

Multiple approaches to Faculty Development: How to play the game with the cards you've been dealt

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Abstract: This paper considers three common approaches, or faculty development models, depending on teaching delivery (face-to-face, hybrid, and distance delivery). It also describes the support strategies that succeed with these models. The paper proposes faculty development occurs in a sequence from face-to-face support to distance delivery. The paper develops these models based on three variables: faculty expertise, the time-place dimension, and the Faculty/Designer ratio. Finally the article describes support strategies to meet the needs of varying Faculty/Designer scenarios.

Introduction

While all faculty development organizations work with faculty in person, many are also reaching out to faculty at a distance. This has led the authors to consider scenarios of faculty development that mirror online course materials. The idea is that some institutions have a face-to-face model, some a hybrid model, some have a primarily online model of faculty development, and some use all three. Different universities and colleges promote different kinds of course formats, but if they promote fully online courses do they also design online support systems that promote faculty development in this area? Increasing numbers of faculty teach online courses, and as they do so, it has become increasingly difficult to promote faculty development to these individuals who are on campus less and less often. Some adjunct faculty rarely, if ever come to campus. In an effort to serve these faculty, perhaps it is a good idea to use the same techniques of online education to promote faculty development at a distance. While this idea is not new in online learning; faculty development may be hybridized (Brooks, 2010) even promoted at a distance. But rather than simply discussing hypothetical or theoretical possibilities, this article provides strategies for promoting faculty development, which may be used with either adjuncts or full-time faculty, through a variety of communications technologies commonly used in the delivery of online courses.

Some faculty are resistant to online instruction, while others embrace it, therefore faculty support centers and organizations must provide services to suit individual needs. This paper proposes that faculty development is a continuum from a face-to-face to distance delivery. So it is important that instructional designers and faculty development centers provide walk-in service, or meet faculty members in their own offices, if that is where they are most comfortable. This is the face-to-face service that many have enjoyed for decades, but as more faculty work from home or out of town, they increasingly need support at a distance. Those individuals that are more or less self-sufficient tend to figure out systems on their own, but still on occasion need a little "just-in-time" support. Thus, online recordings, workshops, and demonstrations are necessary and supportive for faculty at a distance. In addition to technical strategies (e.g. how to use the learning management system) online faculty support must provide pedagogical strategies for how to present sound instruction and to develop quality course materials.

