

The Faculty Toolbox: A tool for promoting faculty use of Instructional Technologies

Abstract: The faculty of the Fischler School of Education were brought together to form a group of "Champions" (a community of faculty) by the Title V-B initiative. With Title V-B support they set out to build what came to be called the Fischler School Faculty Toolbox. This "Faculty Toolbox" serves as a web repository and brought together the School of Education faculty in the hope that they would contribute to its library of shared resources. Faculty worked together and taught one another to improve their technology skills and produced reusable instructional products which adjuncts and others could use in a variety of online and campus-based courses.

Introduction

Those who led the Faculty champions had a preconceived intention, to develop a "community of practice" (Wenger, 1998). As Wenger describes it, they 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, learners "learn by doing" and as learners interact learning becomes a social activity. Cognitive Anthropologists have studied human societies and have identified skilled practice as the work of professionals. University faculty can also serve as a social group, who has a common purpose, and a set of learned skills. In this case, our Faculty Champions group has a common purpose -- which is to provide distance learning to the students of the Fischler School of Education. This community of practice (a "community of faculty") require technology skills which group members are able to demonstrate to varying degrees.

Everett Rogers (1962) was perhaps the first to consider how groups propagate innovations like those our faculty developed. In his book *Diffusion of Innovations*, Rogers describes several subgroups who were evident in the Fischler faculty. These individuals adopt technologies or innovations over time. As he describes it, there are "innovators," "early adopters," the "early majority," the "late majority," and "laggards." These individuals communicate their new ideas (the innovation) in this case the use of various educational technologies, via communication channels over time, and via a social system.

Rogers' theory provides an outline of how innovations are popularized within the community and how these innovations are propagated. However Rogers' theory is not a theory of learning, as it is only a communications theory of how innovations are communicated and propagated. However Rogers' theory can be combined with that of Lave and Wenger's to show how innovators (experts) are early adopters and communicate that innovation to teach others within a community of practice (our "community of faculty") and their social learning is propagated throughout the community. This is now a shared model of situated learning as it begins in the heads of the experts within the community, and the activity of those experts as these individuals teach/demonstrate the innovation to novice group members. In this way learning is shared and propagated through the community of practice. Our vision is that the development of course materials is not a "solo" endeavor, but should include technical support from media services staff, and instructional designers.

Method

Our mission as group leaders was to develop a "community of faculty" and infuse educational technologies into their online teaching. We did so by developing a group or community of early adopter faculty champions. It was our hope that by developing this group of Faculty Champions that the overall

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In addition to the social nature of learners and learning this community of faculty, must have the necessary tools to produce the products required. Therefore faculty were loaned MacBook Pro laptops. This Virtual Lab of laptop computers included several software titles that would aid in the development of instructional materials. It was expected that they produce multimedia artifacts for their online courses and would “learn by doing” under the tutelage of their peers, and hoped that they would further develop a community of technically capable faculty.

The Champions group members were invited together for monthly meetings. This group discussed web technologies (e.g. Prezi, Join.me, Camtasia, Articulate) and each month another faculty person would present a set of instructional materials to the group. Champions were assigned partners, experts with novices, and over a series of months, and now years the group with the support of the Instructional Design staff produced a wide variety of products.

Title V-B Instructional designers and others developed the Faculty Toolbox website as a repository or library of shared resources between the Champions and others. This had the added benefit of making those materials available to the public, so in addition to producing online course materials for Nova Southeastern University, these web materials were available for other institutions.

The Faculty Toolbox web site provides a rich library of supportive materials. Faculty would explore new software titles and produce products for to be posted within the website for their peers to study and emulate. It was through this participation that experts with technology would teach novices to further enhance the group's capacity to produce and develop web-based course materials and multimedia. The Instructional Designers are critical for the success of this group enterprise as they served as group organizers, but also support and Toolbox webmasters.

Faculty developed narrated Articulate presentations for multiple courses. These web-based presentations employed Adobe Flash and used timed PowerPoint animation techniques to promote student learning. These presentations were narrated by the faculty champions, which also promoted a sense of connectedness between the learner and the faculty person. In addition, narrated presentations were translated into Spanish for courses taught in Puerto Rico and Latin America.

Faculty were supported by the hardware and software purchased by the Fischler School Title V-B grant. Individuals within the group edited video with Adobe Premiere, Final Cut and Camtasia, graphics with Adobe Photoshop, finally web pages with Adobe DreamWeaver. Much of what was produced was delivered with HTML 5 video (both for students and faculty). 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 video equipment provided allowed for the development of course materials. Many faculty produced introductory course videos (Lewis, Moreno, & Large, 2009). These short videos provide an introduction to the course, may cover course assignments and initial instructor expectations. Some faculty developed other video products that served as “trigger videos.” These are common scenarios developed for scenario-based instruction (Clark & Mayer 2013). These are trigger events that provide case data via video. This form of instruction is often used to promote group analysis and discussion. Lastly other developers produced videos which depicted the dissertation process and described how to do research. Recall that many learners in the student population were novice graduate students learning 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. These were also produced with faculty champions, and initially with the aid and support of expert videographers and then later posted in the faculty toolbox. However it should be stated that much of the materials produced was produced solely by the faculty and not expert videographers who were initially called in to provide support.

One final side note is that on occasion there is a downside to this model which is probably encountered by all communities of practice. That is at some point even advanced early adopter/experts have limited levels of expertise and must rely on other, perhaps outside individuals for help and support. However this “downside” is what makes exploring new technologies or new innovations so engaging, albeit sometimes frustrating.

Conclusions

The faculty champions received guidance and support by the Dean, the Title V-B 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 learners. Each of these individuals should be applauded for their actions as they developed the community of technically proficient learners. This Faculty Toolbox website serves as the centerpiece for the efforts of the faculty champions and Instructional designers. It should not be underestimated as it gives the Fischler School a solid web presence, and a shared resource for its faculty and students. Finally the Fischler School Faculty Toolbox can be found at <http://apps.fischlerschool.nova.edu/toolbox/index.html>

References

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