Student Attitudes about Distance Education: Focusing on Context and Effective Practices.

Esther Smidt, Jennifer Bunk, Bridget McGrory, Rui Li, Tanya Gatenby

2014

Abstract

There has been an unquestionable upsurge in distance education in recent years. Given this, it is

extremely important to understand the experience of online courses from students' perspectives.

The purpose of the current qualitative study is to understand student attitudes about distance

education in a specific context, namely that of a Mid-Atlantic mid-sized state university. We then

translate our findings into practical recommendations for instructors. Data sources consist of

journal entries written by 36 teacher candidates taking the course, Teaching English Language

Learners PreK-12. Findings are categorized according to Course Characteristics, e.g. students

have definite opinions about the use of the discussion forum, some of them negative, Instructor

Characteristics, e.g. students see the need for interaction/synchronous communication and

effective assessment, and Learner Characteristics, e.g. the appropriateness of distance education

depends on student learning style and practical factors.

Keywords: Distance Education; Student Attitudes; Effective Practices.

41

Introduction

There has been an unquestionable upsurge in distance education in recent years. Between 2002 and 2011, the percentage of college students who were enrolled in at least one online course increased from 9.6% to 32% (Allen & Seaman 2013). Given this, it is extremely important to understand the experience of online courses from students' perspectives. The ultimate beneficiaries of online education are, after all, the students.

The purpose of the current qualitative study is to understand student attitudes about distance education. To clarify, first, this study is student-focused and not faculty-focused. While we acknowledge the importance of investigating faculty attitudes about distance education, our goal is to move the spotlight onto students as well. Second, our focus is on attitudes, which have been classically defined in the social psychological literature as "an evaluation or evaluative judgment made with regard to an attitudinal object" (Weiss 2002, p. 175). Thus, student distance education attitudes represent cognitive assessments made by students regarding distance education.

We extend previous research in two ways. First, we prioritize student needs in a specific context by focusing on students from a mid-sized state university in the Mid-Atlantic region of the United States. Our goal is to understand the attitudes of these particular students in order to direct our efforts accordingly. We thus acknowledge that online learning phenomena can be, and often are, context specific (Gibbs 2010). Second, we direct attention towards effective practices. Findings have little practical use if they do not result in actionable knowledge. Therefore, we will translate our findings into practical recommendations for instructors (along with the necessary contextual caveats). Although changing teaching practices can be difficult, there is evidence that prior to making changes, instructors rely on student needs more than empirical findings (Price & Kirkwood 2013). Our student-centered practical approach will conceivably inspire instructors to make incremental changes to their online courses that will increase effectiveness and satisfaction.

What follows is a two-part review of the literature. First, we will present an overview of distance education research. Then, we will review empirical findings that are relevant to the focus of our current study.

Literature Review

Distance Education Research: An Overview

Kehoe, Tennent and Becker (2005) provide a useful framework for understanding distance education scholarship. Essentially, they divide the distance education experience into three parts: online material delivery, online assessment, and online interaction and engagement. With regard to online material delivery, research in this area is focused on the use of different delivery modalities including synchronous versus asynchronous (e.g., Carswell & Venkatesh 2002), and specific tools like discussion boards (e.g., Chapman, Storberg-Walker & Stone 2008) and WebCT (e.g., Osman 2005). Research focused on online assessment is concerned with quality and learning outcomes. For example, multiple meta-analyses have been conducted comparing learning outcomes in face-to-face versus online courses (e.g., Bernard, Abrami, Lou, Borokhovski, Wade & Wozney 2004; Means, Toyama, Murphy, Bakia & Jones 2009; Sitzmann, Kraiger, Stewart & Wisher 2006).

