Teaching Online: Tips for Engaging Students in Virtual Classrooms

Abi Sriharan^{1,2}

Accepted: 7 October 2020 / Published online: 14 October 2020
© International Association of Medical Science Educators 2020

Introduction

The COVID-19 pandemic has created an unprecedented challenge for academic institutions: to adapt classroom teaching to the online learning environment rapidly [1, 5]. As higher learning institutions are investing resources to increase the capacity of their technological infrastructure and prepare their faculty for the use of digital teaching tools, it is imperative for educators to focus on the pedagogical aspects of online teaching. In online learning environments, educators are often challenged by the need to strike a balance between delivering content to meet the course objectives and keeping learners engaged in the class activities. I've spent more than 10 years studying Master Teachers in Canada, the USA, and internationally to understand what sets them apart from the rest in online and in-person teaching environments. Based on this experience, in this article, I will share five tips for improving online learning for learners.

Tip #1: Curriculum Blueprint

A well-developed curriculum blueprint logically maps out your teaching objectives, learning activities, and learning assessments for your course [4]. It can help you assess which aspects in your class are suitable for synchronous learning and also the elements of your class that are suitable for asynchronous delivery. Several weeks prior to your class, create a blueprint of your teaching plan, logically mapping out the teaching objectives, learning activities, and learning assessments for your course. As you map out your class, use the guiding questions in Table 1 to assess which elements are suitable for synchronous learning

and which are suitable for asynchronous delivery. If you have multiple topics to cover, make sure that you provide a clear link between them. In your planning stage, be reflective, prioritize, and have realistic expectations of your learners.

Tip #2: Agile Plan

When you are planning an online class, you will need to master effective class room management skills. Set clear expectations about the class start and end time, and as you deliver the class, keep it within the planned time. Ensure you have an appropriate number of concepts to cover within your allocated time. Usually, activities and discussions end up taking more time than initially planned. If your session spans longer than sixty minutes, consider including breaks in your session to ensure your learners can move away from the computer and return with increased attention. Take care of the timing of the small group activities and discussions to ensure they are progressing within the allocated timelines.

In an online environment, keeping the learners' attention on your teaching can be difficult. According to a 2015 study commissioned by Microsoft, the average human attention span shifts every eight seconds [7]. Educational psychologists recommend that passive learning content delivery can work when it is chunked into 10 to 15 minutes of content [2]. For example, TED talk expects presenters to keep their talks to a maximum of 18 minutes. The success of your teaching will depend on how well you can keep your learners engaged in the class discussion. As you deliver your online class, pay attention to your learners. When you notice that your class's attention level is getting critically low, adapt your teaching methods to counteract it. The group may need more breaks, new agenda items may pop up, and so on.

Tip #3: Learning Environment

Learning environments are crucial for the success of online learning. A good learning environment promotes learner engagement through collaborations [6]. In a face-to-face

✉ Abi Sriharan
abi.sriharan@utoronto.ca

¹ Institute of Health Policy, Management and Evaluation, Dalla Lana School of Public Health, University of Toronto, Toronto, Canada

² The Centre for Health Sector Innovation, Toronto, Canada

Table 1 Guiding questions for curriculum blueprint planning

-
- What knowledge, skills, and application competencies do I want learners to learn in this course?
 - How will learners demonstrate their learning of the materials in this course?
 - What assignments or learning activities will support the learning?
 - Which of these activities require live activities?
 - Which of these activities could be provided as self-directed learning activities?
 - What are the logical steps to organize learning activities and assignments?
-

environment, these collaborations and networks occur organically. However, in the virtual environment, learners rely heavily on the faculty to cultivate a learning community and to foster a sense of belonging [8, 11]. There are different types of interaction—ranging from individual work to small-group and large-group discussions. Consider having a healthy balance of interaction types throughout your session. It will help your learners stay engaged.

When you are facilitating online learning, consider the following activities to keep the environment supportive and to ensure a positive learning experience:

- **Clarify goals:** At the beginning of each session, remind the students of the expectations for classroom engagement. Encourage learners to participate in the classroom discussions using virtual chat options and questions and answers.
- **Small group activities:** Try icebreaker activities at the beginning of the session to prepare learners for active learning during the core content of your session. Use the breakout room options to create small group discussions, use chat functions to promote reflection activities, and online polling to help encourage learners to actively participate in the classroom.
- **Synthesize:** Your main focus as the faculty is to keep up a sound momentum of the group activities. Regularly summarize the discussions and link the discussions to the course content. Highlight points of consensus and summarize critical takeaways.

