

Welcome to the 8th annual Scholars at Work Conference! The conference seeks to showcase faculty, staff, and graduate students' teaching, research, and innovative activities with peers and colleagues around our institution.

Session 1 Room A

A NEW CONCEPTUALIZATION MODEL EXPLAINING INCIVILITY ETIOLOGY IN UNDERGRADUATE NURSING STUDENTS PRESENTED BY DR. KARA DE LA FOSSE AND RACHEL SCHICKLING SCHOOL OF NURSING

Incivility in undergraduate nursing programs has been exemplified since the onset of the global pandemic. The nursing profession relies strongly on teamwork and unity. Incivility impedes learning and negatively impacts the teaching and learning environment for both students and faculty. Student civilityand conduct behaviors are established prior to entrance into undergraduate nursing programs to promote a community of professionalism,

Schedule:

10:00-10:50 am SESSION 1

> 11:00-11:50 am SESSION 2

current beliefs about incivility must be addressed and mitigated early in nursing programs to uphold standards and expectations. There is little tolerance for incivility in professional nursing practice, necessitating the importance of understanding the root causes of nursing student behaviors before effective interventions can be implemented.

Aim: To provide a globally accepted conceptualized model to undergraduate nursing faculty that provides insight into the causative factors of incivility in nursing programs.

Methods: A systematic review of the literature was conducted to determine the prevalence of models that explains causative factors of uncivil actions by undergraduate nursing students. To date, no model exists that accounts for the biological, psychological, and sociological factors that impacts civil behavior in the classroom.

Results: Causes of incivility has influences in the biological, psychological, and sociological domains, and each must be considered as it relates to the whole person, because external experiences impact internal (i.e., classroom) behaviors. The Conceptualization Model of Incivility Etiology in Undergraduate Nursing Students was created to explain causative factors of incivility in undergraduate nursing students. The model's foundational concepts derive from Bandura's Social Cognitive Theory and Clark's Civility Index. Conclusions: For the first time a holistic account of biological, psychosocial, and sociological causes of incivility has been identified. Non-academic influences are now accounted for when understanding causes of uncivil behavior in undergraduate nursing students. Now that causes of incivility are understood within this context, faculty will be able to implement interventions to mitigate incivility more effectively.



INCREASED STUDENT EMPLOYMENT IS ASSOCIATED WITH INFERIOR BIOLOGY EXAM AND COURSE PERFORMANCE

PRESENTED BY DR. KEENAN HARTERT AND FINLEY SIMS, BIOLOGICAL SCIENCES

Rising tuition rates are detailed as a driver of increased student employment, potentially leading to reduced time and academic performance. We observed this relationship across 3 cohorts of Genetics (BIOL-211), totaling 238 students. Students working 20+ hours scored significantly fewer total points (p=0.0089), exam points (p=0.0255), and were more likely to incur a failed assignment (p=0.0025). These data represent an important metric for identifying and treating underlying factors associated with reduced STEM performance and retention.

Session 1- Room B

USING "SCIENCE FRIDAY" TO PROMOTE PRE-SERVICE ELEMENTARY TEACHERS' SCIENCE TEACHING SELF-EFFICACY

PRESENTED BY DR. TRISH ARNOLD, PH.D., ELEMENTARY AND LITERACY EDUCATION

Developing the science teaching self-efficacy of pre-service elementary teachers has long been a concern for teacher educators (Palmer, 2006). Many pre-service teachers report negative science experiences in high school and often lack confidence in their skills to teach science (Kazempour, 2014; Palmer, 2006). In the current age of the NGSS and their expounding impacts throughout K-12 education, addressing low self-efficacy in teaching science needs to be prioritized in the preparation of elementary teachers as it has been linked to avoidance of inquiry science and the increased use of teacher-centered strategies such as textbook driven worksheets (Palmer, 2006).

Implementing a practice-based approach within a science methods course has the power to positively impact the science teaching self-efficacy of pre-service elementary teachers (Flores, 2015). Designing and implementing a performance based final as a culminating experience within an elementary science methods course is an example of such a practice-based approach. In addition to submitting an elementary science lesson plan with all the accoutrements, preservice elementary teachers planned, rehearsed, revised, and facilitated a "Science Friday" event in partnership with a local elementary school. This "Science Friday" event included six classrooms, two from each grade (Grade 3-5), where the pre-service elementary teachers facilitated a science lesson as a 4-station activity that included an anchoring phenomenon, at least one handson, minds-on activity, and an engineering task. The constraints with this "Science Friday" event were that the final lesson had to be aligned with a given science content standard from the Mentor Teacher, and that the lesson could only be 60 minutes in total length, from open to close. PST feedback was immediately collected after the culmination of the "Science Friday" event. All the pre-service elementary teachers who participated in the performance final found the "Science Friday" experience to be a "value added" experience that positively impacted their perception of their science teaching self-efficacy. Organizational and logistical details of this innovative approach to an elementary science methods course will be shared with presentation attendees.





Session 1- Room C

EFFECT OF TERMINOLOGY ON STUDENT PERFORMANCE PRESENTED BY DR. NAZLI WODZINSKI

This study intends to examine the effect of terminology on students' comprehension of problem statements in assessments. For this, students are tested on simple mathematical concepts that they are familiar with from middle/high school. Questions are written with and without technical terminology that is typically used in STEM higher education. The questions are randomized. Demographic information of students will be collected without identifying information. Conclusions will be made on the impact of terminology on student success.

FUNDAMENTALS OF ENGINEERING DIAGNOSTIC TEST (FEDT) - NAZLI WODZINSKI

This paper presents a D2L module is prepared for ME/CIVE Department to provide a custom design Fundamental Engineering Diagnostic Test (FEPT) to juniors of both programs that only had questions from 1XX and 2XX level courses. FEDT will be used as both an assessment tool for programs on the teaching efficiency of 1XX and 2XX courses. It will also act as an early alert to students who have essential knowledge deficiency in fundamental courses.

Session 2- Room A

FOSTERING INCLUSIVE EXCELLENCE: AN ANTIRACIST PEDAGOGY TO ONLINE COURSE QUALITY PRESENTED BY DR. JONATHAN PAVOR AND DR. BROOKE BURK

Discover the transformative power of Antiracist pedagogy in online education. This session explores applying Antiracist principles to online course design. Faculty will gain practical insights through review of a currently available, nationally recognized DEI rubric focused on course design. Join us in shaping a future where online education exemplifies both excellence and equity.

Session 2- Room B

COMMUNICATION BARRIERS IN THE DEAF AND HARD OF HEARING COMMUNITY PRESENTED BY DR. KARI SWEEN

This session will provide a deeper insight into communication barriers in the Deaf and Hard of Hearing community. When people with hearing loss experience a communication barrier in their career, education, and family upbringing, it leads to language deprivation. When language deprivation occurs, we can see situational and economic disempowerment along with audist attitudes towards the culturally marginalized group which is the deaf and hard of hearing people. This session will highlight the importance of being aware of explicit and implicit biases and promote inclusivity. As a famous deaf actress and activist, Marlee Matlin quoted, "I hope I can inspire people who can hear. Hearing people have the ability to remove barriers that prevent deaf people from achieving their dream." During this session, it is my goal to inspire all and recognize our ability to become an ally together to dismantle the communication barriers that people who cannot hear endure every day.

