

# Web Conferencing Creates Highly-Engaged Online Students in Introductory Psychology

Shelley Evans

smevans@waketech.edu

Wake Technical Community College

Chris Roddenberry

caroddenberry@waketech.edu

Wake Technical Community College

## Article Summary

Web conferencing provides a platform for instructors and students to interact and develop a learning community. Four introductory psychology instructors at Wake Technical Community College integrated the Adobe Connect web conferencing tool into their online courses. Student free responses to end of course surveys provide support that Adobe Connect increases student feelings of engagement. Challenges and best practices for implementation of Adobe Connect are discussed.

## Introduction

Students often enroll in online courses because of the flexibility they offer [1]. These students still enjoy interacting with others, but their schedules may not allow for them to be in a traditional classroom due to working full time or family obligations. Baxter [2] found that perceptions of online learning are changing and social interaction plays a greater role in the learning experience than it was once thought. Online students need opportunities to interact synchronously with one another and their instructor to develop social presence and teacher presence [3]. These interactions are important to student success [4] and persistence, because they may make students feel more integrated into the social fabric of a school [5]. Online students have fewer ways to be engaged with an institution than traditional students do, so developing tools and practices to increase student engagement is a critical component of student success and an institution's future [6].

Web conferencing is one way to bring synchronous communication into an otherwise asynchronous environment by allowing teachers and students to see each other and interact live in educational setting. Research suggests increasing instructor visibility through synchronous video conferencing is the most effective way to enhance student engagement [7]. In addition, the audio and video features of Adobe Connect facilitate two-way communication between students, which creates a strong learning community and develops a sense of belonging among students [8]. Research has also demonstrated the value of using regular synchronous meetings to positively impact student outcomes [9].

## Adobe Connect in Online Gateway Courses

Like many community colleges, online education makes up a large part of Wake Tech's educational program, with some of the largest concentrations of online students in gateway classes. Also like many community colleges, these online students underperform their peers in seated classes and represent a major challenge to Wake Tech. Four online psychology instructors at Wake Tech incorporated

the regular use of Adobe Connect web conferencing into their online introductory psychology courses as part of a teaching protocol designed to increase student engagement, retention, and success [9].

While there are many different web conferencing products available, varying in price and functionality, Adobe Connect provided the best mix of cost and utility for the grant's purposes. Though free for students to use, Adobe Connect meeting hosts have to pay for an annual license. Adobe Connect's moderate cost for users was offset by its flexibility, ease of use, and power. Instructors can send a link to the 'virtual classroom', making it very simple for students to access the session with a click of a button. Students can join an Adobe Connect session using their computer or mobile device and they have the option to use video and microphone to interact with classmates. The use of audio and video is beneficial because it allows for reciprocal communication and instant feedback while students are engaging in a discussion or activity [8].

The building block of the Adobe Connect classroom is the *Pod*. Using the standard Pods included in the system and free add-in Pod provided by third party developers, instructors can seamlessly present and annotate video, powerpoints, images, and documents. Chat pods, student poll pods, and breakout groups create opportunities for rich synchronous interaction and collaboration among meeting participants. File sharing, web link sharing, and note pods allow easy sharing of information. Finally, a "presenters only" area provides a private space for the instructor to keep notes, agendas, and other content to assist in the administration of webinars. Finally, reporting and recording features allow the instructor to keep track of student attendance (down to the minute!) and create recordings for students who miss these synchronous events.

Four psychology instructors at Wake Tech used Adobe Connect for three types of synchronous activities; a first week course orientation, weekly instructor-directed webinars, and weekly office hours. The orientation activity allowed the instructor to introduce the course activities, answer student questions, and it provided a platform for icebreaker activities [10]. Types of weekly webinars differed among the instructors, with some treating the weekly class session as a live lecture with a planned topic, and others using the session for more passive, student-guided, question and answer activities. During these weekly class sessions, instructors often shared assignment help, tips and examples with students. Finally, instructors used Adobe Connect to hold five virtual office hours each week for student consultations.

### **Impact on Student Experience**

Open-ended responses on end of course surveys demonstrated the profound effect these webinars had on students' perceptions. A closer examination of the student responses demonstrates several obvious trends. The most striking observation from the free response data was the frequency and positivity of students comments related to Adobe Connect. Fifty-five of the 240 individual student responses (23%) mentioned Adobe Connect or web conferencing. An overwhelming 93% of these comments were positive, with only four students complaining about difficulty of attending evening meetings. Another trend noted in the student responses is the interactivity and interest Adobe Connect brought to the classroom. Students made comments such as, "live seminars were very interesting, fun, and very informational," and "it helps students connect with the teacher and understand more about what is going on in the class."- One student even stated, "it made me feel like I was in a real classroom!"

