Guidance for teaching in online environments during Covid19

A practical approach to delivering online teaching

March 2021

NACT UK – trading as Medical Education Leaders UK
Championing improvements in postgraduate medical and dental education across the UK

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Content

Introduction

The last few months have resulted in significant disruption to teaching programs. As we are now stabilising it is time to reflect and review how we can maintain teaching programs whilst also adhering to social distancing guidelines.

This document provides suggestions on methods to continue teaching using online and social media tools. It is not intended to be exhaustive. You will also find two guides attached that give advice on how to optimise webinar type sessions.

Drivers for change

- Rota changes
- Travel limitations
- Social distancing (yes it applies to teaching too)
- Need to learn about Covid19
- Need to learn new skills if redeployed

The net effect of these drivers is that it is no longer possible for trainees to meet trainers in large face to face groups. Alternative strategies are required.

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Remote learning

Remote learning requires a different educational skill set to the traditional education model. It works well when interaction and engagement for the learners are prioritised. You cannot simply record a traditional lecture, then place it online and expect it to be effective. As educators you must adapt your style and approach to get the best out of whatever platform you use.

Suggestions for remote learning

A number of options are available to trainers/trainees to provide remote learning. Some are very simple to set up using widely available social media tools. Others will require more substantial design, finding and oversight.

You must always be mindful of security and confidentiality issues. You should understand the security issues of whatever platform you choose to use and always adhere to GMC confidentiality guidance.

Simple

Set up a **WhatsApp** group for a defined group of learners. Use this to post anonymised cases with questions and discussion. This is great for picture based learning e.g. ECGs.
- o Pros: Quick. Easy. Fast. Asynchronous learning.
- o Cons: Hard to do more than one case at a time. Short answer format only.

A similar approach can be used with Facebook groups and Instagram accounts.

Moderate

All of us will now be familiar with online meetings using platforms such as Zoom, Skype and MS Teams. These are often seen as the most obvious 'replacement' for traditional teaching sessions, and in their simplest format they can do that. However, with a little thought and effort these sessions can be optimised for learner engagement. Attached to this document are guides for presenters and delegates for an online webinar/conference. I would recommend sharing these widely.

The main issue with online presentations using Zoom etc. is that they need to have engagement designed into the session. Very few people will concentrate on a long online lecture, so don't try to do it.
- o Pros: Moderately easy to set up, but you do need to understand how platform functions. Can be interactive. Chat and Q&A functions on many platforms. Allows contemporaneous discussion and debate. Can share screen/presentation.
- o Cons: Limited delegate numbers on 'free' accounts. You do need to understand how platform functions (not always intuitive). Not asynchronous (but can be recorded).

Advanced

It is possible to convert an entire training program into an online format, but this will take a lot of time and in most cases a dedicated team. Platforms such as Moodle can be used for this purpose but are unlikely to be achievable in the short to medium term without support.

A blended approach

Our recommendation is that educators take a blended approach to learning, by which we mean a combination of online learning resources combined with workplace based teaching which should still continue during Covid-19.

Trainee engagement

We also recommend involving trainees wherever and whenever possible, both in the design and delivery of online education. Programs that do this are much more likely to succeed than those that do not.

Top tips

1. Promote and advertise online meetings well in advance of them taking place
2. Time spent in online education is still work time, ensure that this is recognised in job plans. Highlight this to ES/CS
3. Be aware that some trainees with disabilities (e.g. deafness) may require extra support
4. Always enable password functions to enter an online meeting (Google Zoombombing)
5. Record learning sessions and make these available for viewing at a later time
6. If you're not good with tech – find someone who is to help!
7. Review and share the guides for presenters and for delegates well in advance of your event
8. Write a lesson plan with timings, outcomes and waypoints to maintain momentum.

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Guide for speakers at a 'virtual conference'

During the pandemic we are all using online technologies more frequently for teaching and learning. However, online teaching uses a different skill set to the traditional lecture/workshop. The following 'top tips' are designed to optimise your preparation and impact.

