# **Teaching Tips/Notes**



Bringing the World to Your Classroom: Using Webex™ Conferencing to Bring Experts to Your Course

# Introduction:

When we, as educators, step into the classroom, we are the experts for the day, but each of us also knows that there are others that usually know at least part of that day's topic better than we do. When I was asked to develop a Nutritional Genomics course for students in our Agriculture and Life Sciences College, I had taught basic Animal Genetics for 10 years at another university, and certainly used many genetic and genomic assays and approaches in my own research. However, I also appreciated the fact that there were other experts in the areas I was going to cover, and so I thought about ways to bring these experts to my students. However, the cost of bringing experts to my classroom from all over the world, each with speaking fees, hotel and airfare expenses and per diems was not feasible to propose to my department. So, I started thinking of other ways that we could bring experts to the classroom using online conferencing technologies.

There are several different conferencing platforms that can be used, each with strengths and weaknesses. Several online sites provide a ranking of online conferencing tools, including G2 Crowd [1], Online Meeting Software Review [2], and Capterra [3] among many others. PC Magazine recently reviewed 10 of the top web-based conferencing tools for price, ease of use and meeting features [4]. Our university contracts with Adobe Connect™, Skype, Google Hangouts™, and WebEx™ Conferencing. For this course, I decided to use WebEx™ Conferencing because I was already familiar with using it during my summer online course, it had tech support from both our university and the company, and it allowed me to have multiple users join the conference and share audio, video and file sharing from anywhere in the world. Also, once I had created an account, I had my own private meeting room which allowed for immediate set up of meetings.

### **Procedure:**

Once I had decided on the topics for my course, I started looking for guest speakers for the Friday interactive sessions. My course is at 8 AM in the Eastern time zone, so this limited me to those in the Eastern, Central, and European time zones, as I was quite sure scientists in California would not want to give a 5 AM lecture. I was able to find scientists from the University of North Carolina, University College, London, University of Madrid, Spain, University of Cambridge, London, University of Pisa, Italy, and a company-AFB International in St. Louis Missouri, as well as several speakers who were at my home institution of Virginia Tech and gave the traditional in-class seminars. For all speakers using WebEx<sup>TM</sup>, I sent a WebEx<sup>TM</sup> "quick start" document, and the link to my personal WebEx<sup>TM</sup> meeting room at least one week in advance. We then set up a 15-30-minute time prior to their class session to test the system. Speakers did not have to load any software, but simply copied the web address into their

browser window and virtually entered my meeting room. They then connected the audio and video, which was easily done through a series of clicks on graphics within the meeting room, and we were ready to go. To share a PowerPoint file, another interactive graphic allowed them to click and either share their desktop, which was showing the PowerPoint presentation, or share their file, which would show their PowerPoint in the meeting room window. Most of my speakers had never used WebEx™ conferencing prior to our meeting and all of them were able to quickly set up in my meeting room within about 15 minutes during our test session. During this time, I also asked speakers if I could record their presentation, using the WebEx™ record feature, and most agreed. Students likewise used the link I provided and entered the meeting room during class time, setting up their audio and video for use during the session.

The WebEx™ class sessions were run as follows: The speaker and I usually met in the room at least 10 minutes prior to class start time, and students entered within 2-5 minutes of class start time. Note that students did not come to our regular classroom, but logged in from home, the library or the coffee shop. Once I saw that everyone was in the meeting room, I would start the recording (if the speaker had previously agreed to it) and would introduce the speaker. I would then ask the students to answer a question related to the day's topic as they introduced themselves—for example, on a day were the topic was the genetics of lactose intolerance, I asked the students to tell everyone whether they were lactose tolerant, or intolerant. This question got the conversation going between the speaker and the students, and sometimes, short discussions around that question arose during this introduction time. The speaker then started their 20-25 minute presentation. During the presentation and any time that students were not talking or asking a question, I had everyone but the speaker turn off their mics. This reduced the background noise in the meeting room. To preserve bandwidth, I also had everyone turn off their videos, except the speaker so that we could see him or her doing the presentation. The class ended with a question/answer period, which usually went over class time as most of the speakers were able to generate a lot of interest in their topics. I posted the recorded sessions on our learning management system for students to review.

#### Results:

Most of the speakers have agreed to speak again next year, even though I did not offer any pay or compensation for their time. Following each WebEx presentations, I did have the students write a brief thank-you note on VT/Hokie Bird paper, and sent the student notes, my own personal thank-you note, and a VT/Hokie Bird pen to each speaker (even those at Virginia Tech). In the end of the year course reviews, students commented that "it's been one of my favorite classes over my entire college career so far" and that "The weekly guest lectures were awesome - I learned so much from these professional researchers in diverse fields and, importantly, I gained new perspective on some very relevant issues by listening to their talks". In summary, using WebEx™ or any other web conferencing software can allow professors to bring experts directly to the classroom with little to no cost, very little time commitment, and very few problems. As an aside, I've also run my class from home or during a business trip using WebEx, and I've used WebEx conferencing to virtually meet with students who had questions about course materials, and graduate students who wanted to talk on a weekend about a new finding. I highly recommend using web conferencing in the classroom or other facets of academic work,

and can envision this technology used in many different disciplines in Agricultural Sciences.

## References

G2 Crowd. [cited 2016 February 9]; Available from: <a href="https://www.g2crowd.com/categories/web-conferencing">https://www.g2crowd.com/categories/web-conferencing</a>.

Online Meeting Software Review [cited 2016 February 9]; Available from: <a href="https://webconferencing-test.com/en/rankings/professional-software">https://webconferencing-test.com/en/rankings/professional-software</a>.

Capterra. [cited 2016 February 9]; Available from: <a href="http://www.capterra.com/web-conferencing-software/">http://www.capterra.com/web-conferencing-software/</a>.

McLaughlin, M., The Best Video Conferencing Services of 2015, in PC Magazine. 2015.

# Submitted by:

Deborah J. Good Department of Human Nutrition, Foods and Exercise Virginia Tech