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Putting Students in the Front and Center: Exploring and Refining Student Centered Learning Techniques

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Abstract

Student-centered learning (SCL) represents a growing trend in higher education that emphasizes active learning strategies in lieu of more traditional passive strategies such as lecture. This study explores different techniques under the rubric of SCL to evaluate the utility of selected tools to enhance student knowledge and student learning. Specifically, this study tests the use of student portfolios, flipped classrooms, digital learning strategies, and problem-based learning to enhance a student's learning experience. Originating as a collaborative effort from a university faculty learning community, this study includes a multi-disciplinary look at the effects of SCL approaches in the fields of aviation, security, and intelligence.

Methods

Plus	Delta
What is helping me learn in this course?	What changes are needed in this course to improve learning?
What am I doing to improve my learning in the course?	What do I need to do to improve my learning in this course?

The benefit of using this model is that it identifies what is going well and what should be changed. The model asks students to both focus on what is working to advance their learning in the course and what could be improved by the professor and by the student.

Preliminary Results

- **25%** or less of students have participated in classes they perceive as student centered.

- **27%** of students, early in the semester, perceive that the structure of the class inspired their regular attendance.

- **38%** of students began to recognize the professor as the most important draw, during post-midterm semester feedback.

- **19%** of students said they attend class regularly because they were enticed by student centered learning.

- **90%** of students perceive they are learning more in classes with a student centered learning structure.

"This process is designed so that students can learn how they learn best. Taking into consideration what works for one may not work for another and at the end of the day it's not about what was taught but what was learned." (Varrata, 2017).

Co-Author Bio

Dr. Brent Bowen is a Professor of Aeronautical Science at ERAU-Prescott, AZ and known for his Airline Quality Rating research program now in its 28th year.

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Dawn Groh is the ERAU Helicopter Program Chair with a research focus on fusing student-centered teaching with aviation training curriculums.

Dr. Tyrone Groh is an Associate Professor of Security and Intelligence Studies.

Dr. Tim Holt is the Dean of the College of Aviation, and a Professor with Embry-Riddle Aeronautical University, where he teaches in the Applied Aviation Science Department.

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