

Abstract Submitted  
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**Transforming Introductory Physics: The Impact of Studio Mode and the Learning Assistant Program**<sup>1</sup> ROBYNNE LOCK, WILLIAM NEWTON, MELANIE SCHROERS, ZACK HUTCHENS, Texas AM University-Commerce — In Fall 2015, we implemented studio physics in the calculus-based introductory physics sequence and introduced learning assistants (LAs) into these classes. This transformation has resulted in increased conceptual learning gains and contributed to the doubling of the number of physics majors. When we created the LA program in Fall 2014, LAs only worked in the science inquiry classes for pre-service K-8 teachers. Since then, we have introduced LAs into chemistry, math, and biology in addition to physics. Details of how we adapted the LA model for Texas A&M University-Commerce, including the LA pedagogy course, are presented along with impacts on conceptual learning and the development of the physics major community. Finally, the effect on future physics teachers is examined.

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Robynne Lock  
Texas A  
M University-Commerce

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