Brief your audience

This will probably be done by the chair, but if not ensure that you brief your delegates on exactly how you want to work with them. We think it's good practice to ask them to sanitise/prepare their workspace to make sure they are in the right frame of mind and environment to learn (see guide for delegates on how to sanitise your workspace for a webinar).

Put your audience first. This means thinking about what it is they want to learn and not just what you want to teach. You can invite delegates to send you messages on what they want to get out of the session at the beginning using chat functions. This is also a great ice-breaker to ensure that delegates understand the need for active learning.

Use the first 1-2 mins at the start of your conference to allow time for delegates to prepare their mind, workspace and aspirations.

Short is sweet

You should aim to deliver short periods of presentation interspersed with activities such as question and answer sessions. We know that in a traditional lecture, participants struggle to maintain focus for more than 20 mins. In an online environment, which has a more passive feel to it, you should halve this. Aim to speak as a sole presenter for 10 mins or less and then plan an activity.

Write a lesson plan

Carefully consider your learning objectives, outcomes and methods. Write a lesson plan with timings alongside waypoints that you aim to reach during your session. Have this within easy reach. Tips on constructing an effective story and plan can be found at - http://ffolliet.com/category/p1/

You cannot do everything

Most online platforms have some form of Q&A or chat room function. This is fantastic to use as repository of live questions during your session that you can then refer to periodically to break up the flow and improve engagement. However, it is virtually impossible to present and monitor this function. Every session should have a colleague assigned to the Q&A/chat functionality. Similarly, you cannot handle the tech and everything else, get someone else to do it (usually the chair). So, for every session there should be a minimum of

- o The chairperson (intro and outro, keeps you to time, handles controversy)
- o You as the presenter
- o The Q&A person to monitor the audience comments and questions.
- o The tech person (who may also be the chair)

Timing is vital

You must keep to time. The only way to do this is to practice, practice, practice. Don't eat into the interactive question time by speaking for too long. Nobody will like you for this.
Tell people how your session timings are going to work at the beginning. This will allow your audience to understand how to interact with the session.

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Technical issues

Ensure your WIFI is working and has a good signal. Ensure that you have used the platform before and that you know the basic functions of how to.
- o Open and close video
- o Open and close audio
- o Share screen

Sound great
You don't need that much to make a big difference.
- o Use an external microphone and not the one on your laptop (the difference is huge).
- o Keep a steady distance from the microphone
- o Learn how to control input levels to avoid plosives (popping sounds when gain too high)
- o Consider using a pop filter to reduce plosives (loud popping sounds, typically when you say a word beginning with 'p')
- o Check how you sound with the chair before the session starts

Look great
You are still presenting and therefore it's important that you look your best.
- o Place the camera at eye level (a low camera angle will make you appear heavier than you really are.
- o Consider your posture. Ideally stand up, or at the very least sit on a proper chair.
- o Check the lighting such that your face is lit (a white sheet on the desktop also helps this). Shine a light at your face to illuminate from the other side, and above your screen. Do not sit with a window or light source behind you as this causes silhouetting.
- o Check your background. Think about your stage and how it comes across. Avoid cheesy, silly or comic backgrounds.
- o Avoid interruptions and distractions. Lock up the pets, get someone to entertain the kids and ensure that if anyone in the background is appropriately dressed and behaving themselves.
- o Have a focus point to talk to. Ideally put a photo of someone close to the camera and talk to their portrait. This keeps your flow and reminds you that there are people out there.
- o Make an effort with your appearance. Dress appropriately, shave, etc. (obvious but I've seen things……!)

