Faculty Attitudes about Distance Education

Esther Smidt, Brian McDyre, Jennifer Bunk, Rui Li, Tanya Gatenby

Abstract

In recent years, there has been a dramatic increase in distance learning in higher education. Given this, it is extremely important to understand faculty attitudes about distance education, not only because they can vary widely, but also because it is the faculty, through their design and implementation of online courses, that will shape the future of distance education. The purpose of the present study is to uncover faculty attitudes about distance education in a specific context, namely that of a mid-sized mid-Atlantic state university. Data sources consist of posts from two of six discussion boards written by 21 faculty participants during an Online Faculty Development Program. Findings are categorized according to (i) philosophical discussions about collaboration, online versus face-to-face courses, and anonymity, (ii) practical discussions about instructor workload and small group discussions, and (iii) practical applications on the incorporation of discussion boards, access, and guidelines for discussion board use. The study ends with course design and faculty training implications.

Keywords: Distance Education; Faculty Attitudes; Effective Practices.

Introduction

In recent years, there has been a dramatic increase in distance learning in higher education. In 2013, the Instructional Technology Council (ITC) reported that the enrollment of students in online courses continues to increase at a higher rate than overall student enrollment at colleges and universities. Between Fall 2012 and 2013, those colleges and universities participating in the ITC survey reported a 5.2% growth rate in online student enrollment. The Department of Education Integrated Postsecondary Education System (IPEDS) reported in Fall 2012 that 26.5% of community college students and 26.5% of undergraduates at four-year institutions enrolled in at least one distance education course. While online enrollment has continued to show growth since 2004, this survey found that overall student enrollment is declining and this is particularly evident at colleges and universities that offer programs for working adults (Lokken & Mullins, 2014).

Faculty, however, have been resistant to online teaching, especially because the demands are higher compared to traditional courses (Murphy, Levant, Hall, & Glueckauf, 2007). The results of the 2013 ITC survey found that engaging faculty in online pedagogy was one of the top two concerns reported by distance education administrators when asked to rank their greatest faculty challenges (Lokken & Mullins, 2014). Conversely, Rudestam (2004) also reported that distance education instructors describe positive experiences such as collaborative learning and rich online discussions. It was found that discussion boards fostered an environment where students could develop higher-order thinking. This study concluded that online discussion boards are ideal teaching tools that can foster collaborative learning, create environments where students can interact with their professors and each other, and engage students in debate and discourse that otherwise would not be available in a distance education course (Bradshaw & Hinton, 2004). It is thus important to understand faculty attitudes about distance education, not only because they can vary widely, but also because it is

faculty, through their design and implementation of online courses, which will shape the future of distance education.

The purpose of the present study is to uncover faculty attitudes about distance education in a specific context. To achieve this, we will be qualitatively analyzing faculty discussion forum posts that occurred during an Online Faculty Development Program at a mid-sized mid-Atlantic state university. To guide our thinking, we asked two related questions:

1.   What do faculty think about distance education?
2.   What do faculty think about discussion forums?

We expand upon previous research by applying the theoretical lens of constructivism to understanding faculty attitudes about distance education in a specific university context. Our research thus has the potential to make both theoretical and practical contributions. Theoretically, we add to the existing body of knowledge surrounding constructivism. Practically, our application of constructivism will result in pedagogical suggestions with the aim of increasing the effectiveness of online learning.

What follows is a literature review centered on constructivism in distance education. We present the theoretical background as well as the benefits and shortcomings of applying constructivism to online learning. This literature review will provide a useful framework for understanding the diverse faculty reactions to distance education that are revealed in our qualitative data.

Review of Literature

Following constructivism's emergence as the most widely accepted view of human learning in the 1980s (Liu & Matthews, 2005), it also began to inform the majority of pedagogical approaches

employed during the genesis of distance education (Dass, Dabbagh, & Clark, 2011). Constructivism remains the most common grounding theory in distance learning, where the instructor's goal is to foster a collaborative, reflective, learner-centered virtual classroom environment which focuses on active, task-based learning through socially constructed knowledge (Dass et al., 2011; Jonassen, Davidson, Collins, Campbell, & Haag, 1995). In today's technological climate, many scholars have noted particular advantages of a constructivist approach to distance education, especially the opportunities for reflective, critical thinking via discussion boards, task-based activities using virtual worlds, and collaboration using online grouping strategies.