The third area that Kehoe, Tennent and Becker (2005) discuss is our area of focus: online interaction and engagement. Researchers in this area tend to be interested in student satisfaction and similar attitudinal variables. We will examine empirical findings in this area in the second part of our literature review. For now, it is worth stressing the utility of focusing on attitudinal outcomes like satisfaction. Not only is there evidence that attitudes about technology are related to performance outcomes (Petter & McLean 2009), but they can also help inform best practices. For example, if we know that students are dissatisfied with the amount of technical support they are receiving, we can focus our efforts on increasing the quality of such support. Another reason that focusing on attitudinal outcomes is so important is that they are a necessary piece to the

bigger picture. In other words, if our ultimate criterion is "success in distance education," that criterion would be deficient if we focused solely on learning outcomes. It would be difficult to argue that an online class was completely successful if the students learned a lot but did not have positive attitudes about the experience.

Student Attitudes about Distance Education: Empirical Findings

Internal Factors

One of the goals of the current study is to prioritize student needs by taking a student-centered approach to understanding attitudes about online coursework. Part of doing so means acknowledging that students' individual differences—or factors internal to individuals—are going to play a role in predicting satisfaction. To this end, a variety of studies in this area have found exactly this. For example, Sun, Tsai, Finger, Chen and Yeh (2008) found that learner computer anxiety was a critical factor in predicting satisfaction with e-learning. In this survey study, computer anxiety was defined as feelings of nervousness and discomfort when working with computers and satisfaction with e-learning was defined as students' overall sense of satisfaction with the e-learning course in which they were enrolled. In addition, Holley and Oliver (2010) used a biographical narrative approach to explore students' accounts of online learning. Analysis of the student narratives revealed that students' ability to control technology, along with students' educational experiences and expectations of managing their "learning spaces" played a role in students' engagement with online learning.

Moreover, the utilization of asynchronous communication tools, such as discussion boards, also points to the dissimilarities in student preferences which may be based on internal, individual differences. For example, Gilbert, Morton, and Rowley (2007) found that while 68% of students they surveyed were comfortable using discussion boards, 32% were "not sure" or "uneasy" about them. In addition, according to Osman (2005), 70% of students felt more comfortable participating in an online discussion forum compared to an in class discussion. These differences

in attitudes about discussion boards could be attributed to personality differences, where an introverted student may enjoy the feeling of anonymity created by participating in an online discussion compared to a face-to-face discussion.

Other studies have investigated satisfaction with the quality of online interactions. For example, Felix (2001) found that students had a negative attitude towards online learning when there was inadequate personal interaction. According to the results of this study, 10 students noted the lack of presence of a teacher to be a disadvantage compared to the 3 students who felt the exact opposite—that it was an advantage. Additionally, Lee, Srinivasan, Trail, Lewis and Lopez (2011) also found that students valued and benefitted from interaction with instructors and peers. When students were asked, "How could this course support your learning better?" interaction with teachers and peers was found as a primary solution. Lee et al. proposed an online or on-campus study group as a means to avoid feelings of isolation and discomfort with a lack of interaction. These effects related to interpersonal interaction could be due to personality differences. For example, an extroverted student may thrive on classroom interaction, feeling it is necessary to their understanding of the material. In particular, this extroverted student may value the direct interaction with a teacher.

Continuing with the exploration of internal factors affecting students' attitudes towards distance education, it would appear that one's self-discipline and drive will also play a role. A student lacking motivation may find it difficult to stay focused while completing online assignments. Smart and Cappel's (2006) findings support this belief as students who were interested in the material or identified with it demonstrated a higher level of motivation. Additionally, disinterest and distraction could explain some students' negative attitudes. Felix (2001) attributed distraction to the "wealth of information" offered by online learning, a problem he proposed was not as prevalent during the age of CD-ROM-based online learning. Currently, while participating in

online course work, the wonders of the internet and the potential for distraction are only a click away.

Interaction with External Factors

These internal factors affecting students' preferences are also influenced by external factors such as enrollment in an elective versus a required course. In a study by Smart and Cappel (2006) exploring students' perception of online learning, students enrolled in an elective course rated online classes positively, while those in a required course rated the online classes negatively. Those students enrolled in the elective course felt online learning was "an effective way to learn," was "fun," and were more likely to take online classes again in the future. This could be a result of the degree of interest in an elective versus a required course or the level of motivation or self-discipline of the students.

