

Quality Virtual Instruction: The Use of Synchronous Online Activities to Engage International Students in Meaningful Learning

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Online instruction offers students a convenient way to access higher education. However, convenience must never trump quality when it comes to participation in a graduate program. Synchronous learning activities in graduate online courses are an effective way to enhance the learning experiences of all students, and especially those from different countries. Synchronous learning activities enable international students to overcome cultural differences and fully engage in the curriculum. Student observations related to synchronous learning activities are shared to illustrate the value of this sound online pedagogical strategy.

Keywords: Online learning, synchronous, asynchronous, international students.

The faculty for the Educational Leadership and Policy Studies program at the University of Northern Colorado recently entered into extensive discussions on the merits of online instruction. The faculty's primary concern with online instruction centered on the fact that the rich exchange of ideas found in traditional classroom settings would be lost in cyberspace. Despite the collective reservation concerning online instruction, three courses in Educational Leadership and Policy Studies were offered online to meet the needs of students in an otherwise exclusively online program. I had the opportunity to teach two of these courses and what follows is are the findings on how instructional quality can be maintained through an online delivery model.

During the summer of 2011, I taught school finance and budgeting to 16 students spread throughout two countries and three states in the United States of America. As I worked on designing a meaningful learning experience for all involved, I specifically sought an effective way to replicate the positive characteristics of a traditional classroom. In the end, the course's design included synchronous and asynchronous learning experiences that, collectively, bolstered all 16 students' understanding of key finance and budgeting concepts. In fact, the design of the course allowed a student from Thailand to meaningfully participate in the synchronous discussions.

The opportunities to offer meaningful online instruction to students across the globe exists; however, to ensure a quality experience for all students, the instructor must understand the constraints associated with online teaching, commit to providing students a quality learning experience, and use synchronous online activities that allow for extensive debates on the studied curriculum. This study details the advantages and disadvantages with online instruction and discusses specific strategies for enhancing the overall quality of the experience for the online learner. In addition, student comments related to synchronous online learning are shared to better measure the overall effectiveness of online instruction that incorporates synchronous activities.

Online Instructions: Advantages and Disadvantages

Too many graduate programs fail to adapt to the needs of the 21st Century learner and, instead, continue to offer traditional instruction expecting graduate students from throughout the world to arrive on campus to receive an education (Hess & Kelly, 2005, p. 156). Such an approach to instruction runs the risk of failing to consider the desires of the modern learner. Online instruction offers students and instructors unique advantages in the instructional process. However, online instruction also creates specific

disadvantages. The online instructor must be aware of these advantages and disadvantages in order to create a quality learning experience for students who desire this delivery model.

Advantages. By definition, online instruction is, “delivered using the Internet as a medium of communication” (Brown & Green, 2003, p. 149). One of the most significant advantages of online instruction is that students who cannot attend a traditional university setting, due to a myriad of factors, can now earn a graduate degree (Card & Horton, 2000, p. 235; see also Brown & Green, 2003, p. 149). Online instruction allows universities to provide a greater number of potential students with access to higher educational opportunities. Given the importance of a graduate degree in the 21st Century, the fact that access is increased through online instruction cannot be overstated.

In addition to access, online instruction is convenient for certain students. Graduate students typically have a multitude of demands on their time that transcend the desired degree. These demands could include family, employment, or distance. As DeMoulin (2005) stated, “People are able to attend college at their time and location using the Internet 24 hour seven days a week. They are able to receive the same content and instruction online as on ground” (pp. 55-56).

A third advantage of online instruction focuses on learning styles. Certain graduate students, especially graduate students learning in a second language, have a tendency to observe the discussion in a traditional classroom and refrain from participation. The online delivery model provides a safer environment for all students to participate in the discussion. This enhanced exchange of ideas benefits all participants and ensures that comments or observations that would have not been shared in traditional classroom are shared (Brown & Green, 2003, p. 149).

Finally, online instruction reduces the costs of accessing higher education for graduate students. Specifically, students do not have to purchase a parking pass, travel to

and from campus, or accrue other possible expenses associated with on-campus attendance. The above-mentioned advantages for online instruction – access, convenience, safe learning environment, and reduced costs – make this delivery model an effective tool for graduate programs interested in reaching across borders to recruit foreign born students.

Disadvantages. Online instruction is not without concerns and disadvantages. A paramount disadvantage that cannot be overlooked is that online instruction does not automatically equate with quality instruction. Chen (2003) succinctly stated that the quality of the online experience “depends upon the careful planning of learning activities and the adequate design of learning environments” (p. 37). Simply providing online experiences does not ensure a quality experience for students. Instead, online instructors must purposefully design learning activities that collectively create a quality educational experience for all students. This is done, in part, through trial and error, training, and soliciting feedback from students concerning how the online experience could be improved.