Success Factors in Distance Education

A review of the literature associated with success factors in distance education reveals several substantial links with a constructivist approach. Bolliger and Wasilik (2009) established student-related issues as "the most important factor influencing satisfaction of online faculty" (p.112), suggesting a student-centered approach to online pedagogy that is consistent with constructivism. Menchaca and Bekele (2008) found situated, social learning to be the most important success factor related to pedagogical strategies as identified by both students and instructors. This sense of value for community is echoed in a case study by Agosto, Copeland, and Zach (2013), in which the use of blogs was found to promote knowledge sharing and reflective thought in a manner that was more effective than a traditional face-to-face model. Shenk, Moore, and Davis (2004) similarly found that online discussions inevitably led to higher levels of student satisfaction in which everyone was heard, higher levels of trust and mutual support among students, and a more thoughtful and relevant exchange of ideas. Overall, these findings strongly endorse the generally accepted position that

student learning outcomes are positively correlated with faculty satisfaction (Fredericksen, Pickett, Swan, Pelz, & Shea, 2000; Hartman, Dziuban, & Moskal, 2000).

The evolving role of the instructor as a facilitator of learning and a guide through knowledge acquisition is a well-established principle of a constructivist approach (Baran, Correia, & Thompson, 2013; Honebein, 1996), and persists as a determinant factor for effective distance learning. A case study by Baran et al. (2013) cited "changing roles" as the most prominent strategy for success as identified by instructors who were nominated as exemplary in online instruction. Shenk et al. (2004) also found in their case study that those discussions in which the instructor moderated or facilitated discussion were most productive, and intervened only when they deemed it necessary. Indeed, Eskey and Schulte (2012) asserted that "[t]he discussion board is the focal point of the online course classroom." The importance of such a pedagogical approach was further substantiated through a large-scale questionnaire study by Olson (2005) in which students (n=185) identified the instructor and his/her ability to facilitate classroom interaction as one of three key factors crucial to success. Elsewhere, other researchers have identified interaction as the most critical factor necessary for success (Simmons, Jones, & Silver, 2004).

The opportunities afforded by technology to allow for examination of meaningful, authentic learning environments through active participation as emphasized by constructivism (Herrington, Reeves, & Oliver, 2006; Honebein, 1996) have likewise been well-documented by recent research. Tam (2000) offered numerous such opportunities that wouldn't be otherwise possible without contemporary technology, such as virtual tours and field trips, and exposure to multiple perspectives on a topic from multiple sources all over the world.

Menchaca and Bekele's (2008) study revealed "multiple tools" to be the most prevalent category of success factors, with citations emphasizing how the variety of instructional tools appealed to multiple learning styles and allowed for types of interaction that could occur spontaneously and from many separate locations. Participants also were quick to note that participation was more evenly distributed when utilizing multiple tools, allowing those students who were less likely to participate in a face-to-face class to become engaged and active in the online learning environment. Means, Toyama, Murphy, Bakia, and Jones (2009), further clarified that it was the perceived ease of technology use that multiple tools afforded that was the defining factor rather than the inclusion of more technology per se.

Obstacles to Distance Education

Although constructivism has been shown to widely inform pedagogical approaches during the development of the distance education model, certain barriers and limitations have been identified by observing the application of theory to practice. Huang (2002) identified some of these key issues relating to constructivism as: (1) a potential for learner isolation in the absence of face-to-face social interaction, (2) the potential for erroneous learning to occur in a context where a student is learning primarily from peers and not the instructor, (3) a lack of willingness on the part of the instructor to accept a new role as facilitator rather than presenter of material, (4) difficulty associated with assessment and evaluation in an online learning environment, and (5) the incompatibility of collaborative learning approaches among groups with significant individual differences, such as adults at the university level. A factor analytic study by Muilenburg and Berge (2005) revealed student-identified barriers similar to those enumerated above, with instructor-related issues (#3, #4) receiving the highest ranking, followed by lack of social interaction (#1).

While pedagogical issues persist at the forefront of the discussions of both success factors and obstacles to distance education, there has been no shortage of research reporting on external factors which impact the distance learning experience. Hogan and McKnight (2007) found that instructors of online university-level courses reported high levels of depersonalization along with low sense of self-accomplishment, which could have negative effects on faculty motivation. Furthermore, many faculty report low levels of motivation to participate in distance education due to variables such as unfair compensation for time and workload, lack of administrative support and technical training, and inadequacy of resources (Bolliger & Wasilik, 2009).

Having explored constructivism and its application to distance education, focusing in particular on its success factors and obstacles as implemented in online learning, we move next to discovering faculty attitudes about distance education as demonstrated in one particular context, namely a mid-Atlantic mid-sized state university.

