Celebration of Faculty Scholarship

3:30-5:00 PM

Friday, October 25th, 2024

FSPA Lobby

Viterbo Fine Arts Center

Center for Teaching and Learning

VITERBO UNIVERSITY

Presentation Format

Concurrent sessions are on rotation with one set of presentations starting at 3:40, 4:05, and 4:35pm. Poster presenters are part of the rotation and may present for some or all the time slots.

Presentation Summary

	Table #1	Table #2	Table #3	Table #4
	Presenter setup; mingle and enjoy a beverage!			
3:40-4:00	*Synodality and the Move Toward a Collaborative Ecclesial Future* (E. Dykman)	*Acacia, A Book of Wonders* (V. James)	*Seeing Sound Is Believing Sound: Keeping the Voice as a Communicative Instrument Healthy, Efficient, and Versatile* (T. Nestorova)	*Viterbo's Spanish Immersion Program: HIP Results* (J. Jambrina and V. Holtz)
4:05-4:25	*Handbook on Religion and Health: Pathways for a Turbulent World* (M. Bersagel Braley)	*Problems of Professional Competency - Crucial Conversations in the Role of Faculty* (T. Hill and C. Klose-Smith)	*Utilizing AI to Save Time, Teach Better, and Prevent Burnout* (J. Lichty)	*It's me, hi, I'm the problem: ANTI-HERO aspects of equity in college courses* (J. Welsh) (continues in next time slot)
4:30-4:50	*"Stem is Everything": Participatory Research, Epistemic Justice, and Informal Learning* (S. McManimon)	*A Reconstructive Multi-Objective Hybrid Mixed Integer Genetic Algorithm: Enhancing University Course Timetabling with Adaptive Scheduling Solutions* (E. Weinberg) 30min.	*Culture or Religion? Discerning Comparative Organizational Perspectives* (P. Ismaili) 30 min	*It's me, hi, I'm the problem: ANTI-HERO aspects of equity in college courses* (J. Welsh)

POSTERS
Four years into COVID-19, where are we with the relationship between Long COVID and Chronic Fatigue Syndrome? (D. Krageschmidt)
Universal Design for Voice Teaching (A. Moxness)
Exploring the Inductive Effect through Computational Modeling: A General and Organic Chemistry Lab Experiment (V. Stepanova)
The Impact of Banner Ads on Consumer Attitude and Purchase Intention Toward Golf Products: Using Product Classification and Contextual Congruity (J.W. Choi)
Expanding Social Justice Curriculum: A Collection of Multimedia Text Sets for Elementary Teachers (M. Langeberg)
Research for Improving Educational Experience (K. Busteed and V. Heiser)

3:40PM Presentations

Synodality and the Move Toward a Collaborative Ecclesial Future

Emily Dykman

Religious Studies and Theology

Location: Table #1

Abstract:

Synodality is an ecclesial definition that re-emerged during the papacy of Pope Francis in the Roman Catholic Church. Synodality defines church in a way that requires the entire Church body's presence and voice. This definitional shift is potentially complicated by assumptions from church regarding their authority and capacity to name correctly their understanding of the faith. This article will discuss the historical nature of synodality in the Roman Catholic Church and the potential of its recent clarification to draw forward a more participatory hierarchical ecclesiology. Concerns will be noted about the lack of preparation for this process and the possible difficulties that could have been avoided.

Acacia, A Book of Wonders

Vincent James

English

Location: Table #2

Abstract:

Acacia, A Book of Wonders (Texas Review Press, 2023) tells the story of Petra Caldwell, the matriarch of Acacia, a new religious movement located in a densely wooded East Texas thicket. In this non-space of surreal and mystical happenings, the saints of Acacia worship vultures as

prophetic emblems and prepare for a prophesied end-times event known as The Commotions. All the while, Petra wrestles against the wiles set for her by her predecessor, the Prophetess Mother Salome Nightingale. *Acacia* affords a unique vantage point in cult fiction: a narrative told by the group's leader.

Seeing Sound Is Believing Sound: Keeping the Voice as a Communicative Instrument Healthy, Efficient, and Versatile

Theodora Nestorova

Communication Disorders and Sciences/ Speech Language Pathology

Location: Table #3

Abstract:

Historically, voice analysis has solely focused subjective auditory and perceptual indices and standards, disregarding objective markers of voice dysfunction and disorders and neglecting the full spectrum of vocalism across different musical genres for singers. This presentation seeks to expand that perspective by showcasing how modern acoustics technology can be used to both qualitatively and quantitatively analyze and understand the intricate aspects of voice production. Delving into my recently published and presented research on speaking and singing voice science using acoustics (and its derived and related tools), this presentation focuses on how acoustic measurements can illuminate the neurobiomechanics of vocal function. Through real-time visualizations and innovative analysis techniques, we will demonstrate how these tools can assist Speech-Language Pathologists, singing teachers, and voice professionals in detecting and evaluating voice differences and disorders.