Another factor that can affect students' online course satisfaction is experience with technology. A lack of experience can interact with the existence of technological problems to heighten dissatisfaction. For example, Smart and Cappel (2006) suggested that students with more technological experience would be more likely to take an online class than those who did not have experience. They also suggested that the potential for technological problems and inexperience with technology could make lengthy assignments seem even longer and could potentially contribute to the frustration students feel with the amount of time required to complete online coursework. Indeed, Smart and Cappel found that 30% of students in their sample felt as if the amount of time it took to complete online assignments was not worth what was gained. Having experiences in an online learning unit in a blended context may likely benefit students in the future as they make decisions about selecting between different educational or training options. The results may suggest that students with more experience with technology and elearning rate it more positively.

Students taking online courses value control over course content and this can interact with the choice of learning tools affecting satisfaction. Mockus, Dawson, Edel-Malizia, Shaffer, An, and Swaggerty (2011) demonstrated students' preferences for control in their online learning experience via a mobile learning study. Students used Androids, BlackBerrys, iPhones, iPhone Touches, and iPads as platforms to access course material. Findings revealed that students found course content delivered to their mobile device to be motivating and they enjoyed learning this way. The authors explained that this pointed towards the desire of students to engage in personalized learning. This demonstrates the importance of taking students' preferences into account, and utilizing effective tools to address these preferences to ensure continued satisfaction and participation in distance education.

External Factors

It is also essential to explore the role of external features on attitudes towards online learning. Another goal of the current study is to highlight the importance of these external components in understanding student attitudes about distance education. Several studies have found that a diverse set of external factors can predict student attitudes. One factor is the length of files to be downloaded, which will become increasingly important as instructors rely on more sophisticated multimedia like videos and podcasts. Related to this, Bolliger, Supanakorn, and Boggs (2010) investigated the impact of podcasting on student motivation and found that the length of files could have an impact on a learner's level of satisfaction. Specifically, some students felt downloads took too long, potentially causing them to lose focus.

Another external factor to consider is the kind of multimedia used in an online course. Boling, Hough, Krinsky, Saleem, and Stevens (2012) found that online classes that relied heavily on text-based multimedia were very unengaging and not effective in helping students to learn. They suggested that the use of interactive Web 2.0 tools could be more effective. Furthermore, Boling et al. proposed that the accessibility of instructors and information had an effect on determining

the overall impression of distance education, which was largely based on the design of online programs.

Students' perception of support is another external factor that can affect students' attitudes. According to a study by Lee et al. (2011), students' perception of support had a positive relationship with their degree of course satisfaction. When the above discussed technological problems or assignment confusion takes place, it is imperative that students feel that they can easily contact their instructor or an Information Technology (IT) staff member. Indeed, in a study by Gilbert et al. (2007), comfort with the amount of support offered was positively related to students' satisfaction with their online learning environment. As further evidence for the importance of support, Gilbert et al. (2007) found that a lack of resources and outdated materials could leave students feeling dissatisfied and unhappy with their online learning experience. In addition, Lee et al. also found course satisfaction to have a small yet notable correlation with final grades. This points to the importance of designing courses with a range of options of support and resources. As Lee et al stated, "access to a learning experience that is tailored to his/her learning style...may result in a more favorable course satisfaction" (pg. 161) and with that, potentially higher grades.

Felix (2001) also found that several other external factors could impact satisfaction with online courses. Specifically, he found that time flexibility, reinforced learning, privacy, wealth of information, ability to repeat exercises, and gaining computer literacy were all cited as advantages of online learning by students. This is promising, as it suggests that students appreciate the pedagogical benefits of distance education and that online instructors should do what is possible to increase these factors in their classes.

In summary, our review of the research related to students' attitudes about online learning reveals that a combination of both internal and external factors can affect student attitudes. In addition, it is clear that both positive and negative attitudes towards online learning exist. Our goal with the

current study is to build upon this research by prioritizing student needs in a specific context and identifying best practices.