Not all online learners have an intimate understanding of technology and many require additional assistance, especially at the beginning stages of the course. If this discomfort is not sufficiently addressed, then the technophobic student will be unable to “concentrate on learning” (Chen, 2003, pp. 37-38). Online instruction requires that the instructor dedicate time at the beginning of the experience to explaining the technology that will be used. In addition, the online instructor must be available to students to answer questions related to technology and curriculum as they arise.

According to Card and Horton (2000) online instruction typically fails to foster the same degree of discussion, interaction, and exchange of ideas found in traditional classrooms (p. 235). If the curriculum being taught is richer through dialogue and debate, then the online instructor must work on replicating this essential component of the traditional classroom in the virtual classroom.

One effective approach at creating an online environment that is conducive to interactions is synchronous learning, which will be discussed in greater detail below.

Finally, a real concern with online instruction focuses on the impact of kowtowing to the students' demands for convenience. A possible by-product of providing students with a more convenient mode to access higher education is, "an army of unmotivated students seeking to acquire credits in the easiest way possible" (Levine, 2005, p. 24). There is value in requiring graduate students to demonstrate their desire to earn a graduate degree by making the sacrifices necessary to come to campus and put other aspects of life on hold. However, online instruction can be designed in a way to not only replicate the exchange of ideas, it should also mirror the rigor and expectations found in traditional learning environments.

Quality Barometers for Online Instruction

Historically, debates around quality online instruction focused on the following dichotomy: synchronous or asynchronous learning. Synchronous learning, by definition, requires all participants to be engaged in an online activity at a designated day and time. Asynchronous learning allows the learner to access the information anytime and anywhere (Quillen, 2010, p. S5). However, online pedagogy scholars no longer view the optimal way to offer online instruction as an either/or discussion. The prevailing opinion is that the ideal online instruction includes both synchronous and asynchronous activities (Quillen, p. S5).

Quillen (2010) identified a number of benefits attributed to synchronous online instruction. These benefits included: problem solving, discussion flow, increased teacher access, and synchronous archives (p. S5). The use of synchronous activities allows the study of content move beyond rote memorization and focus on more complex issues. Students can work on solving complex problems collaboratively when synchronous learning activities are embedded in online instruction.

Synchronous learning activities can create a real-time discussion flow (Quillen, 2010, p. S5). Real-time discussions typically result in richer and deeper exploration of theoretical concepts when compared to managing a discussion via electronic mail or a discussion board. The net result of the richer discussion found in synchronous learning activities is an increase in students' understanding.

In synchronous learning activities, the instructor leads the discussion and manages the sequence of events, as would be done in a traditional classroom. As a result, students who seek online learning activities have greater access to the instructor (Quillen, 2010, p. S5). With greater access, students have a greater likelihood of comprehending the curriculum, the course expectations, and, ultimately, succeeding academically. The benefits of increased comprehension of the course's curriculum and expectations through the use of synchronous learning activities are essential to international students. In addition, the instructor only has to answer a particular question once in a synchronous environment since all of the students will hear the answer in real-time. In a completely asynchronous learning environment it is conceivable that the instructor might answer the same question as many times as there are students enrolled in the course.

Finally, a majority of synchronous platforms allow the instructor to archive each session (Quillen, 2010, p. S5). This feature proves invaluable for students who, due to professional or other commitments, are unable to attend the scheduled synchronous activity. Instead of missing out on what transpired, these students can listen to, and possibly view, the proceedings ex post facto. For the international student the archiving capability offers a way to review the discussion and augment comprehension.

Rao, Eady, and Edelen-Smith (2011) detailed some of the preferable features of a synchronous virtual classroom. These included the following:

- A whiteboard where the instructor can project a power point

- presentation to lead the discussion for the day,
- A text window to allow all participants to comment on the discussion through instant messaging,
 - The ability of participants to raise their hands to ask questions or offer a comment,
 - Emoticons that allow students to express their feelings related to the proceedings (from happy-face to confusion), and
 - Breakout rooms that allow for small group activities. (Rao, Eady, & Edelen-Smith, 2011, p. 24)

Some synchronous platforms offer audio and video opportunities, while others only offer audio. Individual preferences vary on the importance of video streaming during synchronous learning activities, but, clearly, without it the instructor loses out on interpreting body language. Rao et al. also stressed the technology requirements that must be in place for students to participate in synchronous learning, which include: a computer, Internet connection, a microphone, and, possibly, a webcam (p. 24).

Student Observations of Synchronous Learning

The web-based synchronous platform available through the University of Northern Colorado does not require students to download or install software and is, for the most part, simple to access and use.¹ The platform is an audio only synchronous virtual classroom, although the instructor does have the opportunity of posting her or his image. I immediately recognized the value of synchronous activities with online instruction and used the platform the first time I taught school finance online. At the end of the experience I asked the students enrolled in

¹ Due to this study's limitations, the name of the platform used at the University of Northern Colorado will not be identified.

the course four questions related to synchronous learning:

1. What did you like about the synchronous component of this course?
2. What did you not like about the synchronous component of this course?
3. Did synchronous efforts increase your learning experience?
4. Any other thoughts related to the synchronous learning experience?

