

Using Online Tools to Conduct Team Teaching during COVID-19 Pandemic

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Abstract

COVID-19 pandemic has resulted in online platform becoming the mainstream method of teaching and learning (Bao, 2020; Moorhouse, 2020; Tan et al., 2020). Many educators find themselves adapting to teaching in this new environment and wondered how to continue to make their lessons engaging for their students. As educators in National University of Singapore (NUS), we also faced similar challenges when we teach the Environmental Chemistry module (CM3261) to our Year 3 and 4 undergraduates. In this interdisciplinary module, we introduced to our students how human activities impact human health and the environment from the point of view of chemistry and other disciplines such as humanities. We wondered how we could bring about the idea of interdisciplinarity to our students through online platform. As Zoom is NUS's de-facto medium for conducting classes online, we decided to implement online team teaching for toxicology segment of CM3261 through Zoom.

Team teaching is where two or more educators plan lessons, and collaborate during teaching sessions (Kaplan, 2012). Team teaching promotes student-student interaction, student-teacher interactions, as well as teacher-teacher interactions. In our team teaching session, we invited a guest lecturer from Pharmacy Department, and the two lecturers conducted this team teaching in a manner similar to various Hollywood talk shows to foster teacher-teacher interactions. Throughout the session, we promoted student-student interaction by employing breakout rooms to allow students to discuss in a group to solve various case studies, and share their

solution to the class. We also integrated Poll Everywhere (PollEv) into our online team teaching to gather students' responses to questions posted by the lecturers, thus fostering student-teacher interactions. Through our session, we achieved transdisciplinarity based on Harden's ladder of integration (Harden, 2000) as we demonstrated the real-life application of environmental chemistry through the lens of healthcare.

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