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Training Teaching Assistants as Active Participants in Large, Active Learning Lectures

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Extended Abstract

Active learning has been conclusively illustrated to reduce the number of failing students and increase student learning when compared to traditional lectures in STEM courses (Freeman, et al., 2014). As active learning is incorporated more and more in the college biology classroom, instructors typically ask: how do I conduct active learning in my large biology classroom? The answer lies in careful training of Graduate Teaching Assistants, Undergraduate Learning Assistants, or other helpers in the classroom (collectively called TAs). In this active session, participants will undergo training given to TAs and then apply what was learned to the training of their own TAs. Specifically, participants will describe active learning, cite evidence of why active learning is useful, evaluate active learning examples, and understand the role of a TA in a large active learning classroom. Using group discussion, think-pair-shares, and video analysis, participants will understand the type of positive behaviors TAs should exhibit during lectures. Best-practices will be explored, and participants will reflect on application to their own institutions.

Keywords: active learning, teaching assistants, large lectures, TA training

Cited References

Freeman, S, Eddy, SL, McDonough M, Smith MK, Okoroafor N, Jordt H, Wenderoth MP. 2014. Active learning increases student performance in science, engineering, and mathematics. Proc. of the National Acad. of Sci. 111(23):8410–8415.

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