Methodology

As intimated in the Literature Review, the research question of this qualitative research study is: What do students think about distance education?

Data sources consisted of 36 journal entries written by 36 teacher candidates taking the course, Teaching English Language Learners PreK-12, after listening to a research presentation entitled "Reactions to and attitudes about asynchronous online discussion forums in an online faculty development program." Particulars about the 36 teacher candidates are as follows:

Level	Number	Colleges	Number
Freshmen	2	College of Education	16
Sophomores	5	Health Sciences	6
Juniors	12	Arts and Sciences	11
Seniors	10	Visual and Performing Arts	1
Graduate	7	Undeclared	2
Total	36	Total	36

We, the first three co-authors, met weekly and kept researcher journals. We underwent training in NVivo 10, a qualitative research software. We then divided the journal entries into three groups, one per researcher, and created nodes. After this first pass, we compiled a nodes master list and recoded the journal entries, resulting in the following 16 nodes:

Nodes	References
Online	71
Positive	67
Negative	63
Discussion Board	46
Interaction	34
Neutral	26

Flexibility	24
Learning Style	22
Online Experience	17
Assessment	17
Blended Learning	14
No Online Experience	12
Workload	11
Synchronous	4
Experience	3
Face-to-Face	2

We then combined the three groups of journal entries and separated the nodes into "Negative" and "Positive" categories, as follows:

Nodes	Negative
Online	45
Discussion Board	24
Interaction	17
Learning Style	8
Workload	8
Online Experience	7
Assessment	6
No Online Experience	3
Positive	2
Blended Learning	2
Neutral	2
Flexibility	1

Nodes	Positive
Online	26
Discussion Board	26
Flexibility	20
Interaction	12
Learning Style	11
Blended Learning	9
Online Experience	9
Assessment	4
Synchronous	3
Workload	3
Negative	2
Face-to-Face	2
No Online Experience	1

As an analysis of the tables above reveals, some nodes were consistent in placement in both the negative and positive categories, for instance *Online, Discussion Board, Interaction, Learning Style, Online Experience, and Assessment*, while other nodes occupied obviously different placements, for example *Flexibility, Workload, Blended Learning, and Synchronous*.

We then conducted triangulation where we looked for representative excerpts of arising themes. While we were doing this, we realized that most of the nodes coded in negative and positive categories were related. We thus ended up recategorizing the nodes according to the themes of Course Characteristics, Instructor Characteristics, and Learner Characteristics, which are the first three learner satisfaction factors identified by Sun et al. (2008). It should also be noted that the

first two themes of Course and Instructor Characteristics would be subsumed under the External Factors mentioned in the Literature Review while the Learner Characteristics would be categorized under Internal Factors.

Discussion

Course Characteristics

Discussion Boards

The lack of well-designed tasks, particularly as they relate to discussion boards, was a negative course characteristic students felt keenly. Students saw ill-designed tasks as busywork. Among examples cited include uninteresting coursework that incorporated closed-ended questions that students could answer without actually having read the text. Students were also dissatisfied with the preponderance of tasks that catered to visual rather than auditory or kinesthetic learners (8 references of *Learning Style/Negative*). Implicit in these examples are the negative uses of discussion boards, as demonstrated by 24 references of *Discussion Board/Negative*. Indeed, NB2 lamented that a too structured prompt stifles creativity:

In terms of structured assignments, professors should keep in mind that even the smallest idea can spark thousands of new ideas within the minds of students, as everyone has a different perspective and might see something in a prompt that others might not see. When I see a prompt with a bunch of questions that need to be addressed, or that requires a certain number of posts, I lose all creativity. My response suddenly becomes about answering the question, meeting my minimum post requirement, and calling it complete. A discussion board that has too many guidelines or requirements feels like being given a picture and told to color inside the lines. It dismisses any chance for creativity or individuality by having all students conform to the same old cookie-cutter answers that get the good grades.

