

Issues to Consider When Teaching a VTC course (Teaching to the camera)

What is different about the VTC classrooms?

- New podium room control panel
- Video-cameras (taping faculty activities in the classroom)
- Breeze software (to send projected media to remote site via the internet)
- Sympodium and tablet PCs for annotating projected media
- Push to talk microphones on student desks (amplifies and transmits student voice when activated and focuses camera on the student who is speaking)
- Two large screens in the back of room show to allow faculty / presenters to see
 - Projected media (Slides, DVD, video, web-pages, data files, object camera)
 - Students at the remote site (with a picture-in-picture [PIP]of the instructor)
- Flexible camera on podium for demonstrating 3-dimensional objects
- NO document camera
- NO white board
- NO laser pointers

What do the students at the remote site (ECSU) see?

Two large screens in the front of their classroom show

- Projected media shared through Breeze software (Slides, DVD, video, web-pages, data files, projection from object camera)
- UNC-based instructor (with PIP of remote classroom students?)

Do I have to change my teaching style?

Somewhat, perhaps, but not dramatically. You should consider some methods and approaches that are more effective than others in the VTC setting. You will need to be aware of and address the camera as you teach. You may need to limit how far you move around the classroom, but need not stay behind the podium all of the time. It will also be important to establish a protocol for your class with regard to receiving and addressing student questions.

Other important aspects of managing the VTC classroom are the same as teaching locally:

- preparing in advance of class
- communicating expectations to students
- conducting class in an organized fashion
- speaking clearly
- using readable projection media
- making sure that all students can see, hear, and participate in class, and
- beginning and ending class at the appointed time

Additional considerations are covered below.

Visual considerations for the VTC classroom

(see also *Videoconference Teaching Tips* from ITG)

- Make sure you are in the camera view
 - Use the PIP feature on the back screen as your guide. If you can't see yourself in the PIP, the students at the remote site cannot see you either
 - If you plan to move around a lot, make sure the IT staff know this in advance
- Make sure your projected media are clearly readable (for local and remote students)
 - Use crisp, high contrast slides (dark text on very light background OR white/yellow text on dark background). Avoid medium tone, low-contrast combinations. If you

- plan to add annotations to your slides as you present, a light colored background might be preferable.
- Use large, sans serif (block, no script) font (e.g. Arial or Veranda, generally 24 point or larger)
- Streamline and simplify your presentation materials. Compress large files to minimize storage requirements and lag-time between the originating and receiving classrooms. The School's instructional support group can help you with this.
- Use the technology writing tools (Symposium, tablet PC or Smartboard™) to write on (highlight) your slides or use as your "white board" for writing / solving problems.
 - Block print is easier to read than script.
 - Write large enough for the students to be able to read the text
 - Do NOT use the mouse or laser pointer to focus attention on aspects of your presented media; remote students will not be able to see them.
- Avoid wearing extremely dark, bright, or patterned clothing.
- Interact visually with students at both sites
 - Make "eye contact" with the camera regularly (between screens a back of room)
 - It may be difficult to see individual students' expressions at the remote site to gauge if they understand. Stop and assess understanding periodically.
 - Recognize that there may be a brief (1-2 second) visual and audio lag time between sites. Remember to pause when you ask them a question to make sure they have time to see, hear and respond and for their response to reach you.

Audio considerations for the VTC classroom

(see also *Videoconference Teaching Tips* from ITG)

- Remember that the remote site hears only what comes through a microphone
 - Use a clip-on wireless and, before class begins, adjust its placement so that your voice is picked up clearly and there is no rustling or muffling by your clothing. Check the sound level with students at the local and remote sites before you begin your lecture
 - Repeat questions if students forget to use their microphone, and remind them to use the microphones
- Speak clearly and more slowly than you might in general conversation
- Pay attention to what you say in the VTC classroom before and after class; the microphones are on and the sound is being recorded!
- Address questions to and seek responses from students at both sites.

