

An Institution's Training Program on Blended Learning: Development, Innovation, and Impact

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Two descriptors: blended learning, faculty development

Abstract

Blended learning, drawing from best practices in both online and face-to-face learning, is on the rise in higher education. Research shows that faculty needs professional development and support to get prepared for successfully developing and teaching blended courses. This article will share how an institution has re-developed a training program on blended learning based on learning theories and faculty feedback, along with its innovation for an effective process and greater learning impact.

Introduction

Blended learning, drawing from best practices in both online and face-to-face learning, is on the rise at colleges and universities. *Campus Technology* conducted its first "Teaching with Technology" survey in 2016, and 71% of faculty respondents reported using a mix of online and face-to-face environments to teach. The New Media Consortium Horizon Report (2017) has identified blended learning design as a top trend to drive technology adoption in higher education.

Northern Virginia Community College is the largest public educational institution in Virginia and the second-largest community college in the United States. Because of the heavy traffic issue due to its location in the nation's capital metro area with six campuses, the institution has an increasing need for blended courses. To meet this special need and prepare faculty to teach blended courses, NOVA Online has re-developed a training program on blended learning offered for all the college faculty. The mission of NOVA Online is to design and implement excellent and innovative instruction and student support services for online learners. It also supports instructional technology initiatives college-wide through certification programs, courses, workshops, small group consultation, and individualized training.

The re-developed training program is a three-week online course offered at Blackboard as Blackboard has been the learning management system that is used in the college. Since the online course needs extensive knowledge and skills in Blackboard, Blackboard proficiency is required as a prerequisite for the workshop on blended teaching and learning.

Literature Review

Blended learning is the "thoughtful integration of classroom face-to-face learning experiences with online learning experiences" (Garrison & Kanuka, 2004). Blended learning describes "learning activities that involve a systematic combination of co-present (face-to-face) interactions and technologically mediated interactions between students, teachers and learning resources" (Bliuc, Goodyear, & Ellis, 2007, p. 234). Blended learning also denotes a reduction in face-to-face contact or seat time (Vaughan, 2007; Picciano, 2009; Mayadass & Picciano, 2007). For example, Picciano (2009) included "a portion" (institutionally defined) of face-to-face time [be] replaced by online activity" (p. 10). Allen and Seaman (2016) categorized traditional teaching as having 0% of content delivered online and blended teaching as having 30-79% of content delivered online, but the definition appears to be broad and vague. However, researchers recognized benefits of a broadly structured definition of blended learning since it allows institutions to adapt and use the term as they see fit and develop ownership of it (Sharpe, Benefield, Roberts, & Francis, 2006, p. 17). Dziuban, Hartman, and Moskal (2004) argued that "blended learning should be viewed as a

pedagogical approach that combines the effectiveness and socialization opportunities of the classroom with the technologically enhanced active learning possibilities of the online environment, rather than a ratio of delivery modalities” (p. 3). Heckman, Osterlund, and Saltz (2015) pointed out blended learning frameworks are often anchored by the dimensions of time and place, describing interaction modes as either same time or different time and either same place or different place. They stated that “both such a focus on delivery mode could sometimes run the risk of being instructor-centered or content-centered, rather than student-centered” (p. 4).

Blended learning has many benefits from the perspectives of instructors, students, and institutions. Graham, Allen, and Ure (2005) described three general benefits of blended learning: 1) enhanced pedagogy and learning effectiveness, 2) increased access and flexibility, and 3) improved cost-effectiveness and resource use. Blended courses make instructors explore new and different ways to teach by integrating activities from both face-to-face and online learning environments. Blended learning may provide pedagogical benefits such as increased learning effectiveness, satisfaction and efficacy (Garrison & Kanuka, 2004; Graham, 2013; Means, Toyama, Murphy, Bakia, & Jones, 2009). Blended learning provides students increased access to higher education offerings because of its convenience, less seat time, and a flexible schedule (Vaughan, 2007). Blended learning also save institutional resources such as classroom space and parking space, and thus make teaching and learning more cost-effective (Graham, 2013; Moskal, Dziuban, & Hartman, 2013).

Lloyd-Smith (2010) claimed that blended learning has emerged as a potential solution to address the diverse learning needs of community college students. Community college students tend to have multiple responsibilities outside of school, making flexible education an important determinant. Blended courses offer the convenience and flexibility of fully online courses without the loss of faculty and student personal interaction (Sitter et al., 2009). Xu and Jaggars (2011) found that students from blended courses were similar to those from face-to-face classes and they equally tended to complete their courses. Blended learning provides students social connections that enhance communication, thereby supporting student retention and success (Hijazi, Crowley, Smith, & Shaffer, 2006). Studies indicate that blended courses can be effective in promoting student success, but only if they are designed and delivered with care.