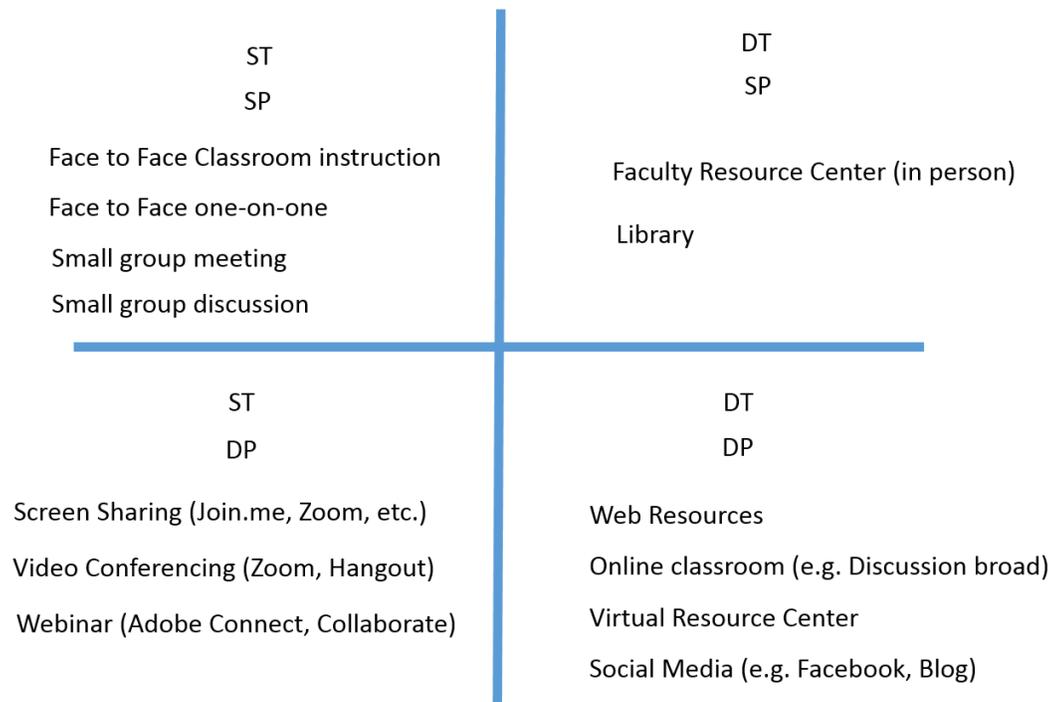
Time and Place

There are a variety of ways in which time and place alter the strategies an Instructional designer can employ. In addition they can interact with faculty asynchronously, or at different times and places. Coldewey's Quadrants (Coldewey, 1986) (See Fig. 1) provide a graphical model of strategies. Faculty support may be offered

synchronously or asynchronously along a continuum of time and place. One may meet in the same-time, same-place (ST-SP) (e.g. face-to-face group meetings); in a different-time, same-place (DT-SP) (e.g. a faculty resource center); in the same-time, different-place (ST-DP) (e.g. video conferencing); or in different-time, different-place (DT-DP), such as faculty receiving support via email (Coldeway, 1986; Simonson, Smaldino, Albright & Zvacek, 2009). In the case of support offered online, the key to successful online interaction, or rather successful online faculty development, is to use the appropriate strategies according to geography or time (Simonson, Smaldino, Albright & Zvacek, 2009). Note the strategies in Figure 1.

Figure 1. Coldeway’s Quadrants

Coldeway’s Quadrants



If Coldeway’s Quadrants were compressed into a single dimension of time and place, faculty support would be from an in-person and same place (synchronous) mode, to different time and place (asynchronous) mode. While this may seem like an over-simplification, it is a way to make a comparison of support strategies.

Figure 2. Time and place dimension



Faculty Designer Ratio

In every instructional design position there is a predetermined, optimal ratio of faculty to Instructional designers. This ratio alters the strategies a designer may successfully implement. If, for instance, the designer works in a small College or center with 20-50 faculty that situation is quite different from that of a designer who works in an institution-wide position, in which they potentially support thousands of faculty. These Instructional designer positions are on the ends of a continuum (See Fig. 3).

Figure 3. Faculty/Designer ratio



With differing ratios, the designer will alter the strategies they employ. If for instance the designer provides support to thousands, they can use one of several means and still be successful. They can teach in-person workshops or courses. But, that will only reach a limited number of faculty, due to the limitation of class size (typically a class size of 20 or so). If the designer moves toward the online environment, they can increase the number of faculty they reach with recorded materials. However this drives the class to a more self-paced instructional mode, decreasing designer-faculty person interaction, and potentially increasing the transactional distance of that interaction. A MOOC, for example, allows for greater numbers but also greater transactional distance (Dron & Anderson, 2012). Thus there is a limitation to how many faculty each Instructional designer can successfully support.

Faculty expertise

Faculty must combine technical and pedagogical skills to teach a course and Instructional designers may support faculty by providing pedagogical and technical support. It is this combination of pedagogical and technical skill that is our next dimension, that is, each faculty person sits along a continuum from novice to expert.