Preparation for class

- Complete a classroom checklist for each class session so the IT knows what technology you are using and can be prepared to meet your need. This will be most efficient if completed at the beginning of the semester, but MUST be done at least 1 week in advance of your class.
- Make sure students and/or the faculty coordinator at ECSU have all necessary class materials at least 3 days before class. A package will be prepared and shipped by the Student Services office every Wednesday at 12 noon. If you do not get your materials into this package in time to meet the deadline, you are responsible for packaging and shipping the materials yourself.
 - Electronic class materials may be emailed directly to students or posted on Blackboard

- Hard copy materials or physical manipulatives (e.g. drug delivery devices to be demonstrated in class) should be shipped to the ECSU faculty coordinator to be received at least 3 days before class or lab.

Engaging students, maintaining attention and emphasizing key points during class

Because videoconferencing involves two-way communication across two or more sites, it requires structured interaction for clarity and good quality flow of conversation. The facilitator/instructor of the VTC class must manage the conversation to ensure everyone who would like to share or ask questions is recognized and given the opportunity. Course directors are encouraged to establish a protocol for students / participants to follow in VTC courses and to publish that protocol in their course syllabi and/or Blackboard sites. The following provides suggested language for articulating this classroom protocol.

To establish a workable rhythm of conversation in the classroom, we ask that you adhere to the following protocol for discussion in videoconferencing sessions.

When in the local classroom (i.e. classroom from which the instructor is delivering his/her lecture) please raise your hand to be recognized before asking a question or sharing a comment. Once recognized by the instructor/facilitator and given the "floor" to proceed with your question or comments, press the button on the nearest desktop microphone so that you can be heard clearly by students in both locations. Please identify yourself before you begin speaking. When you have completed your question or comment, release the microphone button to return control of the sound system to the instructor.

When at the remote site, to ask a question or share a comment, press the button on the nearest desktop microphone to gain the instructor's attention. When recognized by the instructor/facilitator and given the "floor" proceed with your question or comments, first identify yourself and then state your question or indicate you have an additional comment. For Example, "This is Susan Peck, and I have a question regarding Milk Thistle." When you have completed your question or comment, release the microphone button to return control of the sound system to the instructor.

The following provide some examples of active learning techniques that work in the large classroom and can be used to engage students on either end of the VTC experience.

- Slide annotation
 - Use the annotation tools to highlight or underline key words, phrases, or visuals as you discuss concepts
 - Incorporate "white space" (empty space) on slides to allow room emphasizing, expanding, or drawing connections between elements on the slide
 - Leave blank spaces in your text lines for words to be filled in during class (you can even ask the students to do this)
 - Insert blank slides in presentation to prompt you pause to summarize or to ask and answer questions (reinforces key concepts, resets attention)
- Directed questions
 - Ask specific, open-ended questions to guide discussion of concepts. You can direct these either to individual students (by name or by random selection) or to a cohort (proportional to enrollment on each campus)

- Allow sufficient time for students to hear, think about and respond to questions (note lag time)
- Free writes / minute papers / half-sheet responses: stop at an appropriate point in the class and ask students to write a response to a question, such as these
 - Summarize / the concept of _____ in your own words
 - Provide an example of the concept / principle of _____
 - Describe the process by which...
 - Compare and contrast....
 - Describe how this idea relates to our own experience
 - Explain how you would counsel a patient regarding...
 - The 3 most interesting things or major concepts I learned today are...
 - The thing(s) I am most confused about from today's (or previous) class are...

After students have completed their writing, you can collect the papers or simply ask a few students to share what they have written. Collecting and reviewing the papers is a great way to take attendance and to gauge student understanding of the content.

- Think / pair / share: Similar to the free writes described above, but ask students to think / jot down their thoughts related to the question, then share their responses with a partner or small group of students around them. You can then either move on or ask a few students to share their thoughts.

Note: in general, instructors should plan for a maximum of 30 minutes per 50 minute class to involve delivery of information and for the remainder to more actively engage students.

