

USGS National Training Center
Techniques for Instructors of National Training Center Virtual Classes

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Making your classroom instruction available to remote participants can extend the reach of your teaching. When considering video streaming, it is important to first understand the perspective of your remote students. Then it is simply a matter of adopting a few techniques that will keep your remote student engaged and learning. As a USGS subject matter expert, you have likely taught a number of courses in the classroom. Your teaching skills are just as vital in the virtual classroom. The tips in this document will help you to connect with your remote students, and keep them engaged and learning.

Communication: Provide a clear purpose and/or objectives for your virtual training. Success for your virtual students is based on planning and communication on both sides. To ensure this occurs, NTC Staff has developed several communication products to manage expectations. Pre-course information such as steps for registering in DOI Learn, hardware and software requirements, any other expectations along with NTC technical support information will be clearly communicated to remote participants and their supervisors by NTC Staff.

Remote Participants/Students: Remote participants/students are equally important as your participants/students in the classroom. Because they are not visible, it is easy to forget them. To prevent this, NTC Staff will put the names and locations of all your virtual participants on the classroom whiteboard or flip chart as a reminder.

Remote Groups: Most group activities that would normally be done in the classroom can work well virtually so don't be afraid to leave them in your course. Make it clear that each group will report out and someone will need to be designated as spokesperson.

1. If there is only one person at a location, they will still report out but they might not be called on for every activity you may also call on them last and ask if they have anything to add.
2. Depending on how many people are in a remote location, you may want to have them work in smaller groups in order for the activity to be manageable.

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

PowerPoint Slides: Use PowerPoint for stimulating visuals and make sure your content is clear. Understand adult learner have preferences:

1. Visual Learners – Show them
2. Audio Learners – Tell them
3. Kinetic Learners – Let them
4. Relevancy – Show (and tell) them how they can use it.

Feedback provided by remote students indicate your slides should have a minimum 24pt, Sans-Serif font. The amount of information on each slide should be limited. Use consistent color/backgrounds. Slides should be limited to no more than 30 per hour.

Exercises: Participants learn best by working on a relevant class activities or exercises after every 1-2 hours of instruction. A minimum of one exercise per lesson/chapter/module is recommended. If there are several remote participants from a single office having them team up to work on the exercises is helpful.

Engaging Remote Participants: Virtual participants 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 classroom questions out loud to ensure the remote participants hear them.

Eye Contact: Remember to talk to the camera lens, not the monitor. Eye contact matters!

Movement: Rapid body movements viewed via compressed video cause a loss of picture quality. Make slow, 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 participants. It is very easy to “lose” your audience if you are not energized by 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 their course materials, slides, and hardware/software. Asking remote participant’s questions and then providing time for them to answer offers an opportunity to vary your pace.

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

Background Noise: Let your classroom participants know that the microphones in the classroom are sensitive and can be disruptive to virtual participants.

Breaks: Taking planned breaks between class segments is important. Your remote participants need to know in advance when the next break will be and how long it will last. It's especially helpful to announce breaks with an appropriate slide and put the time you will reconvene on the classroom whiteboard.

Humor: Humor works in the virtual classroom just like in the physical classroom. If your classroom participants are laughing, your virtual participants 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, 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 participants know how long each will last and what they should be able to learn. Providing learning objectives clearly delineated on the first slide of each segment is highly suggested.

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

Video Streaming Works! Questions? Contact Patty Gonwa, pmgonwa@usgs.gov, 303-445-4680 or Ralph Roland, raroland@usgs.gov, (303) 445-4678.