Is Hybrid Education and Videoconferencing the Wave of the Future for Online Courses?

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Abstract

In order to answer the question of whether hybrid education enhanced with videoconferencing is the wave of the future for online courses, the author completed an exhaustive literature review of past and present hybrid and videoconferencing programs in the educational, medical, and pharmaceutical fields, both in the United States and globally. The observations and perceptions of both students and this author will be discussed. It has been an eye opening experience to discover how extensive this new hybrid education is being practiced, especially in America, even though it has only been around a few years. This paper also includes details on the hybrid pilot program Grand Canyon University conducted in 2011. It explains how the program was in harmony with the needs of the students. The paper concludes by stating the implications and recommendations of implementing such a program.
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We are at a crossroads in education today. If we were to look at the many factors of change that have occurred in the technological field in the past decade, not to mention the change in the students themselves (Peercy & Cramer, 2001), it becomes very clear that online courses need to adjust to these changes to meet our students’ needs. Statistics show that most universities in America now have online courses as a part of their programs (Harden & Hart, 2002). Only a few years ago this was not true. The concept of a hybrid education was brought about by many variables, such as busy students’ schedules, time and convenience factors, and the cost of brick and mortar (Hochberg, 2006).

The goal of hybrid education is to blend face-to-face, campus courses with an online component. Combining the best of both worlds, it is being discovered that students love this method. It seems to be promoting active independent learning and at the same time, reducing class seat time. The students are finding that it is convenient and much more flexible than taking only face-to-face or only online courses. “The best of both worlds” is a catchphrase in today’s highly technical world (Doering, 2006). As for hybrid education, one of the major reasons for its success is that it gives the opportunity to learn without the restrictions of time and space (Hochberg, 2006). Hybrid education can benefit students by giving them more time to reflect on the issues as they discuss them, but this process can be enhanced by using tools such as videoconferencing (Yanes, 2004). The following literature review will verify these perceptions.

**Literature Review**

**Hybrid Education**

A review of the literature shows us that the hybrid-teaching concept is relatively new, but the use of the Internet for online courses has been going on for some time.

The typical definition of a hybrid course is: one that blends face-to-face (normally students meet in a classroom on campus) with online learning and involves the delivery of curricular materials, access to resources, submission of assignment and online discussions that may be asynchronous or synchronous in nature. (p.155)

Taking an online course was a “poor stepchild” in the educational field for years. Because of technological advances, convenience factors, financial constraints, and even globalization, the online modality has now become a necessity.

Our task as educators today is to try to give the best possible education to the “net generation.” This generation is used to collaborating and thinking differently. They are vastly different in their learning styles than the generation before them. Traditional methods of instruction do not correspond to the way students gather and process information today. They communicate using social networking such as Facebook and Twitter. They cannot simply walk into a university classroom and sit there, passively listening to the professor talk while they take notes. It is against their nature. Hybrid education can help to cross this barrier and engage this new generation of learners (Peercy & Cramer, 2011). It was found, through data collecting, that students who took hybrid courses scored much better in almost all areas than those taking face-to-face courses, a simply amazing result. Learning styles come into play here. We know as educators that not everyone learns in the same way (Renfro-Michel, O’Halloran, & Delaney, 2010). Also, many professors are given a lighter teaching schedule to pilot hybrid classes, using the campus and online methods together. The reason for this is because this type of teaching involves a paradigm shift at the most integral levels of education. It compels the instructors and the universities to examine pedagogy. For those that are involved in this new and exciting
method of teaching, unlearning previous beliefs and techniques of teaching is a must (Brunner, 2007). Another adjustment being made is that the professor is no longer the main dispenser of knowledge, but rather, in a hybrid course, all members of the class are the dispensers of knowledge through interactivity among the group (Brunner, 2007).

The engineering and technology industries are looking for change in their education program as well. They feel that they should be pursuing this hybrid technology, combining infrastructure and technology. Griffin and Hayes (2009) expressed regrets that the technology was not there before. The authors state that, by using hybrid-teaching methods in the technology designers’ world, they have found the “traditional power relationships” are changing. Also, researchers have discovered a new but exciting form of “the user-centered design” model in place of the traditional one (Fleischmann, 2006). Ever since 9/11, the industry has been hurting for cash. One way they found to cut their expenses is to alter the way meetings are conducted. Instead of having several expensive face-to-face meetings in a row, they conduct follow up meetings with virtual communication, using videoconferencing as their primary means of communication (Hochberg, 2006).