Distribution of exams and homework

- To ensure the security of exams administered on the partner campus (ECSU), course directors should send an electronic copy OR mail printed copies (14) of the exam directly to the ECSU campus faculty coordinator [Dr. Huyla Coker, 252-335-3830, HGCOKER@mail.ecsu.edu]. These must be received by the ECSU coordinator at least 3 days in advance of the exam. Electronic copies may be delivered by email to the ECSU faculty coordinator or posted to a secure faculty "group" in the Blackboard system.
- Each course director should communicate with the ECSU faculty member, at the beginning of the semester, regarding his/her preferred method of delivery, and should notify the ECSU faculty member when an exam or other assessment assignment has been sent. The ECSU faculty member will be responsible for confirming receipt of the exam with the course director, storing the exams in a secured location until time for administration, proctoring the exam as it is delivered and returning the exam to the course director for grading.
- All multiple choice tests graded by scantron machine should be returned to UNC for grading so that test statistics can be obtained for the entire class. These should be delivered by express mail, preferably with overnight delivery so as not to delay grading of the exam. As a security measure, the ECSU faculty member will make copies of the students' completed exams and scantron sheets before sending the originals to Chapel Hill for grading.
- For homework or other assignments and assessments, the course director and ECSU faculty member may determine between themselves the most appropriate means and location of grading and recording the assessment. When papers are returned to Chapel Hill for grading, the course director is responsible for returning the graded papers to students on both campuses in the most timely manner possible.

- Homework and exams should be graded and returned to remote students at the same time that local students receive their work
 - Electronic scanners and pen devices are available to simplify grading and sending documents (i.e. allows for email transmission of written assignments in PDF format, before and after grading, between campuses. Contact itsop@unc.edu to learn more

Communicating with students on the ECSU campus

- **After-class questions**
 - You may wish to consider refraining from staying after lecture to answer local students' questions and establishing a uniform policy for all students (e.g. speak with them briefly by phone or from the VTC control room immediately after class, use email or a discussion board). All students may benefit from hearing the answers to these questions.
- **On-line office hours**
 - Each course instructor and teaching assistant should arrange specific on-line office hours for students at ECSU.
 - Online office hours are normally held in the faculty member's office using a web camera attached to his/her computer and a tablet PC. The Multimedia Room also has a station which may be used for online office hours for TAs or lecturers from other locations
 - Online office hours are supported by the School of Pharmacy IT Department. **To schedule support for on-line office hours**, contact itsop@unc.edu at least one week before the start of the semester or two weeks before the start of your teaching segment
 - We understand that impromptu online office hour sessions may occasionally be necessary and will make every effort to assist you at those times. Please email itsop@unc.edu to schedule an impromptu online office hour session
 - All online office hours and other VTC events are posted on our online VTC calendar (in Oracle click on the Open Agenda icon, type "vtc" in the search window that opens)
 - If you must **cancel an online office hour session**, notify the students and itsop@unc.edu as soon as you are aware of the cancellation
- **Scheduling an additional time with students (e.g., Review Sessions, special presentations)**
 - Any class-related activity or event offered to PY1 students on the Chapel Hill campus must also be provided (usually by VTC) for the students in the same class at ECSU.
 - Any event that requires videoconferencing should be scheduled through pharmacystudentservices@unc.edu at least 2 weeks prior to the event. Ideally these events will be included in the course syllabus and scheduled at the beginning of the semester.
 - It is course director's responsibility to announce the event to students at the remote site and to schedule IT support when needed (or cancel IT support if remote students will not participate)
 - If the person(s) speaking at the event has never used the School of Pharmacy's VTC classroom, the course director should be at the event to assist or to make sure the individual watches the relevant training video(s)