The desire for creativity, collaborative learning and opportunities for open expression is aptly encapsulated by NT:

My other two classes at my community college were way better, because they were actually hands on. One of my teacher[s] would ask us to do something crafty, or make things out of clay or blocks (it was teaching elementary education). After we would create things she would ask us to take a picture of our ideas and post them. Then we would be able to view everyone's creative ideas and learn from each other. It did not always involve writing, which I found to be excellent! I felt as though I was actually learning something.

NT's journal entry reiterated the point that asynchronous discussion does not have to be boring, nor does it have to leave out auditory and kinesthetic learners (11 references of *Learning Style/Positive*). HM, however, highlighted the benefit of synchronous audiovisual communication for multiple learning styles: "In my ideal online class, instant chat or Skyping with a professor would be the best situation for learning." This sentiment is reiterated by 3 references of *Synchronous/Positive*—there were no references of *Synchronous/Negative*.

Other positive experiences of discussion boards included the use of discussion leaders, groups, and different types of discussion boards (non-course boards and boards for general course questions). NB1 also specified the attraction of student generated questions:

Also, online courses always have assigned discussions. I had to for my summer course pick an article and ask my class questions one time. Then every other week I answered everyone else['s] questions. I think this was the most effective discussion methods, to have the students direct the questions because we were talking about what interested us.

Students' positive experiences about well-designed discussion board activities were demonstrated by the 26 references of *Discussion Board/Positive*.

Students also suggested two features that would make discussion boards a better experience, firstly by making previous posts invisible:

I liked the idea of making other students' posts invisible because it will encourage them to:

Actually do their own work and [d]o their work on time, because they will be forced to
think of their own answers instead of re-wording a compilation of their classmates work
five minutes before the deadline. (NL)

Secondly, students complained about the inability of their being informed about reply posts, especially in situations where there was a significant lag time between posts and replies:

In online classes however, it is not as easy to communicate because the response is not immediate. If I did have a question, or presented an argument, the other person may not respond for a few days and I will forget what I was talking about. (FC)

It should be noted that the new version of the Learning Management System allows students to subscribe to particular threads so that they are informed of replies to their posts.

Learning and Distance Education

There appeared to be some misconceptions about learning and distance education on the part of students that require some reeducation. Three participants considered collaborating and using supplementary materials and textbooks for assessment purposes to be cheating. DR2, for example, appeared to believe that learning consists of memorizing information and retaining knowledge:

Many times, classes that are online just state the facts and have open book tests and quizzes, which don't benefit the students. This is due to the fact that they are not learning and memorizing the information and retaining this knowledge, rather looking up facts to pass a class. Since the students aren't technically required to know the material, I feel that many online classes are easy A's and do not benefit everyone.

Related to the excerpt above is the assumption by four participants that online courses are not rigorous and difficult—"you should not take any of your core major classes online" (UM1) and "it is [not] beneficial to the overall education of the students to have a 300 or 400 level class online" (LG) because "[a]lthough they say online classes are more convenient, they are probably the most neglected classes that students leave until last minute" (FC).

Underlying these misconceptions may be the philosophy that a face-to-face class occurs in the "real world" (SG) while an online class does not. Moreover, "too much technology creates a social barrier between students and teachers" (SP). Indeed, SP goes on to state categorically that:

While I believe that some online learning activities are okay, too much of anything is excessive. I am completely against online learning and it truly scares me for the future of my career. I want to teach students in a real classroom in a real school, in person.

While no one would argue that face-to-face interaction is not real, the converse, that online interaction is fake and problematic, especially in a world that is moving exponentially towards social networking and telecommuting.

Blended Learning

Blended learning is one of the nodes that had different placements within the negative and positive categories, namely 9 references of *Blended Learning/Positive* as opposed to 2 references of *Blended Learning/Negative*. BG1's excerpt is representative of the positive attitudes about blended learning:

and also one of my Tues/Thurs classes had in-class learning every Tuesday and online learning/assignments due every Thursday. This was my absolute favorite because it enabled us to meet with the teacher and our classmates at least once a week, yet we could complete our assignments and outside of the classroom learning on our own time. I felt more independent this way and my grades were actually better than the typical in-class-only learning. To me, this type of learning felt more like what I'd expected college to be...what it was "supposed" to be, where our grades and how much effort/energy we put into an assignment was totally on us.