Methodology

As indicated in the Introduction, the research questions of this qualitative study are:

1. What do faculty think about distance education?

2. What do faculty think about discussion forums?

Data sources consisted of posts from two of six discussion boards written by 21 faculty participants during the Winter 2012 Online Faculty Development Program held in January 2012 at a mid-Atlantic mid-sized state university. The two selected discussion boards (italicized) were chosen because they demonstrated "rich, 'thick' description" (Merriam, 1998, p.29):

1. Online Student Orientation Assignment

2. *Engage Online Learners Discussion*

3. Effective Online Assessment Discussion

4. Accessible Course Design Discussion

5. Copyright and Library Resources Discussion

6. *Effective Online Discussion*

The prompt for "*Engage Online Learners Discussion*" was:

- Please post your response to the following prompts by **January 9th**.

- Please read and respond to at least 2 postings from other members by **January 10th**.

- Identify an activity that you are currently using in your face-to-face class.

- Discuss how this activity can be transformed to an online activity to engage students.

- Refer to activities discussed in Conrad & Donaldson's Chapter 5-10 if needed.

The prompt for "*Effective Online Discussion*" was:

- Design a small group discussion activity for one module in your online course and post that activity in this discussion forum.

- Your activity should include the objectives for the module as well [as] a description of how students will be assessed.

Using the qualitative software, NVivo 10, the first three co-authors coded the data via both literature-informed coding as well as arising themes, resulting in a list of codes based on topics. We then recoded the data, resulting in the following nodes:

Table 1. Nodes

Nodes	References
Role of Instructor	
Class Management Strategies	44
Assessments and Expectations	28
Time Management	13
Teacher-Student Communication	6
Collaboration	40
Other Benefits of Online Format	29
Anonymity	3
Photo	13
Anonymous Comments	8
Access to Content	
Expanded Access to Content	15
Limiting Access to Content	7
Workload	
Workload for Students	12
Workload for Instructors	8
Technical Concerns	19
Engagement	11
Higher Engagement Levels	4
Learning Outcomes	
Increased Learning Outcomes	9
Decreased Learning Outcomes	1
Class Size	9
Participation	8
Impact on Teaching Philosophy	6
Administrative Support	4
Types of Learners	1

Finally, we conducted triangulation by selecting representative excerpts.

Discussion

The discussions that the faculty had in the discussion forums can be categorized according to:

- philosophical discussions,

- practical discussions, and

- practical applications.

Philosophical Discussions

Collaboration

The Online Student. The first area of philosophical discussion revolves around the nature of the online student. According to AR, "the traditional student is the non-traditional student in most online programs today"—a working professional with the potential for direct real world application of content in the workplace because of their non-traditional student status, highlighting constructivism's emphasis on meaningful, authentic learning (Honebein, 1996). For example, some professors shared about their students' requests to allow the discussion boards to be kept active even after their courses were over:

- "In a summer class I taught several years ago, the students were so engaged in the Discussion Board that they asked if I could make it continue after the course was over. I did, and they did. I would log back into that course over the fall semester, and they were still in there, chatting away. Remarkably, they were chatting about course CONTENT! Obviously, not all of them stuck with it, but there were 7 or 8 of them that just hung on. They really wanted to see this one idea through". (NN)

- "Students in my course continue sharing in the Discussion Board after the course is over as they implement their teacher leadership plans. They appreciate the support, advice, and encouragement from their peers who are teaching in different contexts but often face the same challenges." (EO) This excerpt is also reminiscent of Shenk et al.'s (2004) findings of trust and mutual support among students.

The potential for real world application, whether arising from a personal connection or professional interest—"[students discussing] their own athletic injuries or ask[ing] questions about some of the

injuries that they see in professional sports" (LR)—is a distinction that should be capitalized, particularly with the working professional online student. Indeed, EO stated:

> "I generally touch base with students via e-mail during the fall semester after they return to school to follow up on the goals and plans they discussed during the summer. It might be interesting to keep the online group discussion going after the course is over so the teachers can help and support each other."

EO's statement exemplifies the professor's changing role from that of sage on the stage to that of "moderator/manager in online education"—or Honebein's (1996) assertion of instructor as a facilitator of learning—with the concomitant need for "organization, feedback, and clarity" (AR).

Online versus Face-to-Face Courses

Concerns about Course Conversions. As would be expected in an Online Faculty Development Program, there was much comparison between online and face-to-face courses, particularly in the voicing of concerns about the conversion of face-to-face courses to online courses. NN shared "My main concern about moving course content "online" is that the discussions won't be as rich, or as interactive." TS added "I do struggle with some students not consistently using theory and/or content in their responses and not going back on to the "board" to respond besides the required amount, even if a question is raised to them."

