



A Journey toward Online Teaching: Lessons Learnt

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On March 18, 2020, all the universities received a memorandum from higher authorities that all in-person classes had been suspended due to spread of coronavirus disease 2019 (COVID-19); however, the teaching and learning would continue remotely. This was distressing news for most faculty members and students who had never conducted or attended classes online and were unprepared for remote education. Although experienced, these teachers were used to face-to-face mode of interaction and not necessarily adept at using technology.¹ Switching from a face-to-face classroom to online classes requires preparation and adjustment for instructors, staff, and students alike. If the medium is the message, then you cannot replicate the exact same lecture content and teaching method you had planned for a face-to-face classroom in an online asynchronous or synchronous session—at least not without dividing them into small chunks, making few amendments and modification to benefit student learning.² For most of the young generation especially students, the transition was not as difficult. Today's students are members of Generation Z—digital natives who are accustomed to technology in every facet of their lives and have a real stake in their own education.³ So, they have an ability to get benefit from dynamic, immersive learning experiences and to get engaged and collaborate with their peers comfortably. On the other hand, teachers were required to modify their teaching strategies and styles to meet the needs and maintain students' interest and engagement.⁴

At Institute of Medical Education, Jinnah Sindh Medical University, Pakistan, the faculty braved this challenge with full commitment and enthusiasm and we from the very next day of the notification went online and started training and developing faculty for online teaching and assessment. It was not easy and required a lot of effort from our faculty members to acquaint themselves with technology first and

then teach the same. Despite that much effort, there were times when we faltered and got not-so-pleasant feedback from students. However, not losing heart the journey was continued. The students, mostly faculty of basic and clinical sciences from public and private medical and dental institutions, patiently and willingly went along on these uncharted territories to continue learning through online sessions. With the passage of time and hard work, highly appreciative student feedback started motivating us, and we were able to successfully conduct all the courses. During this journey we have learned a lot of lessons and built up our future online courses on that basis to improve the quality of delivery.

Placed below are few lessons that we have learnt on this journey in developing expertise for conducting interactive, engaging, and useful online teaching sessions.

Lesson 1: Get Acquainted with Your Institutional Online Policies, Environment, and Support

It is essential to develop and be aware of the policies that govern distance education in your institution. The requirements, process, and procedures that are required for approval of online courses must be followed to fulfill the requirement of accreditation bodies, as The Higher Education Commission (HEC), Pakistan, periodically evaluates the progress by contacting institutional Quality Enhancement Cell to provide documents and data related to the distance education programs to improve quality of education.⁵

Moreover, HEC provided access to data bank of online courses and permission to access Learning Management Systems (LMS) basic to advanced level such as Google Classroom, Microsoft Teams, and Moodle to all Higher Education Institutes. For the effective use of these learning platforms for students' learning, the staff and faculty require

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to follow the policies that were required for training to understand and use the e-learning tools and features, get acquainted with the process of developing interactive lectures, be able to upload relevant content for reference, and get used to the online environment.⁶

Furthermore, it is equally important to have a collegial relationship with the personnel in the department of information technology (IT), if present in the institution. For instance, if there is no one designated, then university or institutes should identify someone who is tech savvy, is willing to support, and can troubleshoot IT-related problems. However, best is to make an effort to learn the simple tricks that can help you to deal with small IT-related problems.^{6,7}

Lesson 2: Online Teaching and Learning Is Different—Be Ready to Learn and Embrace New Learning

Do not try to replicate classroom instructions online. You need to learn how to deal with distance education.⁴ Consult health professions' educationist to review your lectures (recorded lectures/synchronous sessions) and teaching activities to improve the quality of teaching. Moreover, try to take professional development courses, which is also an important requirement to make oneself skillful in making teaching interactive and engaging by using different assessment applications, authoring tools, and resolving issues occurring when using learning platforms and management systems.¹ With that try to take management sessions and learn about principles of organizational change and change management strategies to modify your leadership style and adapt to sudden changes in teaching.

