

SYMPAB - (16175) - PCK KNOWN; BUT WHAT DOES DIGITAL TOPIC SPECIFIC PCK LOOK LIKE IN CHEMISTRY VIDEO LESSONS?

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Short Abstract

This study was a response to the emergency migration of teaching and learning into digital platforms almost overnight due to the COVID-19 virus pandemic. The purpose of this study was to begin the process of understanding what would Pedagogical Content Knowledge at a grainsize of a specific topic look like when enacted on digital platforms delivering lessons. The study employed an in-depth qualitative research design based on a specific intervention. It was located in a methodology class of 24 Chemistry pre-service teachers (PSTs) in their final year of study towards a B Ed degree, with a focus on Chemical Equilibrium. Multiple data sets were collected including baseline attempts of planning and designing a lesson video before the intervention. Lesson planning based tutorials and PSTs reflections were collected during the intervention. PSTs' submitted teaching videos and reflections were collected at the end of the intervention. Analysis is ongoing, however, preliminary findings point to an interesting 2-step process followed in creating video based lessons in their first experience. The first step being the transformation of content knowledge, followed by drawing on digital competence. Implications for teacher preparation for the digital age are highlighted.