More specifically, concerns were voiced about the workload increase for students in the conversion from face-to-face to online courses. Even without having to learn to use new software, tasks appeared to take longer to complete online. With the addition of learning to use new software like Prezi, "a learner who is new to an online course may find it a course within itself to master the application before the end of a semester, so deference to a more experienced person may happen"

(AR). In view of this, limiting tasks to the most essential tasks, providing students with software options (e.g. Prezi or PowerPoint), and "assign[ing] an approximate time to each [course] element" (ER) would be helpful.

Besides general conversion and workload concerns, there was also the tendency, albeit inappropriate, of expecting a one-to-one conversion or reproduction effect from the face-to-face to the online environment, as demonstrated by "I think the laughing is half the fun. I wonder how you would get the same effect on line." (YK)

Increased Learning Outcomes. In contrast with the concerns expressed above, and the expectation of a one-to-one conversion or reproduction effect, there was the understanding that converting a face-to-face course to an online course changed the very nature of the learning experience even though similar learning outcomes could be obtained. In fact, there was some sentiment that learning outcomes could be increased—that there were activities that could be completed in the online environment that might not have been possible to conduct or might have been more difficult to complete in the face-to-face environment. This sentiment is explained by the RAT Framework (Hughes, 2005), which explores the possibility (and recommendation) that technology use should not replace (R) face-to-face activities. Instead, it should be used to amplify (A) or transform (T) what already occurs in the face-to-face environment. NE shared:

> "I'm intrigued by the idea that online discussion may be more substantive that in-class discussion. That seems to argue that you can accomplish MORE rather than less in the online version?"

This possibility certainly fits constructivism's claim of collaborative learning and socially constructed knowledge (Dass et al., 2011; Jonassen et al., 1995).

Amplified technology use is hinted at in these excerpts:

- "I don't normally do discussions in general chemistry – so sad! We are so focused on solving problems that we rarely discuss anything, except of course, how to solve the problems. … So, I am thinking about how I could do discussions online that will engage students to think about other important things such as: ethical issues that scientists face, the influence of science on politics, the influence of political situations on science, the lack of diversity among scientists and the effect this might have on what scientific questions are studied, how they are studied, and how the results are interpreted, and the myths and stereotypes associated with science and scientists." (IN)

- "I too think the value of having students view themselves in a discipline specific context is important through video-recording … The activity you describe would work great in the online environment. I think non-verbal communication skills (i.e. body language, voice, posture, eye contact etc) is something that is hard to teach students and have them retain unless it is in the discipline specific context they will use in the future. Certainly we can lecture about what is appropriate vs non-appropriate and they will "hear" us but will the importance of the information be learned. The use of videotaping and debriefing with all of the students will be very beneficial to teaching these skills in a way that the students value as being important to their future as musicians." (TS)

Anonymity

The third area of philosophical discussion pertains to anonymity involving the use of photos and anonymous comments.

Photos. There was an intense discussion about the advantages and disadvantages of having students post pictures of themselves. Among those in favor of having students post a picture of themselves was LN who stated "In my view, a community of readers is more readily established in the presence

of familiarity than in anonymity" and IT who believed "posting a picture of the students themselves is valuable to give a 'human' face to an online course." These sentiments seem in line with constructivism's emphases on situated, social learning (Menchaca & Bekele, 2008) and trust and mutual support among students (Shenk et al., 2004).

AR in particular believed very strongly that student photos should not be posted because "students take online classes for a variety of reasons: anonymity, convenience, equity, privacy, time, transportation, etc." When she surveyed close associates, five of six revealed that they did not post photos for reasons "rang[ing] from equity concerns to personal privacy." AR was particularly concerned about the propensity for stereotyping in the online environment:

- "The online version seems invasive and can alienate. Just think if a person gets correct presumptions about peers based on a visual image, it could confirm bias. What do I mean? If the burly, bisexual student … posted a picture, students would have answered on perception, not meaningful dialogue. If your class deals with bias and perceptions, this could be a good icebreaker, but still it treads very close to a dangerous borderline."

- "After more thought, I thought about an Asian, African, Indian, or a non-white student posting a picture and having students answer "who was born outside of the U.S?" Perceptions could play into their answers and possibly alienate the Asian American, non-white Hispanic American, or Indian American from California, New York, Alaska, or any part of U.S. Also, it could possibly alienate the white student who does not want to appear discriminatory. Moreover, most people select folks who are similar to [them]selves (hence, homogeneous or default segregated communities and organizations across America). If there are any group projects, you could remove diversity in the selection process by folks self-selecting who they would feel more comfortable with b[ased] on visuals."