Figure 4. Faculty expertise level

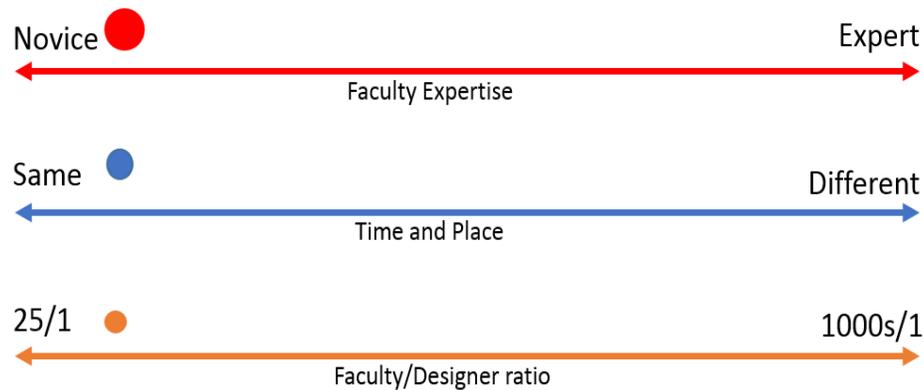


Designers help support and encourage faculty as they develop their technical or pedagogical expertise. Designers guide faculty toward designing more engaging and interactive assignments and activities for learning. For instance, faculty may have technical expertise and know how to produce course materials with PowerPoint, Photoshop, Dreamweaver, or the learning management system. Generally speaking, technical skills are useful in presenting or developing course content. On-campus courses typically offer lecture-based components in combination with other activities, however they are increasingly leaning toward small group activities to engage learners. In addition, faculty are becoming more experienced in the design and development of assignments or assessments, be it a discussion board, WebQuest, or paper assignments. This is a measure of their pedagogical skills, or their ability to provide effective instruction. Clearly, no course should be only content presentation. Faculty must include assessments or activities; therefore, faculty must combine their technical and pedagogical skill to produce a course. This is the dimension we call “faculty expertise.”

Face-to-face faculty development model

The Face-to-face model of faculty development is distinguished by the in-person service that faculty receive. This is made possible by the fact that these faculty and instructional designers are on campus most of the time. The Face-to-face faculty development model is envisioned as a comprehensive approach to: (a) help faculty perfect or acquire teaching and technological skills, and (b) apply them effectively in their teaching. Because faculty can meet with a designer in person, there are two potential approaches. Faculty can meet one-on-one with the Designer or come together in groups. Some universities offer faculty development courses to teach technical or pedagogical strategies. These may be offered to an initial group of early adopter faculty members, and may be paired with weekly course-media enrichment and hands-on practice sessions between instructional designers and faculty, individually or in groups. Ultimately, the goal is to help faculty improve the quality of their teaching, whether in online, face-to-face or hybrid courses.

Figure 5. Scenario 1 - Primarily face-to-face



When the ratio between instructional designer and faculty members is low, faculty have greater access to the Instructional designer. All faculty are learners, whether they realize it or not, so a class size analogy applies here. In other words, a situation where there is one instructional designer serving only 18-20 faculty members is an ideal state (Orellana, 2006), even from the faculty person's perspective, because it is a more personal, the designer is able to grant them more attention during a time of need. However, this case is probably rare. Since much of what occurs between SMEs (Subject Matter Experts) and Instructional designers occurs face-to-face, thanks to the low faculty/designer ratio, it is possible to implement a faculty development approach as the first step in developing a community of practice.

One strategy is the building and facilitating of a Faculty Development course based on Knowles' (1990) theory of andragogy. According to Knowles' defined characteristics of adult learners, adults are: self-directed (which facilitates adoption of innovative techniques in faculty members); enter educational programs with a diverse set of experience and knowledge (faculty typically have different pedagogical and technical skills); become ready to learn once they encounter the need to know or do something (most faculty need to improve both their teaching skills and the content of their courses); are either life, task, or problem-centered (especially those who are joining efforts with administrators to increase enrollment); and are motivated by either internal or external factors, better quality of life, and self-actualization (e.g. when a project taps into faculty's internal motivation and external motivation).

