

Techniques for Instructors of NTC Streamed Classes

When considering live video streaming for your class, it's important to understand the perspective of the remote student. Employing the techniques in this document will help keep your remote students engaged and learning.

Communication - Success for your virtual students is based on planning and communication on both sides. To ensure this occurs, OED staff has developed several written products to manage expectations. Pre-course information such as hardware and software requirements and expectations along with NTC technical support information will be clearly communicated to remote students and their supervisors in advance by NTC staff.

Remote Students - Remote students are equally important as your students in the classroom. Because they are not visible, it's easy to forget them. To prevent this, put the names and locations of all your virtual students on the whiteboard as a reminder.

Number of Instructors - At least two instructors are recommended for a virtual class. This enables one instructor to answer remote student questions via the chat screen while the other is "up front" teaching.

PowerPoint Slides - Feedback provided by NTC remote students indicates PowerPoint slides should have a minimum 24 pt, Sans-Serif font. The amount of information on each slide should be limited. Consistent color/backgrounds should be used. Limit slides to 40 per hour.

Exercises - Adults learn best by working on a relevant class activity or exercise every 1-2 hours of instruction. At least one exercise per lesson/chapter/module is recommended. In instances where there are several remote students at a single office location, teaming up helps!

Engaging Remote Students - Virtual students appreciate being directly engaged by their instructors. Ask them specific questions by name and solicit comments via chat screen to keep them involved and learning. Repeat all questions to ensure the remote students hear them.

Eye Contact - The instructor should occasionally make eye contact with the camera, especially when asking or answering remote student's questions.

Movement - Rapid body movements viewed via compressed video cause a loss of picture quality. Make deliberate movements to reduce distraction.

Gestures - Normal gestures are fine. Avoid swaying, rocking or pacing. Let your hand movements match what you are saying for emphasis or to get your point across.

Enthusiasm - How you show your enthusiasm for your subject matter is a unique to you and is directly experienced by all your students. It's very easy to "lose" your audience if you are not enthusiastic about your subject matter.

Body Language - Vary eye contact, facial expressions, posture and voice. Starting the class with a friendly greeting (maybe a smile) saying "good morning," depending on when the class is being streamed and acknowledging any differences in time zones is a great start.

Course Pacing - If your teaching style is normally fast paced, remember that remote students must simultaneously juggle between their hardcopy course materials, slides, presenters and their hardware/software. They may also have to deal with office interruptions. Asking remote students questions and then providing time for them to answer offers an opportunity to vary the usual teaching pace.

Idiosyncrasies - We all have them. Throat clearing, monotone, repeating certain phrases or words and even laughter, if constantly repeated are highly magnified during a class presentation. This is especially true for the virtual student. Asking someone you trust to identify any of these habits. Increased awareness will allow you to minimize these behaviors.

Background Noise - Let your classroom students know that the microphone is sensitive and will pick up side conversations and noise that will distract and interrupt virtual students.

Breaks - Taking planned breaks between class segments is important. Your remote students need to know in advance when the next break will be and how long it will last. Announce breaks with an appropriate slide. Write the time your class will reconvene on the whiteboard.

Humor - Humor works in the virtual classroom just like your normal classroom. If your classroom students are laughing, your virtual students will probably be amused as well.

Scripting - As you know from watching the nightly news, video presentations can be tightly scripted. Instruction does not usually require a high level of scripting. That said, planning what you will say, along with speaker's notes will help you avoid confusion caused by a disorganized presentation.

Starting a Class Segment - As you begin each class segment, let all your students know how long each will last and what they should be able to learn. Providing learning objectives typed out on the first slide of each class segment is highly suggested.

At the End of a Class Segment - Develop rapport with your virtual students by asking questions specific to the content being covered. Provide closure by reviewing what has been covered before you move on.

Streaming Works! Questions? Contact Patty Gonwa tel: 303-445-4680, pmgowna@usgs.gov or Ralph Roland, tel: 303-445-4678, raroland@usgs.gov