Among the solutions suggested include:

- "I say let it be optional (personal pic or image that describes him/her) and allow space for those who want anonymity beyond their intellectual input to exist." (AR)

- "the web site or where the pictures and biographies etc are post[ed] needs to be password protected" (IT)

Anonymous Comments. Besides the issue of post-or-not-to-post, some discussion also revolved around the issue of anonymous comments. The argument against anonymous comments, namely the desire for "students to take responsibility for their words" (YS) and "the danger … that in online spaces there is a tendency to rely on stereotyping MORE" (NN), is weighed against the argument for anonymous comments, namely that anonymity may encourage students "to take a flyer on an interpretation" (YS) and that "anonymity might enhance course content—because the students would be "embodied" in different ways" (NN).

These concerns raise issues not found in the face-to-face classroom, adding a layer of complexity to student identity in the online environment and its impact on teaching and learning.

Practical Discussions

Instructor Workload

A frequent refrain in the category of practical discussions is the time intensive nature of "reading and evaluating student Discussion posts" (NN), primarily because of the large class sizes. 40- to 45-student and 60-student classes are mentioned while the "optimum is 5-15 participants" (YR).

Among solutions forwarded include the following:

- "Small graduate classes are a great place to start!" (ER),

- Reducing discussion board assignments with 40- to 45-student class sizes,

- Having non-graded discussion board assignments,

- "Group-based collaborative writing assignment using wiki" (II),

- Minimizing "instructor "set-up" time" (NN), for example by automating small group assignments and online quizzes—there is a need to know what the learning management system (LMS) is capable of, and

- Small group graded discussions.

Small Group Discussions

The last solution suggested above, however, resulted in much debate. As mentioned above, some professors saw small group discussions as a way of managing instructor workload and were more concerned about the small group composition, whether to keep the group composition constant or changing. There was a concern about a tendency towards stereotyping and homogeneous self-selection for group projects if the group composition was to remain constant.

AR, meanwhile, believed strongly that small group discussions were not the answer. She stated:

- "Discussion Boards allow all students to participate. … there are more talkative people than others. … some students who [are] reserved in class, come alive in discussion boards. … "Discussion Boards" are spaces for folks to share. … frankly when I ask the class a question, I expect an answer from any part of the room and discussion boards mirror me asking the entire class a question without putting into "small groups," which, from my experience, require extensive monitoring";

- "I don't find this format difficult at all, nor do my students. I have a class of 60 students and the students appreciate the flexibility to comment on who they want to, which build[s] interactions. … Personally, small-group projects work for some assignments. However, I DO NOT think it is appropriate here. I appreciate this format. Why? It is like being at a dinner party or fundraising function-- I enter and depart based on my terms. Thus, I am not being

held-up among friends observing or being forced to talk to certain folks, particularly ones who I have to "make" conversation with."

Practical Applications

Incorporation of Discussion Boards

It should be noted that discussion boards can be used in conjunction with multiple other online tools (Menchaca & Bekele, 2008) in the context of the learning management system. Among those mentioned in the discussion forums include the incorporation of discussion boards with:

- Presentation software like PowerPoint or Prezi, with or without audio or animation;

- Synchronous chat like Skype, during which students can do their presentations;

- Videos as a source for discussion board collaborative activity, whether obtained via the internet or created by instructors or students—constructive peer feedback and individual reflective writing can be conducted on the discussion boards (Dass et al., 2011; Jonassen et al., 1995);

- Online surveys or online polling like polleverywhere.com;

- Content production for avenues like Wikipedia, wikis, and GoogleDocs;

- Discussion board or synchronous chat data being used as sources for end-of-semester reflection papers or subsequent assignments—these assignments can be group assignments which later allow for peer review or individual discussion board response,

- Virtual tours, virtual worlds, and virtual field trips (Tam, 2000), for example where a live field trip culminates in a virtual experience:

    "I find the idea of the 'virtual' field trip fascinating. A little twist on using virtual world...I think that we could still require our students to actually go out into the real world, observe something, and then maybe create a virtual world based on what was

observed. So, they could go into an actual restaurant, make observations, then create their 'ideal' restaurant for a particular disability - or multiple disabilities. Other students could view it and make suggestions to improve. So, students would be experiencing the real world and sharing it via the virtual world. Obviously, the technology to create a virtual world would need to be user-friendly." (EJ)

It is hoped that conceiving of the discussion board as part of an entire learning management system package would provide a more coherent online experience which would result in the co-construction of knowledge in a community of learners (Dass et al., 2011; Jonassen et al., 1995).

