McDonald Observatory Videoconference Guidelines

Welcome to the McDonald Observatory Videoconference Program
We hope that the McDonald Observatory's innovative videoconferences will excite your students about both science and technology. The program is built around a series of observation sequences that are designed to make the experience as interactive as possible.

A. ADMINISTRATIVE CHECKLIST FOR THE VIDEOCONFERENCE
Immediately upon receiving this package…
   Carefully review the Teacher Materials and sheets
   Pass along our equipment information to your technician and arrange for a test connection of the videoconferencing systems (the test call should be scheduled to occur at least one week before your program)
One week   prior to your program…
   Confirm your program date and time
   Complete the test call
   Begin pre-visit classroom activities
24 hours to go!!…
   Discuss appropriate behavior during the videoconference with your students (see appendix).
   Copy student handout sheets for student use during videoconference
On your videoconference day…
   Get in touch with the McDonald Observatory videoconferencing system 10 minutes before program start time to establish the connection and troubleshoot any problems that may occur
   Introduce the students to the McDonald Observatory facilitator and be prepared to help maintain order and to call on students who have questions or answers

B. ADMINISTRATIVE PREPARATION

INTRODUCTION
We appreciate the time and effort that it takes to prepare your students for their program, and we will do everything we can to make the experience as rewarding as possible.
EQUIPMENT CONSIDERATIONS
McDonald Observatory is equipped with Tandberg 6000 technology.

Internet (H.323 protocol)
384 KBPS and up
IP address: 206.76.137.188

TEST CALLS
It is important to complete a test call at least one week before your program.   Please contact Kyle Fricke at kylef@astro.as.utexas.edu or 512-475-8844 to coordinate getting connected with McDonald Observatory.
STUDENT PREPARATION

Students should be prepared to interact with the facilitator during the videoconference. In order to facilitate this interactivity, we have developed student program sheets. Please have copies for the students to use during the videoconference.

STARTING THE VIDEOCONFERENCE

Please test your videoconference link at least 10 minutes before the program start time. If you have trouble connecting, drop the call and try again. You may need to reboot your system before attempting to connect again. Please phone if you are experiencing difficulties.

STUDENT BEHAVIORAL EXPECTATIONS

Students should be familiar with the concept of a two-way connection and understand that each side can see, hear, and interact with the other. Please work cooperatively with the McDonald Observatory facilitator to manage the students in the classroom and to call on students who have questions or answers. If possible, direct the camera as much as possible toward the student who is speaking. Remind the students that when they are speaking, they need to speak slowly and loudly so that the facilitator can hear.

Appendix

Behavior management in a videoconferencing session can be tied to setting expectations, boundaries, and roles/responsibilities. Students need to be part of the process in a videoconferencing activity. Students require education about individual roles and responsibilities during the videoconferencing session. Many videoconference sessions are planned around a student centered learning environment that includes student involvement in the learning process. A student-centered approach lends itself to solutions for behavior problems before they ever start since students are immersed in the process and play an active role in learning.

There are some special circumstances that students should be made aware of in a videoconferencing session. The nature of the environment present some challenges for students. Awareness at the front end of behavior expectations will alleviate problems for students and teachers.

Videoconferencing Etiquette

Otherwise known as Netiquette in the networking world, these rules for behavior simply take common sense and modeling of appropriate behavior in all settings. These are a few guidelines to follow to make sure that all students are aware of the extra care that needs to be taken in a videoconferencing setting.

- Voice: Be sure that your speech is clear, loud enough to be heard in a regular situation (adjust volume if need be), and slow enough to be easily understood. Take a moment to test this out at the beginning and make adjustments. Be aware of possible voice delays across the system and accommodate for the delays. Look at the camera and your present audience when talking to ensure that you are interacting with your far-end audience as well as the participants in the same room. If you are wearing a microphone, be sure the volume is properly adjusted. If you are using a fixed microphone, be sure that you are in range to pick up your voice.
- Noise: Be aware that regular classroom noise must be kept at a minimum to insure that the far-end site can hear. If there is a noisy activity planned during the videoconference, the choices can be to disconnect and reconnect, or mute the audio during the activity.
- Interruptions: Plan ahead for interruptions and have a plan for how to handle them. Students should be given the opportunity to take care of personal needs before and after the videoconferencing schedule time. Also, fire drills do come unannounced and a pre-plan with the principal can alleviate this kind of interruption. Also let the office know that you would appreciate it if there were no announcements to your room during the videoconference session.
- Student Call-outs: Students should be aware that verbal calling out that might be alright in a regular classroom setting may not be workable in a videoconferencing session. Plans for this type of interaction could be handled with cue cards or a simple raise of hands.

- Body presence on camera: Be aware of camera placement and image you are projecting. Plan ahead for whether you want to be standing or sitting and whether you want the camera focused on the teacher or students. Camera movement and adjustments can be made if you have technical help (or have enlisted a student to control the camera), but generally the camera is set in a fixed position.   The camera should be directed toward the person speaking to ensure clear understanding by the far-end audience. It may be necessary to mark off the camera presence area with tape to remind the speaker of where to stand to best engage both audiences.
- Presentation styles: Adapt your presentation style to fit the videoconferencing logistics. If you are a "walker" during your presentations in a regular classroom, you will have to adapt the classroom camera set-up (or your style) so that you do not disappear from the screen. If you like to engage your students in discussion, be sure that you are including students at your site as well as the far end site and that the camera focuses on them when they are speaking.
- Dress: Professional dress is always recommended, and simple clothing provides less distraction in an on-camera experience.
- Lighting: Be sure that all participants are able to be seen when on camera. If lighting in the room is an issue, you may need to choose a designated spot for presentation and provide lighting, so that the camera can effectively highlight the participants.

Student Interaction strategies for videoconferencing: Students who are practiced and comfortable with the videoconferencing environment will take the actual connected time more seriously if the roles and responsibilities during the conference are spelled out. It is helpful to make sure that all students have the experience of time in front of the camera prior to the videoconference. Experience in front of the camera will alleviate some of the behavior problems that can occur due to nervous energy and the discomfort of not knowing what is happening.

A few strategies and types of interactions that might be included in a videoconferencing situation are:

- Student self-introductions should be scheduled at the beginning of the session
- Question and answer periods are included in the schedule to stimulate conversation about the project
- Plan for these question-and-answer interactions with a list of those students who are representing their class by asking questions
- Record student interaction instances with a checklist to make sure all are participating in free-flowing events.
- Follow-up with individual students to comment on interactions

Appendix adapted from <http://www.d261.k12.id.us/VCing/classroom/behavior.htm>

Do and Don't List for Videoconferencing sessions:

Do be courteous to other participants	Don't make distracting sounds
Do speak clearly	Don't make distracting movements
Do keep body movements minimal	Don't cover the microphone
Do move and gesture slowly and naturally	Don't interrupt other speakers
Do maintain eye contact by looking into the camera	Don't carry on side conversations
Do dress appropriately	Don't wear noisy jewelry
Do make the session animated	Don't shout
Do be yourself!	

Table from <http://www.d261.k12.id.us/VCing/classroom/behavior.htm>