Instructor Characteristics

Interaction

The lack of interaction, whether instructor-student or student-student, was one that students felt keenly, as demonstrated by 17 references of *Interaction/Negative* (and confirmed in Felix 2001). In particular, their inability to depend on non-verbal communication resulted in students' preference for agreeing with posts:

Interaction is key not only with your professor but also with your classmates. When you don't see someone face-to-face, you don't know anything about them. You don't know their tone of voice, their personality, etc. For this reason, in prompts like "respond to a classmates thoughts", I usually look for ones that I agree with, because it's first of all easier to agree with someone th[a]n it is to argue with them, but you also don't have to

worry about offending anyone, or coming off as rude, since the people you are interacting with don't know your tone or your personality. (ML)

This finding is illuminating since it provides a glimpse to the reason for the lack of critical thinking in some discussion posts.

Instructor Support, Student Autonomy, and Workload

A familiar complaint, as demonstrated by 8 references of *Workload/Negative* and confirmed by Smart and Cappel (2006), is that online courses have heavy workloads requiring student autonomy and what students perceive to be a lack of instructor support:

My personal opinion about online classes is that online classes place more responsibility and time on the student[s], rather than the professor. In previous online classes I have taken, I found that I needed to spend more time throughout the week focusing on my online classes than my classes that were face-to-face. I did not get the opportunity to attend class one to three times a week, and learn the information auditorally [sic]. Instead, I was teaching the information to myself over the course of many days. Also, I did not find it appropriate that online classes had different assignments due all throughout different times in the week. This resulted in confusion for both me and my classmates. Whereas in a face-to-face class, assignments are usually due on the date that you attend class. (FP)

Organization and Clarity

Students also desired specific instructor characteristics, for example, prompt feedback and e-mail response from the instructor, and clear instructions and assessment requirements (as demonstrated by 6 references of *Assessment/Negative*):

The way the teacher grades assignments is also unclear in online classes. In my current class, my teacher is not clear with what she wants in her responses and as a result, some of the students are not doing as well as they deserve. (FC)

In particular, strong organizational skills were highly appreciated:

At the beginning of the semester everything was posted on the online syllabus and she strictly followed the syllabus. For example, we even knew when ou[r] final was going to be due months ahead of time. I loved her organization. (NT)

Learner Characteristics

Flexibility

One of the greatest advantages of online courses is students' ability to decide when, where, and how coursework should be completed, as demonstrated by 20 references of *Flexibility/Positive*. This is particularly true for students who emphasize self-paced learning and possess an independent learning style:

Another benefit to taking online classes is that it makes one's schedule more flexible. Instead of spending time in a classroom, online classes allow students to spend time in their homes. Because almost all of the assignments are posted online, students can s[p]end as much or as little time on each assignment as they think that they need. Also, some students learn and work better on their own time. Instead of sitting in a class listening to a teacher lecture, students can read a textbook on their own or teach themselves the material that they need to know. Also, if they need more time to work on an assignment, they are not restricted because they have all the time that they want to figure out a problem (LB)

Shy/Introverted Students

As confirmed by 3 participants, and reiterated by Osman (2005), shy or introverted students express satisfaction with online courses:

But, on the other hand, I am a shy person, and I don't normally speak out in class, especially in response to another student. I would never disagree with someone in class, so an online aspect makes this part better for me. I feel that I am able to actually speak my mind through the computer, and not worry about someone judging my every spoken word in class. Through typing, I am able to take my time to think out my response, or erase my previous thought in order to rewrite my answer. (DR1)

