

Using Videos to Increase Teaching Assistants' Pedagogical Content Knowledge and Preparedness

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Teaching assistants (TAs) are often the sole source of instruction for undergraduate laboratory courses associated with a general biology course. The quality of instruction an undergraduate receives is dependent on the knowledge and preparedness of the TA. Although TAs are most likely to be graduate students who have taken general biology courses themselves, the breadth and depth of knowledge required to effectively teach a lab may be underdeveloped or lacking. Subject experts who teach the lecture portion of the course can be a valuable resource for providing educational content to reinforce concepts or fill knowledge gaps. A video of the subject expert, providing content specific to the lab, offers the TA a detailed source of educational material that can be viewed as many times as necessary and at their convenience. Much like using videos to flip the classroom for students, flipping the training for teaching assistants can have the same benefits. With little more than a smart phone and inexpensive video editing software, a repository of subject expert content can be created to provide teaching assistants a resource that will enable them to offer undergraduates a high quality educational experience.

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