Presenter Name:
Joe Holles

SoTL Poster Presentation Title:
Developing and Offering an "Introduction to Research Methods Course" for Honors Students

SoTL Poster Presentation Abstract:
In an effort to improve recruiting and retention, our institution has focused on expanding the Honor's College experience. The Honors College is working with each of the individual colleges to develop honors experiences specific to that college's needs. Within the College of Engineering and Applied Science, the goal is to focus the Honors experience on undergraduate research with an aim of broadening research opportunities and competitiveness of student applications for summer research programs, NSF REUs, internal/external research funding applications, participation in undergraduate research conferences, and preparing the students for graduate school. Historically, many students (inside and outside of the honors program) have received credit for completing undergraduate research, but this is often a "stand-alone" course with no additional preparation and ill-defined outcomes. While this approach may provide a laboratory experience, the research experience is greatly dependent on the research laboratory and the research advisor. The significant increase in expected students performing undergraduate honors research also suggests that a group mentoring approach may be required in order not to require additional time from the research mentors. In an effort to improve the undergraduate research experience, we initiated an Engineering Honors Research Methods course for the undergraduate Honors students during the Spring 2020 semester as a preparation course for subsequent undergraduate research.

The Research Methods course will be broadly focused by providing a general approach to research and graduate school preparation appropriate for all majors in the Engineering College. Alternative approaches from the literature that are used to teach students how to conduct research will be compared and contrasted. Course topics will include: finding a research mentor, literature search skills, using the scientific method for approaching a research problem, developing a research methodology, writing a funding proposal, delivering a research presentation, and selecting and applying for graduate school. The motivation for this work, course details, learning objectives, course schedule, and course assignments will be presented. Experiences, outcomes, feedback, and lessons learned from the initial offering of this course will be presented.

Presenter Name:
Rosemary McBride

SoTL Poster Presentation Title:
Integrating the Entrepreneurial Method into Community College Farm & Ranch Management Coursework

SoTL Poster Presentation Abstract:
Does training in management negatively impact a student's entrepreneurial mindset? This study set out to integrate the entrepreneurial method and evaluate its impact using a quasi-experimental pretest-posttest design using knowledge survey data and data from a collaboration survey instrument on baseline and course redesign. The course results show gains for increased management content knowledge and collaborative engagement after integrating the entrepreneurial method.

Presenter Name:
Ian Bitzes, Julia Bulick, and Rosemary McBride

SoTL Poster Presentation Title:
Where is the source of my learning? Students' Reflections on Preservice Teacher Diversity Education during the Pandemic

SoTL Poster Presentation Abstract:
How did students use their life experiences, online course-learning platform, and freedom to adapt learning plans to meet learning outcomes to become culturally relevant teachers? Post-course interviews in collaboration with students uncover the isolated experience of learning online during the pandemic despite collaborative course elements. This participatory research project reflects on the process of becoming and the cooperative components of the Scholarship of Teaching and Learning research.

Presenter Name:
Kaatie Cooper, Amanda deDiego, Michele Larson, and Kathleen Frye

SoTL Poster Presentation Title:
Exploring Student Preferences and Perspectives About Writing for Different Audiences

SoTL Poster Presentation Abstract:
In this study, a group of eight instructors across a range of disciplines designed a writing assignment in which students (n=104) chose to write to one of three audiences – the teacher, a novice, or an adjacent expert. Unexpectedly, writing for the instructor was the most commonly selected option of our participants--a decision students made based in part on their perceptions of relative ease and familiarity of the task and audience. Yet, at the same time, participants valued being asked to write for different types of audiences, in part because they saw other audiences as stretching their rhetorical skills. Researchers reflect on how findings of this study influence their teaching practices.

Presenter Name:
Michele Larson

SoTL Poster Presentation Title:
Assessing Student Mindsets, Self-assessment, and Learning

SoTL Poster Presentation Abstract:
Student mindsets may be essential for understanding student learning and self-assessment skills (accuracy). I used pre- and post-surveys to assess if mindset influenced student learning or accuracy. I also assessed if different aspects of mindset differed among students. My preliminary data indicates that a student's mindset did not explain student content knowledge or accuracy, but student accuracy was higher in students with higher content scores. I also found that the three aspects of mindset showed a more fixed mindset for creative than overall intelligence and science/math ability.

Presenter Name:
Michele Larson

SoTL Poster Presentation Title:
Student Incivility in an Active Learning Classroom

SoTL Poster Presentation Abstract:
I investigated behavioral responses to different learning environments because I wanted to find out why my students had behaved so hostilely in my active learning classroom. This study may help my fellow instructors understand how to better implement novel teaching strategies so that they receive as little resistance to learning as possible.

Presenter Name:
Meredith Minear

SoTL Poster Presentation Title:
Using Three-Dimensional Models to Improve Spatial Awareness of Brain Anatomy

SoTL Poster Presentation Abstract:
Neuroanatomy is a challenging subject for students due to the complexity of the material and need for three-dimensional (3D) spatial visualization (Guillot, Champely, Batier, Thiriet, & Collet, 2007).
We created a set of 3D printed and virtual brain models using a high-resolution MRI dataset. Students completed a lab exercise where they used either the 3D printed or virtual brain model to order a set of axial slices from dorsal to ventral. They then labeled the different structures that they found useful in determining the slices' positions. We measured the students' ability to localize 2D brain cross-sections before and after the lab exercise. Overall, we saw pre to post-test increases in accuracy on a brain cross-sections task. Preliminary eyetracking data also suggests that students learned to use certain midline structures, but not others to visualize a cross-section.

Presenter Name:
Dilnoza Khasilova

SoTL Poster Presentation Title:
Adult Students' World Language, Literacy, and Culture Learning in a Nonformal Setting: SOTL Engagement

SoTL Poster Presentation Abstract:
The purpose of this qualitative study was to examine seven adult students' learning of world languages, literacies, and cultures in a nonformal setting (e.g., World Language and Culture Program, WLCP) at a large western land-grant university in the United States during the 2019 spring semester. The primary objectives of this study are to provide insight
into what and how adult students learned. Drawing from Simons (2009), the study was framed as a qualitative descriptive case study. Data sources included interviews, observations, field notes, and artifacts. Data analysis drew on the Deep Approach conceptual lens and the Interpret Analyze Present Interact (IAPI) curriculum model to understand seven adult students' learning in the WLCP. Findings showed that adult students learned everyday language and literacy practices (reading, writing, speaking, listening) and aspects of cultural practices (e.g., religion, traditions, geography). The seven participants learned these everyday language and literacy practices and aspects of cultural practices through individual practice and meaningful interactions such as peer collaboration and instructional scaffolding.

Presenter Name:
Jim Gunderson

SoTL Poster Presentation Title:
Measuring Students' Understanding of the Different Impacts of Idiosyncratic Risk and Market Risk in the Capital Asset Pricing Model

SoTL Poster Presentation Abstract:
I became concerned because students in my introductory finance classes did not seem to appreciate the need to filter out idiosyncratic risk before using the Capital Asset Pricing Model to determine the appropriate expected returns for securities. For two semesters during which I was teaching multiple sections of introductory finance courses, I experimented with different amounts of time devoted to this issue in class. I discovered that whether I devoted a small amount of time or a large amount of time to the topic, almost all of my students understood it quite well. My initial impression was wrong, so there was really no problem, and the entire issue turned out to be a moot point.

Presenter Name:
Breanna Krueger, Fabian Nippgen, and Lars Kotthoff

SoTL Poster Presentation Title:
When Students Grade Students: The Efficacy of Peer Assessment Across Three Diverse Disciplines