When learners understand the reasons why they are participating in a certain learning activity, their own learning can be expedited (Morrison, Ross, & Kemp, 2004). Further, learning occurs in context, and transfer of learning happens when what is learned has an impact on performance (Perkins, 1992). To ensure that the expected transfer from learning to application does occur, the Faculty Development course is designed to provide the appropriate context for immediate hands-on application of newly acquired skills. To that end, the Faculty Development course features the following modules: faculty as students, faculty as course facilitators, and faculty as course builders. In the "faculty as students" modules, faculty experience a hybrid course from the perspective of the students, and learn pedagogical frameworks and instructional design basics focusing on adult learning theory, student engagement techniques and active learning. In the "faculty as course facilitators" modules, faculty are required to build lessons based on the instructional design principles they learned in the faculty as students modules, and then facilitate those lessons face-to-face and fully online. They facilitate the fully online segments using their individual hands-on sandboxes created to accompany the Faculty Development course. In the "faculty as course builders" modules, faculty learn the basics and mechanics of course building, and complete hands-on projects where they are required to build content modules and upload them to their sandboxes in the Learning Management System (LMS). After they build their own modules, they enroll their classmates as students in their own hands-on sandbox and participate as teachers and students in each other's hands-on sandbox.

One strategy that faculty learn during the Faculty Development course is Lecture Capture. This technique incorporates different elements of traditional lectures and provides opportunities for content management in online learning, as the resulting product is hosted in an LMS or made available through the Internet. Lecture capture can be done in a variety of degrees and complexity, and is helpful for face-to-face and online learning environments. Recorded lectures can be used for Flipped Classroom instruction, which is reinforced by the use of multimedia to improve presentations typically delivered from the podium; as content for online courses; as content review after the

initial lecture has been delivered; or as a repository of materials available to all students, including those who were absent.

Lecture Capture is another strategy that allows faculty to share products with each other. This eventually contributes to develop a “community of practice” (Wenger, 1998). According to Wenger, these communities typically form naturally among individuals who have a common interest. Within the specific set of circumstances afforded by the low faculty/instructional designer ratio, and considering that typically SMEs have various degrees of technical and pedagogical expertise, it is possible to envision a twofold goal: to encourage SMEs to acquire or perfect the necessary pedagogical and technological skills to enhance the quality of their teaching, and for them to be innovative and transfer their learned skills to one another (Lewis and Slapak-Barski, 2014). By pairing the teaching of the course with faculty course-media enrichment sessions, a community of practice starts to develop as faculty, share with each other the products they have created by applying their newly acquired pedagogical and technological skills.

Taking advantage of the variables of the Face-to-face faculty development model, faculty members gather in large faculty meetings, small meetings between the instructional designer and faculty members, and during the Faculty Development course meetings. When necessary, they also receive support via telephone or via online screen-sharing sessions. Support during telephone or virtual meeting sessions usually focuses mostly on questions related to the LMS mechanics, Lecture Capture, and software titles such as Camtasia and Articulate.

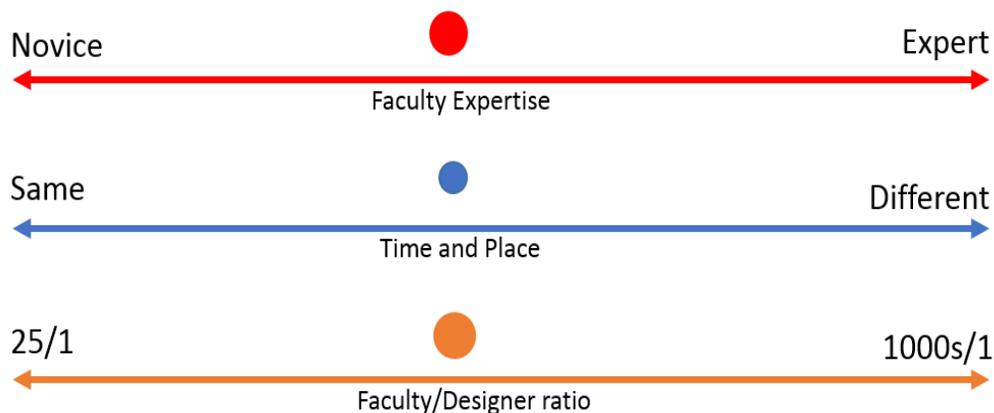
An additional support strategy is the creation of a website that serves as a repository of course materials. The website is a collection of Open Educational Resources (OERs), which are made available to the public at no cost through the use of the Internet. “Open educational resources” (OERs) are “teaching, learning, and research resources that reside in the public domain” (p.4) (Atkins, Brown, & Hammond, 2007). Many of the OERs created are educational videos, which are not registered under a Creative Commons license (Nerantzi, 2013), but are available for others use at a distance (Lewis & Slapak-Barski, 2014). Through this website, faculty are able to share their products with each other, and engage in discussions and unintended mentoring sessions among faculty, as they share how they went about creating a particular final product, including which steps were taken to upload those products to the website.