Access

The mention of different online tools led to an intense discussion about the issue of access. For example, although polleverywhere was touted as an excellent polling tool, some professors preferred Survey Monkey or the LMS's survey tool even though the latter did not provide instant results because it did not run into potential problems like the lack of unlimited text affordances or bandwidth problems, which in turn "could lead to disfranchisement" (AR). Indeed, II reminded:

"... polleverywhere might not be the best solution. One rule for technology integration is to pick a tool that's mature and has been on the market for a while. … Any technology failure and difficulty can impact your overall course evaluation and make both you and your students frustrated."

YS, however, believed that with regards to access, the onus was on students:

"Obviously I'm all for making our courses accessible. However, it seems to me that when a student opts for an online course, the issue of access shifts into the student's lap(top). So I think they have to take the responsibility to get up to speed."

Guidelines for Discussion Board Use

- *Instructions and deadlines.* Explicit instructions about posting and responding to posts (e.g. number of posts and responses) and the provision of requirements and scaffolded deadlines (e.g. post essay, post discussion entry, post responses, watch video, complete a short quiz) are important. Prompts, course objectives, netiquette expectations, rubrics, and time commitment for assignments should also be provided.

- *Assessment of group projects.* It would be advisable to incorporate "team member evaluation[s]" (EJ) in group projects to encourage "equal participation" (ER) so that tech-savvy students are not left to complete the bulk of the assignments. Having both fixed and rotating group compositions would also encourage equal participation.

- *Require authors to reply to comments* so that the problem with students "not going back on to the "board" to respond besides the required amount, even if a question is raised to them" (TS) is averted.

- *Compose in MS Word first*. "[H]ave students compose their discussion board messages in MS Word then copy/paste into [the LMS]" (ER).

In the final analysis, the pedagogically sound use of discussion boards can be remarkably successful, as aptly encapsulated by ER: "I think discussion intensive courses can actually work quite well online. They take a bit more work in the design process to get "right" but I have seen some excellent examples over the years."

Implications

In this section, we offer implications that are both theoretically derived from constructivism and empirically derived from our results. Our aim is to offer practical suggestions that are straightforward yet capture the real-world nuances of teaching online.

Course Design

Our first set of suggestions is related to course design. First, it is clearly important to give students opportunities for meaningful, authentic learning (Honebein, 1996). This can be achieved through service learning or by simply asking students to apply the course material directly to their own lives. Also, instructors should realize that this level of learning can occur *after* a course ends so they may want to consider leaving the lines of communication open by, for example, leaving discussion boards open.

Second, consider giving students the option to post photos of themselves as this can engender social learning and create a learner-centered environment. This does, however, bring up one of the obstacles of constructivism discussed earlier: collaborative learning can be challenging with diverse groups (Huang, 2002). That is, minority students may not feel comfortable posting photos for fear of being stereotyped. Thus, instructor sensitivity is important here.

Third, use discussion boards as they are clearly becoming a crucial centerpiece for many online courses (Eskey & Schulte, 2012). They can be an effective tool to capture many of the theoretically-derived success factors we outlined above and, by utilizing the guidelines suggested by our participants, can be successful. Namely, set clear instructions and deadlines, incorporate team member evaluations, require authors to reply, and suggest that students compose their messages in a separate word processing program first.

Faculty Training

Our second set of suggestions is related to faculty training. Given research findings that student learning outcomes are positively correlated with faculty satisfaction (Fredericksen, Pickett, Swan, Pelz, & Shea, 2000; Hartman et al., 2000), it is critical to stimulate satisfaction with effective training. First, it is important that trainers set expectations about what it will be like to teach

online. For example, new online instructors must learn that there cannot be a one-to-one conversion from face-to-face to online. More broadly related to this, the training should foster a greater willingness to take on the "new" role of facilitator (Huang, 2002).

Second, trainers should stress that online learning can amplify and transform (Hughes, 2005) through the use of collaborative learning that generates socially constructed knowledge (Dass et al., 2011; Jonassen et al., 1995). Indeed, our results show that at least some faculty already understand this. Therefore, trainers can build on this in the training environment by, for example, having trainees give examples of how amplification and transformation might occur. Past research suggests that one way this may be achieved is by stressing the importance of faculty interaction with students (Olson, 2005; Simmons et al., 2004).