Tip #4: Master Facilitator

In the online learning environment, the teacher plays two key roles: the subject matter expert and master facilitator. As a subject matter expert, you are there to share your disciplinary expertise by presenting theoretical content [9]. Your role is to pass on the content expertise to your learner to encourage their learning. As the master facilitator, your role is to help your learners to engage in the learning process and encourage them to participate in the classroom activities, take ownership of

their learning, and reach their learning objectives. An efficient facilitator will ask questions, summarize discussions, connect new concepts to previous concepts, confirm students' grasp of the learning materials, and keep up the momentum of the class discussions [12]. When you deliver an online course, try the following techniques to practice your mastery of facilitation skills:

- **Probing:** Probing questions allow you to assess your students' learning comprehension. Expertly planned probing questions can reinforce learning, develop analytical and reflective thinking, and clarify concepts.
- **Redirecting questions or comments:** Try redirecting queries to the class instead of answering them. Give the class a chance to respond, then clarify and respond as required.
- **Bridging and referring back:** Connect previous class discussions to the current discussion to demonstrate how ideas, theories, and frameworks are connected.
- **Shifting perspective:** If the class gets stuck at some point in the discussion, try to change the discussion by bringing up a different perspective and looking at the problem from a different angle.
- **Summarizing:** In the middle and toward the end of the class, summarize what has been discussed so far. This will help the learners to build upon the conclusions they have already made.

Tip #5: Teaching Presence

Master teachers bring their passion for the subject and their confidence in teaching to the classroom to create authentic connections with the learners [10]. Your confidence and ease with online teaching will create a positive learning environment for your learners and promote intellectual stimulation. You can build your confidence with online teaching by becoming familiar with your online teaching platform, preparing your content, and organizing the optimal technological setups such as the right microphone, speakers, and video. You can also practice online course delivery and record yourself on camera to observe your verbal and nonverbal communications. Your nonverbal cues affect how your learners see you as faculty. For your next online lecture, consider trying the following:

- **Technology:** Test your audio, video, and screen-sharing options at least 30 minutes before the start of class. During the class, if you run into a technical issue, do not panic. Turn off your video and audio and check the system. Fix the problem. Inform the learners there is a technical issue and ask them to wait online or reconnect at a set time. Once you resolve the issue and feel more relaxed, turn

Table 2 Getting feedback online

-
- What is a one takeaway from the class today?
 - What is one thing that you liked about the classroom process?
 - What is the one thing you would like to add or change?
-

the audio and video on, and take control of the lesson calmly and confidently.

- **Position:** If you are used to lecturing in a classroom by standing, do the same in the virtual environment. Studies show that standing up can boost your sense of self-confidence and affect how others see you [3]. Set up your computer and audio system to allow you to deliver your course by standing up.
- **Greet:** As learners are coming into your virtual classroom, greet them. Engage in small talk—similar to what you would do in a normal classroom.
- **Feedback:** At the end of your session, give your students an option to reflect on their learning experiences informally. Be open to their feedback and do not be defensive. Your willingness to listen to feedback will allow your learners to feel comfortable in sharing their reflections with you. Table 2 provides sample list of questions to ask.
- **Reflect:** After each session, reflect on the strengths and areas in need of improvement. Celebrate your strengths and continue to hone in on the areas you can improve.

Remember, online course delivery can feel like a daunting task. Like everything else, practice makes it perfect. Continuously reflect on your teaching and adapt techniques and tools that work for you. For successful course delivery, focus on your teaching strengths and bring your authentic self to the virtual classroom.

Compliance with Ethical Standards

Conflict of Interest The author declares that she has no conflict of interest.

Ethical approval N/A

Informed consent N/A

Disclaimer The authors alone are responsible for the content and writing of this article.

References

1. Bao W. COVID-19 and online teaching in higher education: a case study of Peking University. *Human Behav Emerg Technol.* 2020;2(2):113–5.
2. Bradbury N. Do students really have an inability to concentrate during lectures? *Acad Med.* 2017;92(4):428.
3. Cuddy AJ, Wilmoth CA, Carney DR. The benefit of power posing before a high-stakes social evaluation. Harvard Business School Working Paper Series# 13-027. 2012.
4. Fullerton JT, Pickwell SM. The curriculum blueprint: An application to nurse practitioner education. *JJ Am Acad Nurse Pract.* 1991;3(2):64–68.
5. Lederman D. Will shift to remote teaching be boon or bane for online learning? Inside Higher Ed. 2020. <https://www.insidehighered.com/digital-learning/article/2020/03/18/most-teaching-going-remote-will-help-or-hurt-online-learning>. Accessed 10 Aug 2020.
6. Lizzio A, Wilson K, Simons R. University students' perceptions of the learning environment and academic outcomes: implications for theory and practice. *Stud High Educ.* 2002;27(1):27–52.
7. McSpadden K. You now have a shorter attention span than a goldfish. *Time Magazine*, 14. 2015.
8. Misanchuk M, Anderson T. Building community in an online learning environment: communication, cooperation and collaboration. 2001.
9. O'Shea S, Stone C, Delahunty J. "I 'feel' like I am at university even though I am online." Exploring how students narrate their engagement with higher education institutions in an online learning environment. *Distance Educ.* 2015;36(1):41–58.
10. Palloff RM, Pratt K. The excellent online instructor: Strategies for professional development. John Wiley & Sons; 2011.
11. Persico D, Pozzi F, Sarti L. Monitoring collaborative activities in computer supported collaborative learning. *Distance Educ.* 2010;31(1):5–22.
12. Peterson M. Learning interaction in an avatar-based virtual environment: a preliminary study. *PacCALL J.* 2005;1(1):29–40.

Publisher's Note Springer Nature remains neutral with regard to jurisdictional claims in published maps and institutional affiliations.