I feel that online classes allow students to freely and openly express themselves, especially if the students are on the quieter side. Online classes allow students who do not actively participate in classroom discussions a chance to voice their opinion through the computer. The safety of an online class allows shy students to show their intelligence without feeling as self-conscious and worried about their responses. (DR2)

Student Investment

Conversely, a lack of student investment would adversely affect student performance and satisfaction in online courses. The lack of a captive audience and the need to be physically at a computer with its distractions (Felix 2001) and technical problems are issues students have to face, as stated by QE:

I am not going to spend more time with the online class than I have to. I will just write my post, fulfill the requirements, and then get on with my day. If there is a discussion in class I might as well participate because I have a certain time frame blocked out of my day to be in that class.

Practical Applications

This paper began with the argument that it is important to investigate students' attitudes about distance education—that their thoughts and feelings matter. These attitudes vary based on students' individual differences. For example, the introverted students in this study thought differently about online courses when compared with their extroverted counterparts. It is also important to consider context, e.g. commuter students or students who work full time think differently about online courses when compared with traditional, on campus students. In other words, it is simplistic to decide that 'face-to-face courses are always better'—online courses may be better for some students in some contexts while face-to-face courses may be better for other students in different contexts.

Having said that, here are six practical applications that can be drawn from the findings of this study:

- 1. *Implement discussion boards carefully*: Ensure that tasks are well designed—they should encourage critical thinking, creativity, collaborative learning, and open expression, and cater to a variety of learning styles. Avoid closed-ended questions. Instead, encourage student generated questions. Also, task responses do not have to be text-heavy. Use discussion leaders, small groups, and multiple types of discussion boards. Encourage students to subscribe to discussion threads so that they will be informed of replies to their posts.
- 2. *Consider blended courses*: These courses may be the best of both worlds, although more data is required before this conclusion can be definitively drawn. However, students do think very positively of these courses.
- 3. Focus on interaction and rapport: To make up for the lack of face-to-face interaction, cultivate instructor-student and student-student online interaction and rapport. Encourage students to connect with the instructor and one another as individuals. Synchronous

audiovisual communication can feature greatly in this regard. In this way, it is hoped that students would move away from a preference for agreeing with their peers' posts in asynchronous discussion.

- 4. *Give students a realistic preview of the course*: Ensure that students understand that online courses require a new set of skills from them—autonomy, time management, intrinsic motivation, and student investment. Set students' expectations so that they can decide whether an online course is right for them.
- 5. *Be very organized*: Explicit and clear guidelines for assignments and tasks are critical. Prompt feedback and e-mail response is crucial.
- 6. Be clear about what does, and does not, constitute cheating: Online course instructors must set clear guidelines regarding academic honesty. For example, if students are expected to work alone for an assignment, this must be communicated. However, if assessments are "open book," the instructor should clearly communicate that using the book and supplementary materials is completely acceptable.

Conclusion

By its very nature, a qualitative study is context-specific. In this instance, the findings are derived from teacher candidates in a Mid-Atlantic mid-sized state university. Therefore, it is illuminating that this study's findings confirm what has been found in previous studies and add nuances that contribute to further knowledge in the field of distance education. Findings suggest students favor blended learning format and value the flexibility of an online environment. This is especially true for students who are shy or introverted in the face-to-face classroom. Students also expressed interaction is key to course success not only with their instructor but also with their peers. On the other hand, instructors should provide clear structure and guidance in addition to educating students about course expectations and responsibilities in online courses. It's also important to offer well-designed and creative tasks such as audiovisual content for multiple learning styles.

Using students' perceptions about distance education to help identify best practices is a logical approach. We hope that these six practical applications would give instructors a place to begin as they compare their online courses against the "evaluative judgment[s] made by [students] with regard to [distance education]" (Weiss 2002, p. 175).