Your slides
If you choose to use slides, video or any other presentation program then remember that they will not present in the same way in a webinar as on your own PC when you prepared them.
- o Delegates may have little to look at apart from your slides. Please do your best to design them well. [Check out tips on effective slide design here.](#)
- o Remember that delegates will often have the chat and presenter view functions on their screen as well as your slides. Leave lots of empty space on the right of your slides so that this is not obscured.
- o The general principle of keeping the number of words per slide as low as possible remains. If your audience is reading, they are not listening. DO NOT read out your slides to the audience under any circumstance.
- o Avoid slides that are only to be shown for a small period of time. In general, have fewer slides than normal
- o If you want delegates to perform an activity, have a slide that explains exactly what you want them to do (remember that they cannot ask a friend or double check what you want them to do).
- o Have a questions slide for your Q&A sessions

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Example of a well designed slide. Less important 'space' on right to allow picture in picture and chat windows/
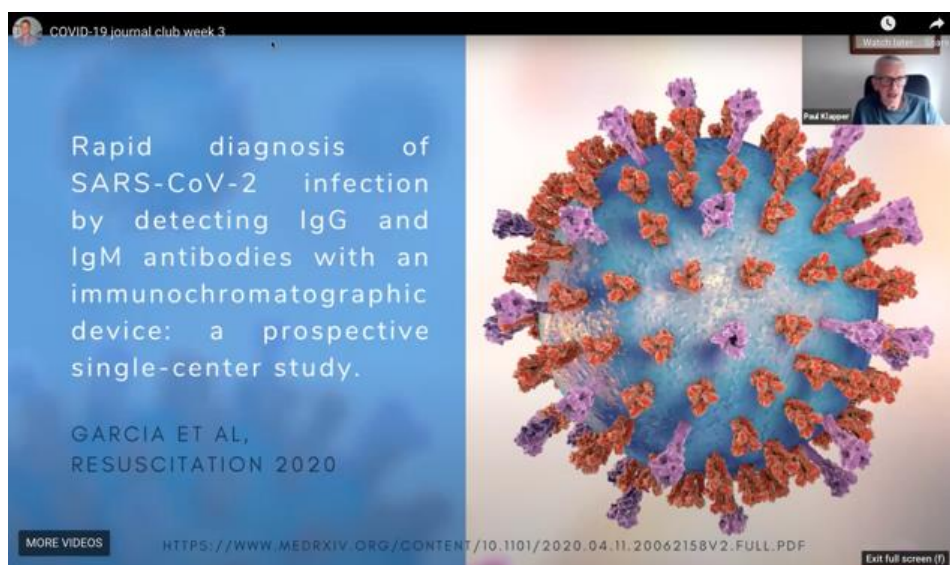
Be interactive
Keeping your audience engaged is vitally important. Here are some ideas on how to do this.
- o Use the Q&A/chat functions to store up questions for periods of Q&A planned in your sessions
- o Present as a panel of speakers with conversation between participants, rather than just as a single talking head.
- o Ask delegates to perform an activity that they can do independently (e.g. take 60 seconds to write down 5 things to improve a webinar, and then go on to present your ideas).
- o You can ask questions of your delegates and then
- o You can use tools such as Slido to ask questions, but be careful as these often take time to set up and deliver. My personal opinion is that they rarely add value to these sorts of sessions.
- o Lots of further tips are available online for example, this link.

Embrace your inner chat-show host and plan your presentation style
How you present will make a real difference to how effective you are as an educator. General principles still apply. Read tips on how to present here.

Panel discussions and interviews work well on screen. Think about great chat-show hosts and how they work with their guests/experts to bring out key points in a style that keeps your attention (vs. a stand-alone lecture). Consider using an interview technique with one or more panellists to create a conversational approach which is usually more engaging. If you do take this approach, then please practice it in advance and do not leave entirely to the day. Have a 'road map' for your sessions with key learning points to be achieved at set timings through the session. Paradoxically, the key to appearing spontaneous and relaxed is to prepare and plan well for sessions using this technique.

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Add breakout rooms to encourage active participation

Breakout rooms are an excellent way to enhance interaction and improve audience participation. Most platforms allow you to create multiple breakout rooms from the main session. The recently upgraded Teams platform now has similar functions to Zoom making the creation of rooms really simple. If you are running a small workshop (up to 30) you can create breakout rooms for pairs up to groups of eight in order to simulate exercises such as role play, coaching, debate and brainstorming. It's key that each breakout room identifies a spokesperson to feedback to the main room. This can be an excellent way to "warm up and relax the group" in order to increase the confidence of individuals speaking in the larger group.