Students also mentioned that attending the live webinars or office hours helped them to gain a better understanding of course concepts. For example, a student stated "the webinars were very helpful in my learning and understanding the material for this class." This supports the findings of Skylar [11] that

found students perceived lectures conducted using web conferencing software increased their understanding of the course concepts. Many students also stated that they appreciated the opportunity to ask questions.

### **Lessons Learned & Best Practices**

There have been some challenges to using this synchronous communication tool. Even though some instructors report high levels of student interest, others have a difficult time getting students to participate. Olson and McCracken [1] caution instructors that students may have chosen to take online classes based on the flexibility this modality allows, and due to time constraints, participation in synchronous activities might not be feasible or preferable. The psychology instructors at Wake Tech who have high attendance at weekly sessions do a very good job of “selling” the idea in course announcements and other communications. Some instructors offer extra credit for participation or offer the synchronous webinars to take the place of their weekly participation in class discussion boards.

Another challenge with Adobe Connect sessions is the quality. To begin with, students must have a strong high speed internet connection. Some students only have access to Adobe Connect using mobile devices, which is of much lower quality as compared to accessing it from a computer. When just a few students participate in the sessions, the quality of the video is okay, but as more students join in, the bandwidth tends to get overloaded.

A practical suggestion to overcome this challenge is to ask students to turn off their video and microphone and use the chat feature to communicate, instead. The instructor may ask students to turn their microphone or video back on, one-by-one during question and answer sessions. The chat feature is useful for students to ask questions as the instructor is speaking. For very large class sizes, it may be helpful to have a moderator respond to students. However, the psychology instructors at Wake Tech were easily able to respond to student comments for class sizes between 30 to 40 students.

Finally, there is a cost associated with Adobe Connect, so instructors may want to consider using a free tool such as Google Hangouts or Skype. However, each web conferencing tool has different capabilities and limitations. Before adopting a particular tool, it is best to experiment and make sure it fits instructional needs.

Adobe Connect, like other tools, its utility is directly related to the skill of the person using the tool. There is a learning curve that all instructors must traverse in order to develop synchronous teaching ability. These best practices below will speed up the learning curve for instructors.

**1. Maximizing Student Participation:** The impact of Adobe Connect is dependent on student participation. Unless synchronous events are mandatory part of the course activities, the instructor will have to find ways to encourage student participation. One specific strategy is offering synchronous activities as an alternative to other mandatory activities. For example. Synchronous meetings might be used as an alternative for weekly discussion board activities.

In order to maximize student participation, it is important to hold the first online event during the first week of class, preferably within the first few days of classes. After the first week of classes, it is more difficult to persuade students to engage with this tool. One good strategy is to hold a course orientation during the first week. Instructors can accomplish two goals, giving students a quality overview of the course and introducing them to the tool. The orientation session is also a great opportunity for the instructor to guide students to adjust their settings on video and sound.

**2. Creating Engaging meetings:** It is important to remember that teaching with webinars requires a different skill set than classroom teaching, and even the most experienced classroom instructor will be challenged when transitioning to webinars. Instructors should practice with Adobe Connect before engaging in organized course activities. To keep students engaged, use all the tools in the meeting room (PowerPoint, videos, polls, breakout rooms for collaboration)

**3. Technical Considerations:** Bandwidth is a major factor in determining the quality of the online experience, and careful attention should be paid to factors that affect bandwidth. In meetings with more than 5 or 6 participants, it is usually better if all participants do not stream their images. Instructors may Also, instructors should use a computer with a hard connection to the internet. It is a good idea to encourage students to use hard connections, as well. Some students use mobile devices to attend the web meetings, but the user experience is somewhat degraded, along with some of the add on features available in Adobe Connect. When possible, students should be encouraged to attend meetings using computers.

## Conclusion

Adobe Connect is an easy-to-master web conferencing tool that has the power and flexibility to facilitate any learning environment. Instructors who first familiarize themselves with the tool and take the steps to maximize student participation will likely have the greatest success with its implementation. Adobe Connect adds value to the learning experience by helping students connect with each other and the instructor, developing a sense of community, and also strengthening understanding of course concepts. Like any tool, using Adobe Connect has some challenges, but the advantages of supplying a face-to-face synchronous communication platform to the online learning environment far outweighs these.

Student comments on end of course surveys from four psychology courses support that students enjoy the interactivity of web conferencing and the opportunity to connect with each other. Instructors considering using web conferencing in their courses should reflect on the positive student feedback found here and take it from the student who said, “the best thing about this class is the webinars. I really wished my other teachers did that because I feel like I am more successful with them.” Instructors can implement Adobe Connect knowing that it adds value by bringing an interactive face-to-face component to the online environment.

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