

WONDER QUESTIONS: ENGAGING, MOTIVATING AND ILLUMINATING STUDENTS AND TEACHERS

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KEYWORDS: science education; student motivation; undergraduate learning and teaching; flipped classroom

“Write a Wonder Question for this topic. (A Wonder Question is anything you wonder about after having done the pre-work. It should be related to the lecture topic but does not have to be directly covered by it.)” I have taught introductory physics courses using a Flipped Classroom design since 2012, and this question is always the last question on the pre-lecture quiz my students have to complete before each lecture—and it is by far the highest return-on-investment pedagogical tool I use. Wonder Questions are valuable in three ways: they force students to connect the new material with previous knowledge; they give me an insight into what students are interested in learning so I can make my lectures more motivating; and they offer me an opportunity to reorganize the course material I choose to present in class in order to answer student Wonder Questions. In this talk, I will explain how I integrate Wonder Questions in my courses, give several examples of Wonder Questions, and show how I use them to present—and have students work with—course material in a new light during class.

Proceedings of the Australian Conference on Science and Mathematics Education, 30 September - 2 October 2020, page 48, ISBN Number 978-0-9871834-9-1.