Wednesday, February 7th, 2018, noon
Literacy Center Balcony

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Boyer Scholarship: Applications in the Life Sciences

Abstract. Former SUNY Chancellor Ernest Boyer recommended the expansion of our traditional understanding of scholarship to include the scholarship of teaching and learning. During my tenure at SUNY Potsdam, I conducted research that falls within this classification. Biological Concepts (BIOL 125) was developed for students enrolled in our Childhood/Early Childhood Education major. Instruction in Biological Concepts, with highly variable class sizes within and among semesters, provided an opportunity for controlled studies of student learning. One application was the impact of class size. For over a decade, multiple sections were offered that included small (<30) and large (>75) sections. Faculty member, student learning outcomes, laboratory and lecture actives, PowerPoint presentations, and final exam were all the same; leaving class size as the main variable. A second application was the impact of active learning on the understanding of a major biological concept, the process of photosynthesis. An analysis of measured learning outcomes will be shared that will help us understand the impact of class size and lecture activities on learning.