Concurrently, to support online teaching, numerous tools were introduced to assist teachers in developing online sessions and courses, which are readily available on the Internet to promote learning, like different collaborative technology-enhanced learning platforms (Zoom, Google Classroom, Google Meet), LMS (Docebo, BlackBoard, Edmodo, Moodle), Wiki's, and tools designed to promote gamification made life easier.⁸ Although, when you are new to it, some of them are complex to use but after learning the basics of these tools by small effort watching free tutorials available on Google you can be experts.⁹

Moreover, it is good to discuss with someone who is already using online tools and features to save time and energy; however, immerse yourself to learn in short bursts like Google the material you have less idea of or search for solutions on Internet you are stuck with and get it resolved by your own self and focus on fundamentals and basic trainings, which are available for free on the Web. In short, the essential thing is to start experimenting yourself as once you will start experiencing and reviewing that what went wrong and what can be done in much better way will help to make appropriate use of available tools and practicing that with time you will feel perfection in your work.⁶ The century-old adage "Practice makes a man perfect" really works, so practice consistently and apply what is learnt.

In contrast to this even if you have learnt about distance education, designing online courses, and engaging students with different online tools, it takes significant time and effort and is far more energy consuming than face-to-face sessions. For which it is recommended to protect yourself from getting exhausted by working on computers for long hours playing with screens, which can affect your physical and mental health in this online era.¹⁰

Lesson 3: Develop a Lesson Plan

We all are used to structuring our lesson plans to suit the physical environment of a classroom. However, the same lesson plan cannot be used as such in an online session as adaptation is required in virtual environment. Revisit the goals, content, and objectives and determine content that can be learnt adequately in an online environment.¹¹ It is better to divide the topics into sections with indicative time for each and using embedded features for making session engaging like white board, chat box, discussion forums, polls, and quizzes, providing much-needed sense of structure. Then identify the content for self-study, and give them task to write and submit reflections on the session attended. Flip the class and provide students with prerecorded lectures and reading material and/or guide them to online resources that are freely available. The students will love this as they feel empowered and can pace their learning.⁸⁻¹¹ For sessions that need discussion/explanation, plan for synchronous sessions; a sample of a 50-minute lecture is given in ►Table 1.

Lesson 4: Involve a Peer/Staff to Assist You in Conducting the Synchronous Session

Collaborate and encourage sharing of reading material, lesson plans, presentations, and recording lectures in your department/institution. Have weekly meetings to discuss success and issues in delivering online teaching and to plan strategies for future. It is very effective to conduct the online session in a team or keep a faculty or staff from your department to help and support you during online sessions. Synchronous teaching requires the faculty to multitask—a feat not many would be adept at, and which requires continuous practice and support. Assistance might be needed to read and respond to the chats, in making online groups, sending students to breakout rooms, in managing time, etc. Encourage and motivate online resource developers and do not hesitate in taking their help when required.¹²

Lesson 5: Conduct a Trial Session with a Smaller Group the First Time Around

Embarking on online teaching is challenging and hence it is important that teachers carry out at least one mini-session with a small group of audience (even one or two) and rehearse; even then if technical glitches appear, or family members and pets in the background interrupt, or you find people eating during class, all these should be taken as part of online session. Not only that, recognizing the fact that we all

Table 1 Description of the teaching session

Topic	Time allotted	Teacher activity
Introduction	3 minutes	<ul style="list-style-type: none"> • Greet, introduce the topic, connect with the previous lecture/session • Share the objectives and the road map
Subtopic A	20 minutes	<ul style="list-style-type: none"> • Ask a quiz by displaying a question on a slide or by an assessment tool • Share the response • Summarize • Keep a faculty member as a helper
Subtopic B	20 minutes	<ul style="list-style-type: none"> • Cover the content • Give a small task to students in groups—Using “Breakout rooms” (use Google Meet/Zoom) • Share the responses, give feedback • Share the correct response with explanation • Summarize • Ask them to raise hands if they want to ask a question or write in chat box • Respond to as many questions as possible
Conclusion	5 minutes	<ul style="list-style-type: none"> • Give 2–3 MCQs • Share the responses • Summarize the entire session • Inform them that they can ask questions on other online mediums like emails, WhatsApp group, discussion board (if using LMS)