There were 16 students enrolled in the course and 11 of them completed this optional course evaluation. The student comments are instructional and offer insight on the value of synchronous learning.

What did you like about the synchronous component of this course?

Eight students referenced their appreciation with a comment along the lines of, "the ability to communicate with my peers." "Also, being able to hear the instructor's voice gave a little bit of a human element in an online course." Clearly, a synchronous activity allows students to interact with one another and with the instructor in real-time and students find value in these interactions.

The human element comment came out again when a student wrote, "It's nice to hear about others' specific opinions, situations, and experiences. It also made the online class feel more like a 'brick and mortar' class." Students appreciate developing a shared-experience in a course and the sharing of stories and experiences expedites the amount of time required to develop a shared-experience. If students are only assigned to independently work on assignments without having the opportunity to interact with one another then there is no sense of shared-experience.

"I found the synchronous component to be a vital portion of the online education experience because it provides a richer interactive experience rather than if students shared thoughts by email." The synchronous activities allowed the discussions to move

beyond mere content and explore application of concepts. This richer discussion appears to be more genuine to students and to enhance understanding.

Finally, this comment succinctly summarizes the perceived advantages of synchronous learning activities embedded in online courses:

I have taken several on-line classes and this is the first one that has utilized the synchronous component. It only enhanced my experience with the on-line class. I prefer to actually attend class in person for a live, face-to-face discussion and debate. However, the synchronous component of the class was better than not meeting at all.

Online delivery models might not be ideal for all learners but, due to various circumstances, online courses are the preferred delivery model for some students. In such cases, synchronous learning activities meld the convenience of online instruction with the overall quality of traditional face-to-face classrooms.

What did you not like about the synchronous component of this course? The concerns with synchronous learning mostly centered on time demands for individual participants. “When I registered for the course, I was unaware of the synchronous meetings and had to shuffle and make changes to my schedule.” Instructors using synchronous activities in online courses must work to let students know of this fact as soon as possible. Some students might be unable to attend the synchronous activities and might be relegated to listening to the archived sessions.

The most commonly identified concern with synchronous learning activities focused on technology issues. “The only piece I did not like was when my technology was not working.” “On two occasions I had technical difficulties with (the platform). Overall, (the platform) seemed to work well and I felt more comfortable with it over time so my small issues were not major.” To properly access synchronous web-based platforms

does require a minimum degree of technology, including Internet hook-up. In addition, the instructor should take time to explain the platform to the students and establish norms related to participation to mitigate personal anxieties related to the virtual classroom. For example, one student voiced concern about the number of comments she made in class and wished others would have participated more. A norm related to participation could have been established at the onset to address this concern.

In addition, students identified that synchronous learning activities were not as good as traditional face-to-face experiences.

“I have to say that there really was not anything I did not like about it. It obviously does not take the place of having class in a classroom but it is the next best thing. I wish ALL my on-line classes/professors utilized this component as it really enhances the on-line experience.”

Did synchronous efforts increase your learning experience? Fifteen of the 16 respondents answered in the affirmative to this question. The one person to say no stated, “Synchronous efforts failed to produce an increase in learning because it inhibited classroom discussion. I feel there was a significant loss of answering questions by students and discussing between students.” Seven of those who answered affirmatively to the third question observed the sentiment articulated in the following quote, “I understood the course content much more after each synchronous session that I did from simply reading the material. I benefited from your instruction and from hearing the perspectives and experiences of other classmates.” “I think that without the synchronous sessions it would not have felt like a class but more like an independent study. The synchronous sessions really did allow for exchange of thoughts.”

In addition to the benefits associated with the live dialogue, students expressed understanding the content better as a result of

the synchronous activities. “The synchronous discussion really helped to increase my knowledge of the subject we were talking about.” And, finally, this observation, “Yes, it did increase my learning experience. It held me accountable for the reading.” Because students knew they were going to have to discuss the assigned reading in the synchronous activities, they better prepared for these sessions.

Any other thoughts related to the synchronous learning experience? Six students felt synchronous activities should be required for all online courses, “I wish all of my on-line classes had this component. It was fantastic.” Another student recommended the instructor realize that, “for first-time users, it is intimidating to talk openly... I believe synchronous learning is extremely useful but comfort level takes time.” Another student offered a wonderful suggestion that would address the intimidation issue, “May want to ‘call’ on people to answer questions.” The following statement best summarizes the value of synchronous learning experiences, “Synchronous learning makes a poor education model (online learning) a little better because it does expose students to more thought and ideas in an interactive manner.”