Hybrid (both face-to-face and distance) faculty development model

As we have discussed there are several scenarios or models of faculty development (See Fig. 2). This hybrid approach exists because faculty are not always on-campus, but still may find that they need support, both in person and online. While there is some overlap between these scenarios, how faculty are supported is the defining characteristic of the model, and what sets the model apart from other similar models. Again there is a continuum of instruction/support that occurs in all of these models, and there is some overlap found in all organizations. In this scenario faculty may be supported in person (ST, SP) as in the Face-to-face model, but also at a distance as in the Fully online model (DT, DP), but also in the intermediate modes (ST, DP & SP, DT). As institutions begin to move course materials, courses, and programs online, fully online faculty development materials are becoming more and more common. However, those who teach fully online courses are the ones with the most need for support. Because this situation exists many universities and colleges have begun to use distance technologies to promote faculty development.

When we consider the hybrid model (see Fig. 6) we see a situation similar to what most instructional designers support. They work in a position in which there are more than just a couple of faculty in their area of responsibility. An Instructional designer’s area of responsibility is not usually for all the faculty at that institution. Most are only tasked with a degree program or at most a college. When this is the case Instructional designers work with faculty of all sorts to produce classroom-based or blended materials, and fully online materials within that degree program. So this instructional designer is often tasked with working with all levels of faculty expertise from the most novice graduate assistant to the most senior faculty person. Therefore they must assess a faculty person’s level of “faculty expertise” and respond accordingly to provide the appropriate level of service in response to that person’s needs. However it should be stated this is not easy, and this is where Instructional designers make mistakes and either misjudge a faculty person to either over, or under compensate as they provide service.

Figure 6. Scenario 2 - Hybrid model



In this hybrid model there are a variety of strategies that an Instructional designer can consider within a single day. These Designers may work with someone to develop blended instructional materials in the morning, perhaps to consider classroom strategies like clickers, web videos, or screen projectors. Later in that same day, that designer may find they are supporting faculty (and students) in synchronous sessions (e.g. Blackboard Collaborate® or video conferencing) (Blackboard, 2014). Finally it would not be unusual to see that same Designer concluding their day, by helping faculty develop fully online course materials using the same communications technologies (e.g. Blackboard Collaborate or videoconferencing or other technologies), but now in the context of the learning management system.

As an example strategy of this type of faculty development model, this section considers the support that was provided at a College of Education. In that role, the authors were asked to develop a website to promote distance learning, but while doing so, developed a faculty community of practice to support the site and faculty community. This effort resulted in faculty developing course materials, that they contributed to a college wide “Faculty toolbox website” (Lewis & Slapak-Barski, 2014). This was done to help faculty develop a community of practice. Since faculty in this scenario do come on campus, but have limited time, they have a chance to meet one another in person, and also meet online. Thus this model calls for the design of activities to help organize the community of practice, both online and in person. Faculty are encouraged to gather and come together in a synchronous mode, to design and develop course materials, to have one-on-one and large group interactions, to document their efforts in an online forum, and finally they are supported by instructional designers and by one another via screen sharing.

Because this is a mixed scenario, synchronous online interaction is also possible. Therefore an important faculty support strategy is to encourage faculty to gather together, and meet online via video conferencing technologies like Google Hangouts, or Zoom (Google, 2014; Zoom, 2014). The authors tried this strategy and faculty met regularly and brought in examples of their work to discuss them with the larger Champions group.

