

of Physicists

Canadian Association Association canadienne des physiciens et physiciennes

Contribution ID: 1905

Type: not specified

## Really flipping the classroom: empowering students as teachers

Thursday, 1 June 2017 08:00 (1h 15m)

Freeman et al. in their landmark 225-study metaanalysis determined that active learning increases student performance in STEM (PNAS 2014). They went so far as to state "If the experiments analyzed here had been conducted as randomized controlled trials of medical interventions, they may have been stopped for benefit". Did they just conclude (in a paper cited over 1000 times) that smooth and clear (prof-centred) lecturing is not ethical? If so, how do we achieve active learning with 200 or more students? Research-based instructional strategies provide almost too many options. Reading the studies, there is one common factor that rises to the fore: feedback is provided to every student in every class. And the only way to do it is to engage the students as teachers.

Presenter: Prof. FRASER, James M. (Queen's University)

Session Classification: R1-4 Faculty Workshop: Really flipping the classroom: empowering students as teachers (DPE/CEWIP)

Track Classification: Physics Education / Enseignement de la physique (DPE-DEP)