

THREE PERSONAL BARRIERS TO TEACHING TRANSFORMATION

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KEYWORDS: active learning, flipped classroom, higher year courses

ABSTRACT

The benefits of active learning over traditional teaching methods have been well known for over a decade. Yet, uptake in courses taught by lecturers not familiar with the literature is very slow. Existing research has highlighted several institutional and structural barriers to change, but few go into the *personal* experience of the lecturer undergoing this transformation. In 2021, a second-year course on quantum mechanics was transformed to a flipped classroom style course employing constructive alignment. The lecturer (Micolich) had taught the course with good student feedback for several years and was not previously experienced with modern teaching methods before collaborating with a Physics Education Research academic (Lindstrøm). All meetings were recorded, and all written communication and notes were collated, resulting in a large data set capturing the process. In this talk, we will focus on three clear barriers to transformation faced by the lecturer: 1) being convinced of the research evidence for active teaching methods; 2) being convinced that the research literature was *relevant* to the lecturer's specific context; and 3) as a late career researcher accustomed to being the expert, fundamentally changing his teaching approach required moving outside his comfort zone and having the courage to be a novice again.

Proceedings of the Australian Conference on Science and Mathematics Education, The University of Western Australia, 28-30 September 2022, page 46, ISSN 2653-0481