Medical and pharmaceutical schools are also adjusting to new technologies and looking into the hybrid method of teaching. Medical schools are already beginning to blend their home base curriculum with the innovative e-learning, hybrid method of teaching. The universities that do not rise up to embrace this new technology will not survive long into the next century (Harden & Hart, 2002). In their study of the three methods of teaching a class (face-to-face, on-line and hybrid), Buzzetto-More and Sweat-Guy (2006) found the students by far favor hybrid learning. The College of Pharmacy at the University of Florida doubled their enrollment when they implemented their new hybrid program back in 2002 (Ried & Byers, 2009). At that time,
the pharmacist shortage in the United States showed that there were thousands of pharmacist positions open and not enough qualified pharmacists to fill them. The College of Pharmacy at the University of Florida stepped up and helped fill those positions by introducing their hybrid program. Lack of funding and buildings made the University of Maryland’s School of Pharmacy think outside the box as well. It developed hybrid classes, using both synchronous (videoconferencing) and asynchronous (recorded lectures) as well as small group activities (Congdon, Nutter, Charmeski, & Butko, 2009).

Religious institutions are embracing this new hybrid model in their curriculum as well. For example, Aquinas Institute of Theology, based in St. Louis, Missouri, embraced the hybrid model years ago. Their young ministers have the same busy schedules as most young working people in other fields seeking their Master’s degrees in education, trying to organize their working world with their personal lives. The model Aquinas follows blends face-to-face teaching with online instruction, using a Web site for each course. (Esselman, 2004). At Boston College’s Institute for Religious Education and Pastoral Ministry, the course entitled “Co-Creating the Reign of God“ was build around the hybrid model, integrating the online teaching/learning and face-to-face class meetings (Blier, 2008).

Daniel Brunner (2007), Associate Professor of Church History and Spiritual Formation at George Fox Evangelical Seminary states that, “The convergence of online and traditional face-to-face education has been called ‘the single-greatest unrecognized trend in higher education today’ (p. 115). Based on his hybrid classes, he feels the strengths of a hybrid course over only an online or face-to-face course are more time flexibility for students, increase in student performance, better retention, deeper sense of community and greater interaction among students and instructors (Brunner, 2007, p. 117). The author agrees with Brunner when he refers to the
hybrid model as the “single-greatest unrecognized trend in higher education today.” Very few educators have ever heard of the term, other than when it refers to certain car models promoting lowered gasoline consumption. It is an educational term that is flying under the radar. This will change, however, in the next few years, as it is shown how the hybrid model enhances learning.

**Videoconferencing**

Videoconferencing has often been called “interactive videoconferencing,” or IVC. It consists of “live, synchronous audio and video communication via a computer or digital phone network among sites in different physical locations” (Dal Bello, Knowlton, & Chaffin, 2007, p. 38). This technology has been around for many years, especially in the business world. Educators are now finding that it is a great tool to use in online programs as well. One of the nice things about videoconferencing is that it enables two or more people to see and hear one another in real time (Motamedi, 2001). Videoconferencing, used by many universities, comes in many different forms. Today, there are many different videoconferencing tools, based on different technologies. The use of Internet2 is one of these tools. It is a system used by a non-profit consortium of universities whose main goal is to get universities to use this high speed Internet system for the primary use of videoconferencing (Özkan, 2005). Videoconferencing can also be used as a tool for professional development. For experienced, full-time faculty, mentoring adjunct professors can be a time consuming experience. Also, with faculty members all across the country, videoconferencing allows professional development at an institution like Grand Canyon University to be effective. In an effort to stay competitive and efficient, universities must find creative ways to maintain good communication between staff members, and one method to do that is to use videoconferencing when possible (Rogers, McIntyre, & Jazzar, 2010).
Videoconferencing can be used in both the hybrid model as well as using it in the online approach alone. Videoconferencing technology has been used in just about all areas of business, the medical field and of course, the educational field (Pitcher, Davidson, & Napier, 2000). Using video cameras, Skype (a free, online videoconferencing program), blogging and other powerful technology, tools should be used to add life and value to the tools of best practices in education.

It is now clear that hybrid education and videoconferencing are the waves of the future. The following is a description of a pilot hybrid program Grand Canyon University set up for a class of administrative interns who were completing their requirements for their Master’s degree in Education Administration.

**Historical Development of the Hybrid Project at Grand Canyon University**

In 2010, Grand Canyon University assigned one of its Administrative Internship online classes to one of its adjunct professors (the author of this paper). There were only three students assigned to the class. This author wondered what best practices he could use to engage the three students during the online classes. He contacted the three students and asked if they were interested in doing most of their work videoconferencing by using the free program, Skype. He knew about the value of “skyping” each student individually, but wanted them to debate the issues of the course as a group through videoconferencing.

**First Videoconference Online Class**

Once a week, the author and his three students videoconferenced, using both Skype and the free tool called Google Docs. Google Docs is a feature of Google Gmail whereby all members with access can see a word document. Google Docs provided them with the opportunity to work on a project simultaneously with classmates during Skype sessions. While in the program, each student was able to add his or her individual part of the paper to the document
while the rest of the class looked at the document on their own computer. All were able to read it and make corrections to the document from wherever they were in the country. Once they completed the document and put it into the proper APA format, they copied and pasted it into their Collaborative Learning Community (CLC) assignment post. The feedback the author received from the students was that they would never want to go back to the “old way” of doing assignments online. They were more motivated and engaged than they had ever been in any of their previous online classes. They felt that using videoconferencing and Google Docs to work together on assignments and discussions engages all participants and created a proficient final product. A few of the students said that the use of videoconferencing allowed them to maintain real-time contact with their fellow classmates. One even said that he noticed a perfect attendance in all videoconference calls. He felt that this was due to the convenience of being in one’s own home and still being able to “attend” class. Also, students felt that because the videoconferencing classes had fewer people in the group, it gave them the opportunity to speak more freely and share more input on the issues than they would in a normal face-to-face class.