Certainly peer-to-peer support occurs amongst faculty (Georgina, & Olson, 2008) either synchronously or asynchronously. Peer-to-peer support can occur in a variety of ways, either by email, web 2.0 applications (e.g. blogs, wikis, or social networking applications), the telephone or via screen sharing. This provides “just-in-time” instruction both in person and at a distance between and amongst peers. In addition, faculty may be called and provided support. While many may not consider a phone call to be distance delivery of faculty support, under the right circumstances, this can be described as synchronous support at a distance. However, the phone support has its limitations. It’s difficult to demonstrate how to do something by only speaking to someone, however support may be provided via screen sharing applications, to overcome this limitation at a distance.

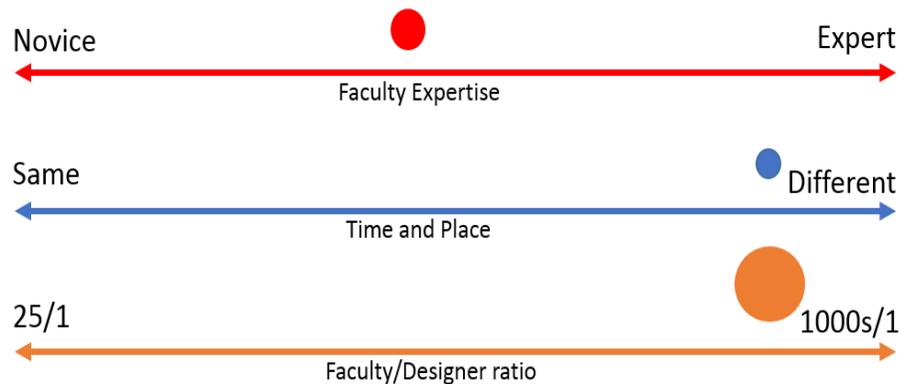
Technologies support faculty development, but just as in online course development, technologies only provide a means of communicating, and only simply make communication interactions more efficient (Clark, 1994). However, a side effect of using communications technologies to support faculty, is that they can learn how to use the synchronous technology, and may ultimately employ them to deliver online courses. So in the case of screen sharing, if a faculty support person were to use a program such as Zoom, as a video conferencing/screen sharing technology (Zoom, 2014), then that faculty person may decide to adopt the technology for course delivery. Finally, Instructional designers may also design and develop web-based resources to support faculty at distance. These may

include but not be limited to: blended or fully online courses (either self-paced or instructor led); recorded demonstrations or worked-examples of how to perform procedures (Lewis, 2005); self-contained learning objects that describe classroom-based or online course activities (Vescio, Ross, & Adams, 2008), tips and tricks to grading or providing learner feedback; or any number of other types of Open Educational Resources (OERs) (Atkins, Brown, & Hammond, 2007). Again what distinguishes this model from the others is how faculty are supported. This hybrid model of faculty development allows for in-person and faculty development at a distance.

Many remote/Distance faculty development model

With the growth of online learning and the increasing prevalence of online courses, the need for promoting quality online instruction becomes greater. Large multi-campus universities hire hundreds of instructors to handle the great volume of students, which can reach tens of thousands. However, time scarcity and competing priorities make it hard for faculty to participate in “live” events whether these are face-to-face or online (Stevens, 2005). Many faculty teach from a distance and are not on campus, making geographical distance an additional barrier. The final case is when the Faculty/Designer ratio is the most extreme (see Fig. 7), with only one designer per many, perhaps thousands of faculty. Moreover, learning needs can be diverse in a large faculty population. For Instructional designers who find themselves significantly outnumbered by many remote faculty needing support, designers should not despair, but apply a combination of strategies for this situation.

Figure 7. Scenario 3 - Many at a distance



A combination of overlapping strategies is needed to provide different degrees of support. By providing diverse online learning opportunities, faculty development becomes flexible enough to overcome the three barriers of faculty expertise, time-place, and the ratio of faculty to designers. Therefore, this final model proposes the use of five strategies: (1) Just-in-time resources; (2) online courses; (3) social media; (4) adaptive environments; and (5) synchronous events.