Within larger conferences you can use breakout rooms to create workshops or poster rooms allowing participants to rotate between these. The host can control how the rooms are created from a pre-determined list or leave the rooms open for learners to move freely between sessions. As the host you can also jump between breakout groups to answer questions, provide support and monitor progress. Alternating breakout sessions and exercises with more formal sessions can ensure the learner experiences a range of teaching styles.

Use panel discussions

If you are given a long session, a difficult or controversial topic consider delivering the session as a panel discussion rather than as a lone presenter. Panel discussions, if carefully planned are more engaging and interactive for your audience.

Many platforms (e.g. zoom) allow you to invite the panel and the audience separately. This is a very effective tool to control the conversation and flow. For example, the panellists can chat to just the panel members and/or all delegates. Consider a panel discussion for any session that is assigned for more than 20 minutes. Try and reproduce the interaction and debate of a live panel discussion (as below) within the online environment.

A 'chair' for a panel discussion is essential, whether face to face or online, they should have a clear plan for how the session will develop.

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Guide for participants at a 'virtual conference'.

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General
- Arrive on time and test your connection. Ideally be in place and ready to go with 5 mins to spare as you would for any other meeting.
- If the session asks for interactivity, then please do join in. It's tough for the speaker to deliver a session if it's only their activity. Try and play your part in any and all activities.

Sanitise
I'm not talking about hand gel, but rather your workspace. Although learning remotely you should try and give yourself an environment that helps you learn.
- Turn off/mute your phone
- Remove any obvious distractions
- Turn all those extra tabs off on your browser
- Close programs that you are not using
- Lock up or distract any unruly pets, children, partners (!)

Organise your learning environment

Your learning environment is the digital device you will be using. Although you can use mobile devices, a laptop or desktop PC will work much better.
- Look at how your screen is organised such that you can see people and their slides
- Make sure that you can open chat functions and see how that window opens on the screen.
- You may find that different elements (video, slides, chat functions) overlap. On some systems you can prevent this by opening the browser window as full screen.
- A dual screen system can help avoid overlapping windows on some platforms (though this requires you to have two screens).

Look great
You are still a participant and people can see you. It's important that you consider how you will come across in the session, and that you look as good as you can be
- Place the camera at eye level (a low camera angle will make you appear heavier than you really are.
- Check the lighting such that your face is lit (a white sheet on the desktop also helps this).
- Check your background (avoid cheesy or comic ones)
- In general, we would recommend keeping your video on. You may have to turn it off if you struggle with bandwidth. Your video being on should not affect others bandwidth (a common misconception).

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Technical issues 1
- Turn off your microphone unless you are speaking
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- Turn off your microphone unless you are speaking
- Honestly, nobody wants to hear you slurp your tea.

Technical issues 2
- Ensure your WIFI is of good quality
- If you lose signal, then turn off your camera to reduce bandwidth
- Ensure that you have used the platform before and that you know the basic functions of how to.
    - Open and close video
    - Open and close audio
    - Use the chat or Q&A functions.

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Further reading

NACTUK/Medical Education Leaders UK Video
NACT UK/Medical Education Leaders UK has created a video guide for optimising Zoom for virtual workshops
https://youtu.be/blM6zn6BZ38?t=1

You can download a free e-book on the theories and practice of technology enhanced learning from the St Emlyn's website.

All clinicians and educators understand that the internet has changed the way that we work and live. In the last decade the way that we interact with the internet and with others through the internet, social media and other web enabled communications has shaped almost every part of the society we live in. Medical education is no exception to this; trainees and trainers are increasingly interacting with social media platforms such as Twitter and Facebook together with websites containing blogs and podcasts as principle sources of information. As educators we must understand how to optimally and safely guide trainers and trainees to use these tools wisely.

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Medical education needs to understand how online learning can support trainee and trainer development. There are numerous opportunities to enhance current strategies in education through online learning. All educators should be aware of the influence of online learning amongst trainers and trainees.

Good luck with using these technologies in your education.

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