SCIENCE EDUCATION ONLINE AND VIDEO DEMONSTRATIONS

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Pre-service secondary science teachers are required to complete science specific curriculum and pedagogy units as part of their university degree in order to be registered to teach in Australian secondary schools. At Edith Cowan University (ECU), the first science education unit aims to provide students the knowledge and skills necessary to successfully undertake their first supervised professional experience teaching science in a secondary school. Face to face contact for this unit is through highly interactive weekly on campus three-hour seminars using a constructivist methodology. However, with the advent of COVID-19 and enforced social distancing, on campus classes at ECU were moved off campus from the beginning of week 6 in semester 1, 2020. Classes were held online using Zoom, and new materials were developed to support online learning. The on campus discrepant event science demonstration assessment item was no longer possible, and students were required to video their demonstrations instead. This provided challenges for students who needed to show their pedagogical content knowledge through the implementation of a Predict, Observe, Explain (POE) conceptual change strategy. In this presentation, I will reflect on the online experience and consider lessons learned.

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