Additionally, a goal of the training program should be to demonstrate how using multiple tools can help create meaningful, authentic learning environments with active participation (Herrington et al., 2006; Honebein, 1996). It should be stressed that multiple tools are the means to an end – the end being increased ease-of-use (Means et al., 2009). Therefore, when using multiple tools, usability should not be sacrificed. It is also important that faculty be adequately trained to use these tools. However, the training should also emphasize sensitivity to access issues. Do not simply assume that all students will have access to all tools. Sharing the syllabus before the class starts can inform students of expectations about what technologies will be necessary, which can reduce access issues.

Finally, it is important to note the findings of this study that are relevant for instructors who teach online or may be thinking about creating an online course. Although there were some concerns about maintaining the interactive nature and richness of a face-to-face course through the transition to online, it was evident that similar outcomes could be obtained in an online learning environment and

in fact, might even be increased. It was felt that online learning offers students the potential to learn real world applications through discussion board assignments. Instructors did voice their concerns about the management of reading and evaluating discussion board assignments for large classes. Several solutions were gleaned from this study including the use of small group discussions, which was found to be a topic of debate. Some felt it to be a useful pedagogical tool to help manage the instructor workload while others were concerned about small groups restricting the participation of students in an online class. It was noted that discussion boards used in conjunction with a variety of other online tools would provide a more coherent experience for the learner.

Suggestions for future research

A reasonable next step following the present qualitative study on faculty attitudes about distance education is a university-wide quantitative survey and this step is currently under way. Furthermore, besides faculty data, it is also important to collect student data, particularly comparing the student attitudes of those who have taken online courses as opposed to those who have not. These data can be obtained via quantitative surveys as well as qualitative semi-structured interviews.

Besides collecting data about distance education indirectly via surveys and interviews, it would also be a good idea to collect data directly. This can be done through observations of online courses, taking into consideration the varieties of online courses being offered university-wide—for example by investigating synchronous and asynchronous implementations of online courses. In addition, online instructors can conduct action research studies of their own courses, which would result in a deeper understanding of course dynamics and lead to improvements in the quality of individual online courses.

Conclusion

Distance education is undoubtedly driving today and tomorrow's higher education revolution and these courses are continuing to grow in number. However, faculty have been more pessimistic than optimistic about online education (Allen, Seaman, Lederman, & Jaschik, 2012). Thus, in order to further develop the quality of distance education, it's important to understand faculty attitudes and views and how they relate to pedagogical tools.

The findings of this study suggest that faculty are concerned about the conversion of face-to-face courses to online courses. The conversion not only changes the nature of the learning experience but also increases the workload for both students and instructors. Faculty are also sensitive about anonymity issues, specifically about whether student photos should be optional and discussion comments should be anonymous. It should be noted that faculty do see the value of online pedagogical tools, such as discussion boards, and how they can contribute to increased learning outcomes if designed appropriately with clear instructions, guidelines, and assessment methods. Access, however, has been an issue when it comes to choosing specific tools to use in the online courses.

The study offers practical implications for online course design and faculty training. It suggests that online courses should offer authentic, meaningful, and long-term learning; students should have the option to post or avoid posting photos of themselves; and instructors should set clear guidelines in terms of discussion board setup and use. The study also suggests that faculty should be trained in various learning tools as well as how to use them to create meaningful and authentic learning environments. Additionally, faculty should be informed about online teaching expectations and potential role changes.

Although the scale is small, this study sheds light on faculty views of distance education and offers practical suggestions and implications for online education. We hope this will provide faculty who are contemplating teaching an online course and those already engaged in online pedagogy valuable information that will assist them in creating a meaningful, authentic learning environment for online learners. It is also our hope that these findings give faculty an opportunity to start thinking about their role in an online environment and the need to learn new tools in order to embrace new teaching philosophies.

References

Agosto, D. E., Copeland, A. J., & Zach, L. (2013). Testing the benefits of blended education: Using social technology to foster collaboration and knowledge sharing in face-to-face LIS courses. *Journal of education for library and information science*, *54*(2), 94-107.

Allen, I. E., Seaman, J., Lederman, D., & Jaschik, S. (2012). Conflicted: Faculty and online education. Pearson.

Baran, E., Correia, A. P., & Thompson, A. (2013). Tracing successful online teaching in higher education: Voices of exemplary online teachers. *Teachers College Record*, *115*(3), 1-41.

