the-trainer as an educational model in public health preparedness. *Journal of Public Health Management and Practice*, 11(6), S123–S127.
- Perkins, R. A. (2011). Using Rogers' theory of perceived attributes as a framework for understanding the challenges of adoption of open educational resources. *International Journal of Humanities and Social Science*, 1(18), 59–66.
- Powell, J. (2000). Lessons from the browser war (1995-2000). *PC Computing*, 13(3), 64.
- Reid, R. H. (1997). *Architects of the web*. New York, NY: Wiley.
- Rogers, E. M. (1962). *Diffusion of innovations*. Glencoe, IL: Free Press.
- Rogers, E. M. (2003). *Diffusion of innovations* (5th ed.) New York, NY: Free Press.
- Rourke, L., Anderson, T., Archer, W. & Garrison, D. R. (1999). Assessing social presence in asynchronous, text-based computer conferences. *Journal of Distance Education*, 14(3) 51–70.
- Solomon, G., & Schrum, L. (2007). *Web 2.0: New tools, new schools*. Washington, DC: International Society for Technology in Education.
- Tenam-Zemach, M., & Lewis, D. (2012, March). *Weekly lesson pages: How to develop and structure your online course*. Paper presented at the 23rd annual Teaching Academic Survival Skills Conference, Ft. Lauderdale, FL. Retrieved from <http://www.davidlewisphd.com/publications/2012-TASSWeeklyLessonsPage.pdf>
- Tobin, M., Lewis, D., & Slapak-Barski, J. (2012). EDU 600 Welcome video. Retrieved [http://apps.fischlerschool.nova.edu/toolbox/instructionalproducts/EDU600/\\_welcome/default.htm](http://apps.fischlerschool.nova.edu/toolbox/instructionalproducts/EDU600/_welcome/default.htm)
- Vescio, V., Ross, D., & Adams, A. (2008). A review of research on the impact of professional learning communities on teaching practice and student learning. *Teaching and Teacher Education*, 24, 80–91.
- Waseem, F. (2013). University System of Maryland to test open-source pilot program. Retrieved from [http://www.diamondbackonline.com/news/local/article\\_220ab632-1415-11e3-8930-0019bb30f31a.html](http://www.diamondbackonline.com/news/local/article_220ab632-1415-11e3-8930-0019bb30f31a.html)
- Wenger, E. (1998). *Communities of practice: Learning, meaning, and identity*. Cambridge, England: Cambridge University Press.

- Wiley, D. (2002). Learning objects need instructional design theory. In A. Rossett (Ed.), *The ASTD e-learning handbook: Best practices, strategies and case studies for an emerging field*, (pp. 115–126). New York, NY: McGraw-Hill.
- Wiley, D. A. (2000). Learning object design and sequencing theory. Retrieved from <http://opencontent.org/docs/dissertation.pdf>
- Wiley, D., & Gurrell, S. (2009). A decade of development. *Open Learning*, 24(1), 11–21.
- Woods, R., & Ebersole, S. (2003). Becoming a “communal architect” in the online classroom: Integrating cognitive and affective learning for maximum effect in web-based learning. *Online Journal of Distance Learning Administration* 6(1) Retrieved from <http://www.westga.edu/~distance/ojdl/spring61/woods61.htm>