For faculty who have never taught online, blended courses can be challenging to design and teach as they need to develop new technological and pedagogical skills for this teaching modality. Research shows that professional development is crucial to prepare and support faculty to teach blended courses (Owens, 2012). Whether they take a low-impact blend or a medium-impact blend or a high-impact blend design approach (Alammary, Sheard, & Carbone, 2014), faculty must have the technological skills to design and maintain the online portions of blended courses. They also must have pedagogical skills needed for instructional methods unique to blended learning. Dziuban, Hartman, and Moskal (2004) concluded that maximizing success in blended learning requires a planned and well-supported approach that includes a high-quality faculty development.

Re-development and Impact

Constructivists believe that learning is an active process in which learners construct new ideas or concepts based upon their current and prior knowledge. Vygostky’s zone of proximal development indicates that learning is a social process in which people can develop more skills through peer interaction or collaboration than learning alone. Since adult learners are self-directed learners and instruction for adult learners should be task-oriented and related to the real world, adult learning programs should be developed to capitalize on the experience of all participants.

Constructivism and adult learning theories guided the re-development of the training program from its face-to-face format into a three-week online format offered on Blackboard. The initial training program required faculty to attend a series of face-to-face workshops on blended learning and then develop a blended course for review to earn a certificate of completion. The training program would often take faculty more than one semester to complete. The training process was long and the workload was very high for both faculty participants and professional training staff in terms of teaching and learning, course development, course review, and training data record management. Feedback from faculty and professional staff showed an ineffective training program. To enhance the training program and increase the learning impact, the training program has been redeveloped into a three-week online course that integrates active learning, social learning, project-based learning, and authentic learning into a new program to better meet the institutional need.

In addition to active learning supported by constructivism and social learning supported by Vygostky’s zone of proximal development, the online course also addresses authentic learning and project-based learning to make up for the initial course development and course review components in the previous face-to-face training program. Authentic learning is often referred to as real-life learning that is associated with a real-world problem or situation. It encourages learners to create a tangible and useful product, and provides learners with opportunities to

connect directly with the real world beyond the classroom. Project-based learning is an instructional approach that is centered on learners. It is defined as “an instructional approach that contextualizes learning by presenting learners with problems to solve or products to develop” (Moss & Van Duzer, 1998, p. 1). Project-based learning is different from traditional teaching as it emphasizes learning through learner-centered, interdisciplinary, and integrated activities in real world situations (Blumenfeld et al., 1991; Solomon, 2003).

Besides constructivism, project-based learning is also theoretically anchored in situated cognition (Brown, Collins, and Duguid, 1989). Brown, Collins, and Duguid (1989) think that learning is maximized if the context for learning resembles the real-life context in which learning materials will be used. Learning is minimized if the context for learning is not similar to the context in which the learning will be used. Project-based learning integrates experiences, knowledge, real-world contexts and situations into an active learning process for the creation of a tangible artifact, which produces meaningful learning.

The three-week online course covers all the basics about blended learning that the initial face-to-face workshops offered, and it also provides faculty an opportunity for active learning, social learning, project-based learning, and authentic learning without an additional course review. Three weeks of online learning makes faculty commit a certain amount of time to finish all the learning activities and assignments during the three weeks. Two out of three weeks provide faculty with opportunities to discuss and share topics such as understanding of blended learning, benefits and challenges of blended learning, examples of blended learning activities, and issues faced while designing a blended course. Taking a project-based learning and authentic learning approach, the online course requires faculty to develop and create artifacts such as a blended learning syllabus, a blended learning course design blueprint, and three modules of blended learning for a real-world course faculty have taught in a face-to-face format or a new course faculty are going to teach as a blended course. Furthermore, all the learning materials are accessible to all learners with captions available for all the videos in the course. After the three weeks of online learning, faculty will gain basics about blended learning as well as course design and hybrid pedagogy through hands-on learning at Blackboard.