References

- Allen, I. E., & Seaman, J. (2013). Changing course: Ten years of tracking online education in the United States. Pearson. Retrieved February 04, 2014, from http://files.eric.ed.gov/fulltext/ED541571.pdf
- Boling, E. C., Hough, M., Krinsky, H., Saleem, H., & Stevens, M. (2012). Cutting the distance in distance education: Perspectives on what promotes positive, online learning experiences. *The Internet and Higher Education*, *15*(2), 118-126.
- Bolliger, D. U., Supanakorn, S., & Boggs, C. (2010). Impact of podcasting on student motivation in the online learning environment. *Computers & Education*, 55(2), 714-722.
- Bernard, R. M., Abrami, P. C., Lou, Y., Borokhovski, E., Wade, A., & Wozney, L. (2004). How does distance education compare to classroom instruction? A meta-analysis of the empirical literature. *Review of Educational Research*, 74, 379–439.
- Carswell, A. D., & Venkatesh, V. (2002). Learner outcomes in an asynchronous distance education environment. *International Journal of Human–Computer Studies*, *56*, 475–494.
- Chapman, D., Storberg-Walker, J., & Stone, S. (2008) Hitting reply: A qualitative study to understand student decisions to respond to online discussion postings. *E-Learning*, *5*(1), 29-39.
- Felix, U. (2001). A multivariate analysis of students' experience of web based learning. *Australian Journal of Educational Technology*, 17(1), 21-36.
- Gibbs, G. (2010). The importance of context in understanding teaching and learning: Reflections on thirty five years of pedagogic research. Retrieved February 04, 2014, from http://issotl10.indiana.edu/plenary.html
- Gilbert, J., Morton, S., & Rowley, J. (2007). E-learning: The student experience. *British Journal of Educational Technology*, 38(4), 560-573.
- Holley, D., & Oliver, M. (2010). Student engagement and blended learning: Portraits of risk. *Computers & Education*, *54*(3), 693-700.

- Kehoe, J., Tennent, B., & Becker, K. (2005). Using the web to enhance tertiary education learning experiences. Retrieved February 04, 2014, from http://ausweb.scu.edu.au/aw05/papers/refereed/kehoe/paper.html
- Lee, S.J., Srinivasan, S., Trail, T., Lewis, D., & Lopez, S. (2011). Examining the relationship among student perception of support, course satisfaction, and learning outcomes in online learning. *The Internet and Higher Education*. doi: 10.1016/j.iheduc.2011.04.001.
- 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, D.C.: U.S. Department of Education, Office of Planning, Evaluation, and Policy Development.
- Mockus, L., Dawson, H., Edel-Malizia, S., Shaffer, D., An, J., & Swaggerty, A. (2011). The impact of mobile access on motivation: Distance education student perceptions. World Campus Learning Design. Retrieved February 04, 2014, from http://learningdesign.psu.edu/research/MLRTWhitePaper.pdf
- Osman, M. E. (2005). Students' reaction to WebCT: Implications for designing online learning environments. *International Journal of Instructional Media*, 32(4), 353-362.
- Petter, S., & McLean, E. R. (2009). A meta-analytic assessment of the DeLone and McLean IS success model: An examination of IS success at the individual level. *Information & Management*, 46(3), 159-166.
- Price, L., & Kirkwood, A. (2013). Using technology for teaching and learning in higher education: A critical review of the role of evidence in informing practice. *Higher Education Research and Development* (in press).
- Sitzmann, T. M., Kraiger, K., Stewart, D. W., & Wisher, R. A. (2006). The comparative effectiveness of web-based and classroom instruction: A meta-analysis. *Personnel Psychology*, 59, 623–664.
- Smart, K. L., & Cappel, J. J. (2006). Students' perceptions of online learning: A comparative study. *Journal of Information Technology Education*, *5*(1), 201-219.

- Sun, P. C., Tsai, R. J., Finger, G., Chen, Y. Y., & Yeh, D. (2008) What drives a successful elearning? An empirical investigation of the critical factors influencing learner satisfaction. *Computers & Education*, 50(4), 1183-1202.
- Weiss, H. M. (2002). Deconstructing job satisfaction: Separating evaluations, beliefs, and affective experiences. *Human Resource Management Review*, 12, 173-194.