Videoconferencing (VC). A Student Perspective.

Ruth McGovern, Andrew O'Regan

Progression to the clinical years of the Graduate Entry Medical School programme involves placing students on clinical attachments. The placements are based in hospital and general practice clinics that are distributed throughout Munster and Leinster. Students in the various regions attend a local teaching hub on a weekly basis, from where they can attend lectures. The lectures come live via videoconferencing from the GEMS and involve interaction with students based in five regional hubs. The following is an account of graduate entry medical student experiences of videoconferencing as a means of delivering weekly lectures- The dos, the don'ts, hints and tips for students by students.

Technical aspects of videoconferencing.

Technical issues are inevitable when introducing technical systems to first time users. (Foronda & Lippincott, 2014) The technical issues that usually arise may be due to a combination of factors such as tutor and student inexperience with the equipment and disorganisation on the part of the videoconferencing co-ordinators and the support team.

Student inexperience-

Prior to beginning clinical placements, the medical school issued all students a document outlining the various aspects of the videoconferencing equipment and its use. Of the many fellow students that I interviewed, I encountered very few students who had read this document. Some did not know it existed. In practice this lead to huge student frustration, wasting of valuable time that should be allocated to course content and consequent disengagement from the lecture. (CARTWRIGHT & Menkens, 2002)

Reading that one document, rather than hoping that a technically savvy fellow student would be attending your site, is crucial to ensure that your valuable study time is not wasted. Arriving 5-10 minutes early will also help to mitigate this problem.

It is important not to underestimate the complexity of the equipment or to overestimate your own technological competency. As students you must be able to resolve common problems. These usually include inability to see the slides when you are already dialled in and inability to dial in. See the table below;

Technical problem;	Possible solutions;

Inability to see the slides when dialled in →	• Dial in and dial out • Use display or click Far button and then left/right buttons to change content layout • Disconnecting and then reconnecting
Inability to dial in "no internet connection" →	• Ensure internet is connected • Make sure the rooter is switched on • Make sure the network cable is on • Try to reboot the system

Tutor inexperience-

While some tutors may be competent users the videoconferencing equipment, the issue of the technological generational gap can often prove problematic. Some of the "old school", for the physicians delivering lectures may not understand the equipment or even care to understand it. In these instances student competency with the equipment is crucial.

Videoconferencing technical support team-

In the case of an irresolvable technical issue students may avail of the support of the videoconferencing helpdesk between 8am and 9pm Monday to Friday. Members of this team have been trained to deal with common problems and the implementation of backup procedures.

Logistical aspect of videoconferencing.

Essentially this is the process of preparation and organization to ensure that the necessary resources are in place for effective videoconferencing.

Logistical problems often occur less frequently as the term passes students become more familiar with the equipment. (Callas et al., 2004)

In terms of logistics, students must be able to;

- See the tutor → Check the monitor.
- Hear the tutor → Check the audio/ speakers.
- Be seen by the tutor → Check the camera.
- Be heard by the tutor at appropriate times. → Check the microphone.

Don't forget;

- Remote site microphones should be turned off when the tutor is speaking.
- Do not discuss personal issues at any site in case the microphone is on.
- The microphone and camera should be moved as little as possible.
- Local site students must speak up so that the remote sites can follow the discourse. It is difficult for remote site students to hear local site students.

Videoconferencing etiquette

Effective communication to occur between tutors and local students, between tutors and remote students and between students themselves is undoubtedly a complex scenario to facilitate. (Gillies, 2008)

To allow for the smooth and effective running of videoconferencing sessions the following may prove helpful;

- Arrive 5-10 minutes early. That way any issues can be resolved with no infringement of course allocated lecture time.
- Aid the tutor where they are having technical or logistical issues.
- Refrain from surfing the web, sending emails, facebook etc. This applies to remote as well as local site students. It is distracting for both the lecturer and the other students at your site.
- Avoid engaging in conversation as much as possible. Other students may not be able to follow the lecture as a result.
- Situate the camera so that everyone is visible. Facing the camera to the wall and leaving early never goes unnoticed.
- Keep the microphone on mute unless you are conversing with the local site.

Interaction, engagement and concentration. A note for lecturers.

The primary function of videoconferencing is to allow students in various geographical locations to receive equivocal education as local site students while avoiding long periods of time commuting to lectures in a cost effective way.

Barriers to effective videoconferencing are multiple. They include failure to interact with remote site students, insisting on didactic teaching rather than adapting teaching style to integrate videoconferencing into the learning environment and lack of competency with the videoconferencing equipment are the most common causes. (Raffelini, 2006) These factors result in remote site students disengaging from lectures and poor concentrations levels leaving such students at a perceived disadvantage.

The following are simple steps for presenters to help students to interact and engage in the learning environment so that the requisite learning objectives are achieved in an effective and memorable way.

- Most importantly- Interact with remote site students.
- Interact with remote site students from the beginning. If you do not do engage them early in the sessions, you've lost them.
- Ask the remote students questions. Get them thinking.
- Set tasks that require problem solving i.e. assign case based exercises to each remote site.
- Adapt you teaching methods. Increase the font size, make the slides dark with light coloured text and create charts and graphs that are more legible.(Callas et al., 2004)
- Request that students at remote sites converse between themselves as little as possible to allow other students at that remote site to follow the lecture.
- Student concentration is not indefinite. Breaks are important not only for concentration but also our ability to recall information.

Callas, P. W., Bertsch, T. F., Caputo, M. P., Flynn, B. S., Doheny-Farina, S., & Ricci, M. A. (2004). Medical Student Evaluations of Lectures Attended in Person or from Rural Sites via Interactive Videoconferencing. *Teaching and Learning in Medicine, 16*(1), 46-50.

CARTWRIGHT, J. C., & Menkens, R. (2002). Student perspectives on transitioning to new technologies for distance learning. *Computers Informatics Nursing, 20*(4), 143-149.

Foronda, C., & Lippincott, C. (2014). GRADUATE NURSING STUDENTS'EXPERIENCE WITH SYNCHRONOUS, INTERACTIVE VIDEOCONFERENCING WITHIN ONLINE COURSES. *Quarterly Review of Distance Education, 15*(2), 1.

Gillies, D. (2008). Student perspectives on videoconferencing in teacher education at a distance. *Distance Education, 29*(1), 107-118.

Raffelini, C. (2006). An evaluation of the training activities provided by videoconferencing in a university hospital centre. *Innovations in Education and Teaching International, 43*(3), 261-277.