

TEACHING SYSTEMS THINKING CONCEPTS DURING A PANDEMIC: MODES FOR ENGAGING LEARNERS

Lynette Tan*, Naviyn Balakrishnan and Navarun Varma

National University of Singapore, Residential College 4, 6 College Avenue East #17-11 RC4 NUS
Singapore, 138614 Singapore

*Corresponding author: rc4lynette@nus.edu.sg

Abstract: Amongst the pressing concerns in the thick of the current global pandemic, particularly in the context of residential colleges within Higher Education (Inkelas 2016), is that of our ability as educators to create a sense of community amongst our students, as well as to effectively facilitate learning in the online environment. A faculty at a public university in Singapore strategized to meet these challenges of teaching in a pandemic on two fronts – creating a level of online and hybrid classroom that would integrate as much of the face to face (f2f) experience for undergraduate residents as possible to retain a sense of community, as well as using asynchronous material to support students in their learning. To encourage student engagement, education technologies such as gamification are also utilized. This paper considers the employment and impact of those strategies in classrooms where systems thinking modules are taught – ‘Committed to Changing Our World: The Systems Pioneers’ (n = 24), ‘Thinking in Systems: Disaster Resilience’ (n=48) and ‘Thinking in Systems: Diseases and Healthcare’ (n = 32) leading to a total number of 104 students, mostly in their first and second years and from various disciplines, invited to participate in the study. This paper shows pedagogical examples of how we as educators can innovate by using available online tools, while embracing the principles of good teaching to best support our students in their learning.

Keywords: Classroom community, digital education, online tools, active learning