Transferring a Flipped Class in Algebra-based Physics to New Faculty

LEIGH SMITH, ALEXANDRE SOUSA, Department of Physics, University of Cincinnati — Transferring existing active classroom educational efforts to new faculty is a challenge that must be met to ensure sustainability of changes. We describe a flipped class approach to teaching algebra-based Physics being transferred to a new faculty member. This flipped class includes extensive video and reading-based preparation materials outside of class, and the use of Learning Catalytics for in-class work is developed and tested by one of the authors. These materials are of course idiosyncratic to the style of the developer. Student results using the new materials are compared with students in more standard classes which suggest significant positive benefit over several years. A faculty member decided to use these materials in his own section of the same course. Our experience shows that it takes some time for the new faculty member to use and adapt the materials in a way which matches his own style, which in the end results in equivalently enhanced results. Lessons learned from this transfer process will be discussed.

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