TRANSFORMING TEACHING AND LEARNING THROUGH BRAIN SCIENCE: THE DEVELOPMENT OF A PROFESSIONAL DEVELOPMENT SERIES

A ROUNDTABLE PRESENTATION

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ABSTRACT

The University of Central Oklahoma (UCO) is rooted in a transformative learning based mission. UCO defines transformative learning as "a holistic process that places students at the center of their own active and reflective learning experiences" (http://www.uco.edu/central/tl/index.asp). Fully supported by UCO's Center for Excellence in Teaching and Learning (CETTL), faculty are encouraged to study, design and research transformative learning practices that enhance teaching and learning at UCO. The Embodied Brain Professional Development Series is one initiative focused on understanding what transformative learning looks like in light of brain-based learning. To understand how students learn, one must understand how their brains take in, process, and retrieve information. Using the book, *The New Science of Learning* (Doyle & Zakrajskek, 2013) as a common foundational text, a small group of interdisciplinary faculty began discussing practical applications to create a more transformative learning environment, based on neuro-science, in the classroom. Faculty members committed to participate in The Embodied Brain series and each one facilitated a session by providing an article, book chapter, or video that others would review prior to attending each meeting. This material was meant to extend and deepen the content of the chapters from *The New Science of Learning*. Faculty members provided some form of practical classroom application, related to the material covered, and led discussion at each session. Transformative learning concepts, in light of brain-based research were discussed as well as how others could apply these concepts in the classroom. Several promising practices were highlighted. Objectives of this session were: 1) review *The New Science of Learning* key ideas and applications; 2) consider new approaches to helping students learn; and 3) devise a plan for updating course content, assignments, or other opportunities designed to help students master course outcomes.

SELECT REFERENCES

University of Central Oklahoma. (2015d). Transformative learning. Retrieved on December 30, 2016, from http://www.uco.edu/central/tl/

Doyle, T. & Zakrajsek, T. (2013). *The New science of learning; How to learn in harmony with your brain.* Sterling, Virginia: Stylus.

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