Abbreviations: LMS, Learning Management Systems; MCQs, multiple choice questions.

are not perfect and expert in the online delivery, and that there can also be things that can go wrong from our end, is totally fine, and that is true fact that things will not always go according to the plan most of the time in remote teaching. Acknowledging this helps communicate the sense that “we are all in this together.”¹²

Lesson 6: Communicate Early On and Engage Students in Their Own Learning

Let your students know how the course is structured, its content and learning objectives, before the course or session starts, using multiple ways of communication like emails, messages, WhatsApp group, or uploading on LMS or Web site. Give them a weekly schedule with day and time so that they may plan other activities, locking the time for their learning. Involve them in the session by catchy ice-breaking activity and laying down ground rules that will stimulate

engagement to learn enthusiastically with no disturbances and also help them to sustain in the session investing in doing their part.¹²

Additionally, to make learning process focused and improve student involvement in distance education teachers require extensive training. Things get difficult in an online environment if teachers are not trained and there is no evaluation of sessions. Faculty members need to take interest and employ multiple strategies to keep the students engaged.^{2,4} Even though students’ microphones and cameras may be off to improve connectivity, teachers need to be skilled to incorporate exercises at suitable intervals. Each activity must be related to the content just taught. Preferably, these exercises or activities should be brief (i.e., 3–5 minutes) and application oriented. Some students are more comfortable speaking up in main room, while others may be more willing to contribute to a breakout group or in a discussion thread. Each of these types has to be involved and appreciated for his/her efforts.

Parallel to this it is important to have frequent low-stake assessments to check students’ understanding and retention, synchronous and asynchronous both. To produce the best outcomes and responses from students, give them assignment to reflect on their online sessions (300-word limit) or include a set of 15 quiz questions, a short prelecture assignment, or a pretest; while during the session, one way is to use polls, questions (multiple choice questions/true/false), or discussion threads.^{2,8} Mentioning that this is not a serious report (low-stake task), this will make them engaged and learn efficiently.¹³

In short, let students take control of their learning. Facilitate connectivism; you can set up online group spaces for students dividing them in groups and asking them to support and consult with one another before sending emails to you directly. You can post a couple of questions to help students break the ice and start conversation on discussion forums or on social media. Encourage students to use the communication tools they prefer like Wiki, Zoom, WhatsApp, or Padlet to collaborate and share the ideas.^{1,4}

Some groups will click well and some will not, but this little effort can make students feel confident, socially supportive, and also reduce your workload. Schedule a session periodically during the course for your students to voice concerns, socialize, and ask questions.¹⁴

Lesson 7: Do Not Be Afraid If You Do Not Know Anything

Do not hide your feelings in front of students/participants. Emotional openness of a teacher in online sessions is a useful instructional strategy. You can acknowledge that it is your first time, and you are learning while teaching. If you do not know or have forgotten how to perform a certain online task, ask the students to help you, reassuring them that you will be there to support their learning as well. This forthrightness will help develop a rapport with your audience and should involve the students as partners in the teaching–learning

process. This student engagement will improve student motivation, attention, and ownership.^{2,13}

Lesson 8: Follow Guidelines for All Online Modalities

Part-task your online teaching and incorporate blended learning including asynchronous course with synchronous sessions with online group discussions and provide interactive activities to engage students. Real-time group discussions focus on providing social support and checking if any issues need to be addressed immediately. It is a great way to collect student feedback on your online teaching.¹³ Concurrently, keep the synchronous Zoom or Google Meet, etc., meetings optional for students and do not get upset or frustrated if less or no one shows up: students are still happy to know that this is an option that can be availed by them if they are in trouble.

Conclusion

Remain flexible, cooperative, and compassionate as, comparing from face-to-face mode, home lives are different for students and even for you as it changes from day to day.^{2,7} Make sure all teaching and learning material are available to students along with the assessments that can be answered by referring to the given learning resources,⁸ and do not forget to reflect on your teaching. Last but not the least, keep a plan in your mind to continue with online teaching and how to provide sustainability to work from home after the COVID-19 pandemic.¹⁵

Conflict of Interest

None declared.

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