1. Just-in-time learning resources allow faculty to find information quickly and build their knowledge at their own pace. These resources include those produced by the instructional designer, such as guides and tutorials, but also subscription-based proprietary services (e.g. Atomic Learning and Lynda.com) (Atomic, 2014; Lynda.com, 2014), and some Open Educational Resources (OERs). Just-in-time learning resources are flexible and allow for a great deal of learner autonomy. However, just-in-time learning resources are often merely used as job aids to perform specific tasks and faculty are often unaware of what they do not know, therefore they may run into difficulty defining, articulating their problem. This strategy caters best for self-directed learning.
2. Instructor-led online courses offer learning paths, which provide faculty with structure and goals. Since faculty expertise varies, some may find the structure of the course to be supportive, while others may find it restricting.
3. Social media provides opportunities for social learning, that is, learning with others and learning from others. It helps build communities of learning and practice. It allows for faculty autonomy in their learning and instructional and technological development while still providing some structure through the conversations and social interaction (Wodzicki et al., 2012).

4. A fourth element is an adaptive, automated, semi-structured learning environment. A self-paced adaptive learning environment is an environment that continuously evaluates learner's progress and allows for guided non-linear progress at the speed that is most convenient to the learner. Unlike just-in-time learning resources, a self-paced adaptive learning environment offers different routes for advancement, based on its interaction with the learner. The learner can choose how to advance, but is guided and supported by the automated learning environment. In other words, adaptive learning provides some structure that is flexible and allows for more autonomy than that of online courses, since it provides options and recommendations, rather than a set path.
5. Finally, in addition to the four asynchronous faculty development elements described, for immediate support there is a need to supplement learning with synchronous faculty development. Phone and online VoIP (voice over IP software such as Skype or Google voice), webinars (using platforms such as Blackboard Collaborate), IM (instant messaging software such as Gmail chat, and Skype), and video sharing (using software such as Google Hangouts) are some of the options for synchronous learning events that help complete and enhance the main core of asynchronous faculty development (Blackboard, 2014, Google, 2014; Skype, 2014). Mobile learning (m-learning) takes an important place in this strategy by providing an additional ubiquitous channel (El-Hussein, 2010).

The above describes a response to a scenario where there are many faculty relative to the number of instructional designers. It was suggested in this section that to promote quality online instruction through faculty development, asynchronous resources and strategies should be employed and complemented by synchronous events and communication. These different strategies offer opportunities for self-directed and standardized learning with various degrees of guidance.

Conclusions

This article has considered the implications of three different factors as they affect faculty development. 1) The Faculty/Designer ratio is very important, for it alters the strategies in which designers can interact with those that they support. 2) The expertise of the faculty person changes the nature of their acceptance of a technology and/or service. 3) The time/place dimension alters the ways in which a designer and a faculty person can interact, or how peer faculty can interact with each other. All of these factors or variables alter how a "community of faculty" will form and work together. However, given our modern technologies and communication strategies for teaching and interacting with faculty, a series of models or approaches can be combined to support faculty wherever they are in time and place. Educational technology is instrumental in promoting deep learning, which is based on meaningful experiences that are applied in real-world situations (Novak, 1988). The hope is to replicate successful practices of online learning and course materials, but now in the arena of faculty development. To accomplish this task, the authors attempt to develop a community of practice among learners. We can do so with a true "community of faculty" who become a "community of learners" who are open to learning, and apply their newly-acquired educational technology skills into their teaching (Januszewski & Molenda, 2008). It is the role of the Instructional designers to ensure improved pedagogical practices that impact the overall faculty, so applied educational technologies diffuse throughout the community as faculty transfer their learned skills to one another (Lewis & Slapak-Barski, 2014).

Several models of faculty development have been discussed and described in this article. Instructional designers often find that the scenario within which they work is already predetermined. However, they can play the game successfully by providing support strategies that consider the faculty person's expertise, the time and place that is most convenient to the faculty person, or the number of faculty they must support.

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