Synchronous Learning and International Students

Students choosing to study in a foreign country face a multitude of challenges that could impede academic success. These challenges include language proficiency, cultural differences, socialization, and networking with co-nationals (Lee, Park, & Kim, 2009, pp. 1219-1220). A proficiency in the language of instruction is essential for the international student to succeed academically (Yang & Clum, 1994) and little can be done to over compensate for language deficiencies.

However, if international students possess minimum language proficiency then online instruction with synchronous learning activities could prove an optimal delivery model for learners from a different country. One of the biggest challenges an international

student faces when studying in a foreign country stems from cultural differences. A program that offers international students access to knowledge through an online delivery model is, in effect, providing these students with cultural support. For example, a student from Thailand was able to fully participate in the course central to this study. As a result of the delivery model, the student was not forced to leave her family and culture to study in the United States. Instead, she was able to remain in a culture that was most comfortable to her and study at an American institution.

In addition, synchronous learning activities provide a forum for all students, including international students, to socialize with their peers and establish professional networks with individuals from multiple countries. The synchronous component of online instruction allows all students, including international students, to work in groups to complete assignments and to exchange ideas during class discussions. These types of interactions create a natural environment for all students to socialize and to develop professional networks with other students. However, socialization and networking will not automatically occur. Instead, the professor will have to facilitate this process and create opportunities for all students to meaningfully interact with one another.

Limitations and Analysis

The limitations of this study include two points that require explanation. First, the study’s methodology fails to meet all of the requirements for generalizability and validity. Specifically, the student sample size and the participant selection process limit the degree to which these findings can be applied in other settings. The student comments included in this study come from 11 individuals enrolled in a required graduate course for either a principal’s license or special education director’s license. There is no evidence that the students’ collective views are representative of the views of other students in different disciplines. In addition,

students were invited to share their views of the experience at the end of the course as a part of the course evaluation. Students were not randomly selected and no effort was made to gauge the views of the non-respondents.

A second limitation of this study focuses on an extraneous variable. Regardless of the delivery model the quality of the instructor will influence students' perceptions and there is no indication that students were not evaluating the professor as much as they were commenting on the value of synchronous learning activities. Or, stated differently, a professor with limited mastery of pedagogy might use synchronous learning activities and discover different student perceptions.

Despite these limitations, the findings presented in this study are of interest to professors providing instruction via an online delivery model. Research indicates that students select online instruction primarily due to the convenience (DeMoulin, 2005, pp. 55-56) and the findings reported in this study support this claim. The overarching sentiment articulated by students in this study was that face-to-face instruction was the preferred delivery model, but online instruction offered the necessary convenience to allow students to complete their desired degrees.

Brown and Green (2003) observed that online instruction creates a safe learning environment that elicits comments from students who might not participate in a traditional face-to-face classroom (p. 149). The students that participated in this study claimed that the synchronous activities provided them with a non-threatening forum to contribute to the discussion. Students could choose to participate either by speaking or by sharing their thoughts through the instant message window.

Research also indicates that for online instruction to be meaningful, students cannot be encumbered with technological issues (Chen, 2003, pp. 37-38). This point was also supported by the findings from this study. Students are required to run a program that verifies that their computers will interact correctly with the synchronous platform

before they can enter the virtual classroom. In order to do this correctly students must possess a minimal degree of technical expertise. In addition, other technical issues occurred periodically for students and, as Chen stated, these experiences interfered with students' ability to "concentrate on learning" (p. 38).

Quillen (2010) stated that synchronous learning results in richer classroom discussions and provides students with the opportunity to delve deeper into the content (p. S5). Students who participated in this study confirmed these findings. Students stated that an online course without synchronous learning activities would be nothing more than an independent study experience and void of the exchange of ideas that moves learning from factual understanding to application. Students also reported an appreciation for the synchronous activities that allowed them to gain greater understanding of the assigned topic through discussions with other students and with the professor.

Peterson (2002) stated, "Many programs are zealous in using the most current Internet based instruction, videotaping feedback, and computer-based training in programs" (p. 216). Peterson then encouraged programs using technology to do so only when the instructional tool improves "the quality of teaching and learning" (p. 216). Synchronous learning activities appear to improve the overall quality of teaching and learning of online instruction.

Conclusion

Online instruction is not the optimal delivery model for all students, but it does offer students a convenient, and perhaps the only, way to access higher education. Professors charged with offering instruction through an online delivery model must vigilantly work at providing all students with a meaningful learning experience. For online instruction to be meaningful, especially for students learning in a second language, there must be a synchronous component built into the curriculum. The synchronous activities

create a forum for students to discuss the curriculum with the professor and with one another. In addition, synchronous efforts turn the overall experience from a self-guided learning process to one where each student feels a part of a larger learning community.

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