Second Videoconference Online Class

During the second pilot videoconferencing class in 2011, another great advantage to using Skype as a tool was learned and practiced during this pilot program. In this class, there was a student who lived in Germany. She was working at a school on a military base and was completing her master’s degree at Grand Canyon University via the online modality. In order to include members from all over the United States, as well as Germany, the group met every Sunday morning. This way, the student from Germany could participate in the videoconference even with the time difference. Once again, in the opinion of this author, this is the future of online courses; using such programs as Skype, the students and professor are able to hear and see
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The Hybrid Project

In 2011, the university had a cohort Administrative Internship class on campus. The students felt that they were going to spend too much time in class each week, not to mention the commute to and from class. The university came up with the perfect answer. They created a sixteen-week hybrid course for them, using the face-to-face campus class six weeks and videoconferencing the other ten weeks. The campus classes consisted of the whole group while the Skype sessions were comprised of small groups.

Students expressed their satisfaction with the Hybrid Project in a survey conducted at the end of the course. The consensus of the ten class members was that the hybrid model was a huge success from every standpoint. For students that have never experienced this kind of learning, combining face-to-face learning with online experience, and then adding a great communication tool, Skype, to enhance the online components, was unbelievable. The hybrid class had the right amount of interaction with classmates and the professor to achieve quality discussion and collaboration. After being a part of this hybrid class, the students felt it was a truly rewarding experience. They felt it was highly organized and structured, “very conducive to the limitation of time all of us students have.” They felt that the hybrid experience was extremely helpful given the demands of the internship, working full time, and being parents as well. The students said that compared to an online course, the hybrid method was much more effective. The opportunity to interact with classmates in real-time made the course much more meaningful than merely
reading and responding as they do in typical online courses. The students concluded their evaluation of the program when they said that the live discussions allowed for spontaneous questions and thoughtful responses.

**Implications and Recommendations Based on the Pilot Program**

The implications and recommendations for all higher level institutions, as a result of this pilot program, is to encourage universities to explore the implementation of this latest model of hybrid learning, conducting a combination of on-campus classes and videoconferencing using a program such as Skype, with the tool of Google Docs to enhance the video part of the hybrid program. We are aware that, as far as universities are concerned, there are some drawbacks to using such programs as Skype. At the present time, the ability for the university to monitor and record interactions during videoconferencing is limited. Lawsuits can ensue if a student feels he or she has been treated unfairly and the university has no record of the transaction, thus no means of determining the proper recourse. The use of programs such as ANGEL or LoudCloud provides the necessary level of documentation. Also, in this day and age, programs must be “data driven.” Besides liability concerns, conversations taking place using present innovative programs cannot be easily recorded and coded for *data purposes*. However, advanced software for this purpose is being developed, and some learning institutions, including Grand Canyon University, are looking into them for possible use in the future. With the advancements in videoconferencing capabilities, universities *must* invest in empirically researching the hybrid/videoconferencing modality to scientifically validate the overwhelming anecdotal evidence.

We also need to accept the fact that adopting programs such as the hybrid model means change and that is normally a slow process. Sometimes higher learning institutions are their own
worst enemies. They are afraid of the reality that change is constant. The status quo is no longer the best method for these times. For example, most universities have a Digital Media Degree Program. Why not ask those students to come up with new methods of the best practices using the latest technologies? Let them be creative in their design to help their universities promote hybrid classes and other methods of learning for modern students who are far different from the generations before them. Through this pilot program, we found that these students are learning differently, based on all the technology they are being exposed to, such as Twitter, Facebook, texting, and smartphones that are even capable of videoconferencing. Hybrid classes enhanced with videoconferencing are more student-centered, more stimulating and more dynamic.

It is now up to the institutions of higher learning to acknowledge that we are living in a changing technological world. Just as we have gone from large phones to smart phones, we will go from sitting in a class and listening to lectures to using technological tools such as hybrid courses enhanced with videoconferencing. If we add tools such as Skype and other such software programs to the mix, we will see greater achievements and accomplishments from our future students. Our students are asking us to adjust to their busy lives, use the latest technologies and make the proper changes in curriculum to meet their needs and learning styles. This author has faith in our universities that they will embrace new technology in their curriculum as soon as it is reasonably possible. So, is hybrid education and videoconferencing the wave of the future for online courses? This author’s answer is a resounding “Yes.”
References