Other issues to consider

- Try not to call on the remote students a disproportionate number of times relative to local students. Remember that the remote site makes up approximately 1/10th of the student body and it would be seen as unfair to ask them to answer the majority of the questions
- You may choose to teach your lecture locally or at the remote site. Faculty are strongly encouraged to teach at least one lecture per course or module from the remote site. Information about and reimbursement for travel are available (see Kim. Deloatch for details).
- Class archives
 - All video-teleconferenced sessions in the Doctor of Pharmacy program will be recorded both through the Breeze™ software, stored in a web-based format, and in DVD and VHS format. The Breeze archive will contain the computer data (e.g. slides) shared during the session merged with the audio recording of the session. DVD and VHS recordings will contain audio and video capturing instructor activities and data presented, as captured by the camera in the back of the classroom.
 - Because of server space limitations, Breeze recordings will be purged from the server at the end of the semester. DVD master recordings will be stored indefinitely in the School's media library. VHS copies will be erased / recorded over at the end of the course (to conserve space).
 - If desired by the course director, the School of Pharmacy IT staff will provide him/her with a URL for accessing the archive after each class session. Access to class archives is restricted to:
 - Course directors, faculty, and TAs participating in the course
 - Students enrolled in the course
 - Division chairs and their designates, with the faculty member's knowledge, for the purpose of peer teaching evaluation
 - In the event that technical or weather-related problems prevent successful delivery of a class session to the remote (ECSU) site, students will be given access to the Breeze archive for that class period, through a link in Blackboard, OR the course director may provide the Breeze™ and/or DVD archive to the course facilitator at ECSU to be viewed once by the group of students who were unable to receive the instruction.
 - Clarification of intellectual property issues and development of a more complete policy regarding the use of archives is currently underway. Until a full policy is developed, only one aspect of their use is clear. Any time that access to a Breeze archive is given directly to any student it **must** be given to **all** students enrolled in the class so that no individual or group of students has preferential access to this study aid.
 - It is a good idea to have access to multiple copies of your PowerPoint presentation, especially if you are planning to use the simple screen sharing method in Breeze and/or plan to use a tablet PC. In addition to saving a copy of your file on the tablet PC or "K" drive, it is a good idea to have a second copy it to a USB memory device. That way, if there is a problem, a copy of your slides can be quickly accessed from the alternate device.
- Consider developing web-based tutorials for "content delivery" to free up class time for discussion and development of critical thinking skills

Training and development opportunities:

- Technology and pedagogy training for new VTC instructors in December / January (itsop@unc.edu for dates)

- Ongoing Training
 - Specific Video Conferencing Lunch and Learns
 - Technology Series hosted by IT department
 - Specialized Training when appropriate
- One on one, support personnel or guest lecturer training available on request, must schedule at least 48 hours prior to class being taught/supported (itsop@unc.edu to schedule).
- Handouts with VTC teaching tips and videos demonstrating how to operate each room are available from the SOP Instructional Technology Group (itsop@unc.edu)
- A video demonstrating how to operate each room is available on the desktop in each room.

Daily Classroom Checklist

Course: PHCY 61 PHCY 62 PHCY 63 PHCY 68 PHCY 69L PHCY 170

Class date(s): _____
(May include multiple dates if classroom needs are the same for each date)

**NOTE: If you cancel an event, you MUST notify IT
(itsop@unc.edu) of this change in the schedule**

Class time: _____

Instructor name: _____

Instructor phone: _____ Email: _____

Today's class session will originate from

- | | |
|--|-------------------------------------|
| <input type="checkbox"/> UNC Chapel Hill – Kerr 1001 | <input type="checkbox"/> Beard 202D |
| <input type="checkbox"/> UNC Chapel Hill – Beard 116 | <input type="checkbox"/> Beard 202E |
| <input type="checkbox"/> ECSU | |

Type(s) of class session:

- | | |
|---|---|
| <input type="checkbox"/> Lecture/discussion with data (slides, files) | <input type="checkbox"/> Presentation panels |
| <input type="checkbox"/> Lecture/discussion without data | <input type="checkbox"/> Student presentations |
| <input type="checkbox"/> Lecture / discussion with problem solving(e.g. need to “write on board”) | <input type="checkbox"/> Other (please specify) _____ |

Type(s) of instructional materials to be used in this session:

- | | |
|--|---|
| <input type="checkbox"/> PowerPoint slides | <input type="checkbox"/> Audio files |
| <input type="checkbox"/> MS Office files (Word, Excel, Access) | <input type="checkbox"/> Other (please specify) _____ |
| <input type="checkbox"/> VHS video | _____ |
| <input type="checkbox"/> DVD video | |

Do you wish to reserve a tablet PC for this session? Yes No
(email ITSOP@unc.edu to confirm 1-2 days in advance)

Do you move around the room a lot when you teach? Yes No

Please list any special requests or concerns regarding today's session.