Bolliger, D. U., & Wasilik, O. (2009). Factors influencing faculty satisfaction with online teaching and learning in higher education. *Distance Education*, *30*(1), 103-116.

Bradshaw, J. & Hinton, L. (2004). Benefits of an online discussion list in a traditional distance education course. *Turkish Online Journal of Distance Education, 5*(3).

Dass, S., Dabbagh, N., & Clark, K. (2011). Using virtual worlds: What the research says. *The Quarterly Review of Distance Education*, *12*(2), 95–111.

Eskey, M. T., & Schulte, M. (2012). Comparing attitudes of online instructors and online college students: Quantitative results for training, evaluation and administration. *Online Journal of Distance Learning Administration, 15*(4). Retrieved August 10, 2014 from http://www.westga.edu/~distance/ojdla/winter154/eskey_schulte154.html.

Fredericksen, E., Pickett, A., Swan, K., Pelz, W., & Shea, P. (2000). Factors influencing faculty

    satisfaction with asynchronous teaching and learning in the SUNY learning network. *Online*

    Education: Learning Effectiveness and Faculty Satisfaction, 239-270.

Hartman, J., Dziuban, C., & Moskal, P. (2000). Faculty satisfaction in ALNs: A dependent or

    independent variable. *On-line education: Learning effectiveness and faculty satisfaction*, 151-

    172.

Herrington, J., Reeves, T., & Oliver, R. (2006). Authentic tasks online: A synergy among learner,

    task, and technology. *Distance Education*, *27*(2), 233-247.

Hogan, R. L., & McKnight, M. A. (2007). Exploring burnout among university online instructors:

    An initial investigation. *The Internet and Higher Education*, *10*(2), 117-124.

Honebein, P. C. (1996). Seven goals for the design of constructivist learning environments. In B. G.

    Wilson (Ed.), *Constructivist learning environments: Case studies in instructional design* (pp.

    11-24). Englewood Cliffs, NJ: Educational Technology Publications, Inc.

Huang, H. M. (2002). Toward constructivism for adult learners in online learning environments.

    British Journal of Educational Technology, *33*(1), 27-37.

Hughes, J. (2005). The role of teacher knowledge and learning experiences in forming technology-

    integrated pedagogy. *Journal of Technology and Teacher Education, 13*(2), 277-302.

Jonassen, D., Davidson, M., Collins, M., Campbell, J., & Haag, B. B. (1995). Constructivism and

    computer-mediated communication in distance education. *American Journal of Distance*

    Education, *9*(2), 7-26.

Lokken, F. & Mullins, C. (2014). Trends in elearning: Tracking the impact of elearning at

    community colleges. *2013 Distance Education Survey Results,* Instructional Technology

    Council.

Liu, C. H., & Matthews, R. (2005). Vygotsky's philosophy: Constructivism and its criticisms

    examined. *International Education Journal*, *6*(3), 386-399.

Means, B., Toyama, Y., Murphy, R., Bakia, M., & Jones, K. (2009). *Evaluation of evidence-based*

    practices in online learning: A meta-analysis and review of online learning studies.

    Washington, DC: U.S. Department of Education.

Menchaca, M. P., & Bekele, T. A. (2008). Learner and instructor identified success factors in

    distance education. *Distance Education*, *29*(3), 231-252.

Merriam, S. B. (1998). *Qualitative research and case study applications in education*. San Francisco,

    CA: Jossey-Bass Publishers.

Muilenburg, L. Y., & Berge, Z. L. (2005). Student barriers to online learning: A factor analytic study.

    Distance education, *26*(1), 29-48.

Murphy, M. J., Levant, R. F., Hall, J. E., & Glueckauf, R. L. (2007). Distance education in

    professional training in psychology. *Professional Psychology: Research and Practice, 38*(1),

    97-103.

Olson, P. W. (2005). Significant success factors in distance education. *International Journal of Case*

    Method Research & Application, 17(2), 235-245.

Rudestam, K. E. (2004). Distributed education and the role of online learning in training professional

psychologists. *Professional Psychology: Research and Practice, 35*(4), 427-432.

Shenk, D., Moore, L., & Davis, B. (2004). Teaching an interdisciplinary distance education

gerontology course: Benefits of diversity. *Educational Gerontology*, *30*(3), 219-235.

Simmons, S., Jones, W., Jr., & Silver, S. (2004). Making the transition from face-to-face to

cyberspace. *TechTrends, 48*(5), 50-85.

Tam, M. (2000). Constructivism, instructional design, and technology: Implications for transforming

distance learning. *Educational Technology & Society*, *3*(2), 50-60.