After faculty complete the online course, they will receive a certificate of completion through the online registration system. At the end of the online course, anonymous survey is conducted with all the faculty participants to collect feedback about the online course and their learning experience. Below is a brief summary of course evaluation surveys conducted with 304 faculty participants from Spring 2016 through Fall 2017:

Survey Items	Mean (n=304)
Requirements for successfully completing the workshop were clearly stated.	4.7
The workload was appropriate.	4.5
I was able to regularly share ideas with others.	4.4
I feel prepared to develop a blended course now.	4.6
The workshop increased my confidence in my ability to teach a hybrid course.	4.5
I would like to recommend this workshop to a friend or colleague.	5.0
I'm satisfied with the workshop.	4.7

The survey is composed of questions with a Likert scale from 5 points for “Strongly Agree” to 1 point for “Strongly Disagree” and open-ended questions for faculty to share comments and thoughts about the online course. During the two years from Spring 2016 through Fall 2017, 304 faculty have completed the online course and 184 faculty have completed the survey, which yields a response rate of 61%. The survey data shows a very positive result about clear requirements of the workshop communicated to faculty, appropriate workload, peer learning through regular sharing with other fellow faculty members, feeling prepared to develop a blended course, and increased confidence to teach a blended course. All faculty respondents were very satisfied with the workshop and all of them would like to recommend the workshop to a friend or a colleague. Some qualitative data from the open-ended questions in the survey are listed below to show faculty’s positive experience about the online format of training, timely response from the facilitator, peer learning opportunity, project-based learning, and the online course itself.

Samples of positive comments on the online training format:

What I liked most was the simply ability to participate at any point and at any hour. That makes a huge difference to me in being able to complete the workshop. I think the course is fine as is, likewise the technology.

I really like the online format. That's the only way it can make me complete the hybrid training course while teaching my own students.

Samples of positive comments on the facilitator of the online course:

I appreciated the instructor's readiness in dealing with questions the class had and the regular communication.

I was and am very satisfied with the course. Professor Wang was and is a great Instructor. She is very warm, lovely, and friendly. She works very well with everybody. She is patient, understanding, and understands human problems. She is highly educated, very competent, and very good at what she does. A great Instructor, and a great asset to NOVA.

I really liked the quick, detailed feedback from the instructor. I enjoyed the discussion boards and collaboration with fellow faculty. I cannot think of anything specific to improve the course.

Excellent course. The optional materials are extremely helpful, and applicable. Anyone not well versed in hybrid pedagogy would benefit from the course. The instructor is extremely helpful and provides very timely and appropriate feedback. I especially appreciate the quick responses to emails (same day, usually within a short period of time).

Samples of positive comments on peer learning opportunities:

What I like most was the ability to share with others and get a wider view of the difference between hybrid and online courses.

I like the fact that this workshop used discussion boards and required its students to reply to another students thread, I think that is an excellent idea. I like the outlines explaining what is going to happen in class and online.

With regards to what I liked most, I thought the implementation of the discussion boards was particularly nice because it allowed me to get a sense of how other disciplines are implementing the hybrid format into their classrooms.

Samples of positive feedback on the course:

When I see that a course is well organized and easy to navigate, I know that it's going to be a good course. Then when I reviewed the content for each module, I knew that it would help me as I design the online component of my courses.

I liked everything about the course. The videos and readings were interesting and to the point. Hong communicated with us often and was very approachable. The technology was not over my head which was a major relief. I also appreciated that Hong said to start out using what we know and add to it later down the line.

I love the way the instructor gives us detailed instructions and it made it easier for us to understand what was expected from us for each assignment. I am very happy to learn about the resources available to us via this course. Thank you.

I liked the assignments that help to frame the shape of an actual course that we would create.

The course was informative and Hong's instructions were very clear and easy to follow.

In addition to re-developing the face-to-face workshops into an online course, the training registration system has also been improved to make the registration process and data management easier. The initial registration was through emails and then an online system. Training staff had to spend lots of time to trouble shoot technical issues for registration and manage the training data in spreadsheets. After the online system is changed into a home-grown system for registration and data record management, more time is saved from technical support for registration and more effective data record management is achieved.

Conclusion

Innovation takes many forms in both theory and practice, and its core value lies in problem solving and evolving (Magna & Buhan, 2018). Examples of this type of innovation for evolving include researching new and better ways to enhance teaching, changing education delivery to appeal to a new target population, and implementing new ideas to bring about better outcomes. Sustaining innovation refers to a process, system or modification that improves an existing product or system. It makes the process better and more efficient as well as more beneficial to the end users. Our sustaining innovation is achieved through both course re-development and new registration system development. By redeveloping the face-to-face workshops into a three-week online course with a focus on authentic learning, peer learning and project-based learning, data showed increased learning access, learning effectiveness, and faculty satisfaction and thus better support them to teach blended courses. By developing a new registration system to manage enrollment roster, course evaluation survey and certificates of completion, operation process showed reduced time in technical support for course registration, training data management, and certificates management. Our intention to improve training and solve a problem faced in the training program resulted in a greater impact in both faculty learning and training process management.

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