

FIRST YEAR STUDENTS, BLOCK MODE, AND RESEARCH; A CONSTRUCTIVIST APPROACH

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KEYWORDS: First year, Block Mode, Research, Pedagogy

PROBLEM

STEM delivery has, traditionally, involved the instructor proffering facts, of which the learner accepts and repeats without real synthesis. In the 4th Industrial Revolution however, where connectivity is ubiquitous, a priori knowledge must not only be recognised, but also welcomed.

PLAN

Since the inception of block mode, n = 530 Exercise Science students have completed a research methods unit. Learning outcomes for this unit include the ability to read and understand scientific literature. The challenge was to create a connection between content and the students prior knowledge, allowing for individual interpretation and creation of understanding.

ACTION

Students, in focused groups, were introduced to the steps involved in finding and reading scientific literature. In these small groups, individuals were able to discuss found content and, when combined with their pre-existing knowledge, take their a priori, and creating a posteriori, knowledge. (Jonassen, 1991)

REFLECTION

First year students, especially those with lower educational background, have historically struggled with the unit, leading to poor completion rates. Since the shift to block mode, completion has increased as have assessment outcomes. It would appear that the combination of focused delivery, and recognising of a priori knowledge has had a positive impact on these outcomes.

REFERENCE

Jonassen, D. (1991). Objectivism versus Constructivism: Do We Need a New Philosophical Paradigm? *Educational Technology Resource and Development*, 39(3), 5-14.

Proceedings of the Australian Conference on Science and Mathematics Education, The University of Sydney and University of Technology Sydney, 2 - 4 October 2019, page 31, ISBN Number 978-0-9871834-8-4