Viterbo's Spanish Immersion Program: HIP Results

Jesús Jambrina and Vickie Holtz

English and World Languages

Location: Table #4

Abstract:

This presentation will share HIPs from the Viterbo's Language Immersion Program in Zamora, Spain, for the last two years, including recruitment, retention and graduation rate. Majors in the Spanish program grew by 9 after 26 students participated in this program in 2023 and 2024. Most of these are double majors Nursing & Spanish, increasing interdisciplinarity, language proficiency and intercultural competence in the classrooms. In the case of Minors, they have been able to complete it ahead of plans. This program has also served students fulfilling their B.A. requirements by facilitating its completion in one trip. The Language Immersion Program have contributed to international exposure and global citizenship on campus, becoming a signature HIP for the Spanish program.

4:05 PM Presentations

Handbook on Religion and Health: Pathways for a Turbulent World

Matthew Bersagel Braley

Ethics, Culture, and Society

Location: Table #1

Abstract:

Nearly fifty years ago, the moral clarity of "Health for All" mobilized health systems and religious communities around the world to reimagine what was possible in responding to the suffering of the most vulnerable across the globe. Growing awareness of the fragility of the planet, our social ties, and health systems compel us to revitalize this moral commitment. This session will share highlights from a series of events inspired by the recent publication of *Handbook on Religion and Health: Pathways for a Turbulent Future,* which responds to the urgent call to move from "health for all", to "health of the planetary whole."

Problems of Professional Competency - Crucial Conversations in the Role of Faculty

Tamera Hill and Carole Klose Smith

Psychology and Counseling Education

Location: Table #2

Abstract:

According to numerous faculty, the role of gatekeeper to the profession of counseling can be challenging. As trained counselors, faculty foster a sense of change and growth which may delay timely remedial processes. This presentation will facilitate discussions by addressing problems of professional competence that faculty face, as well as implications for programs, and the elements that create a climate conducive to effective gatekeeping.

Utilizing AI to Save Time, Teach Better, and Prevent Burnout

Josh Lichty

Education

Location: Table #3

Abstract:

Find out how AI can save time, energy, and stress to free teachers from what drags them down and allow them to do more of what they love and what drives them. Learn how AI as "augmented intelligence" can support the instructor with some simple, time saving, tasks including rubric creation, providing feedback, and generating presentations.

It's me, hi, I'm the problem: ANTI-HERO aspects of equity in college courses

Jessica Welsh

Business, Leadership, and Ethics

Location: Table #4

Abstract:

In 2022-2023, a group of researchers at a Midwestern regional university conducted focus groups of students to explore why Ds, Fs, and Ws persisted among students of color, first-generation students, and Pell Grant recipients in first year gateway courses. The students reported the reason for their attrition to course policies and differences in instructors across sections, which can be likened to ANTI-HERO factors. The information presented is from a qualitative case study involving students and faculty in focus groups to discuss potential reasons for why students with those identities seem to perform at a lower level than their peers. This work will be taken to a National Communication Conference to discuss ways we can improve equitable practices without infringing on academic freedom.

4:30 PM Presentations

"STEM is Everything": Participatory Research, Epistemic Justice, and Informal Learning

Shannon McMannimon

Business, Leadership, and Ethics

Location: Table #1

Abstract:

"STEM Justice" was a multi-year participatory research project at the Kitty Andersen Youth Science Center of the Science Museum of Minnesota. This roundtable will consider ways in which we worked to counter epistemic injustices that narrowly circumscribe who is considered a science and research knower and producer. We articulated how "dominant" STEM reflects epistemic injustice and critiqued common approaches to broadening participation in STEM. Together, our collaborative, emergent, and ethical process positioned young people and adults as science knowers and doers who understand that "STEM is in everything." Our research, which co-created materials for communities to engage STEM as a tool for justice, may provide an example of work toward an epistemically just (McIntosh & Wilder, 2023) approach to (informal) learning research.

A Reconstructive Multi-Objective Hybrid Mixed Integer Genetic Algorithm: Enhancing University Course Timetabling with Adaptive Scheduling Solutions

Eric Weinberg

Math, Engineering, and Computer Science

Location: Table #2

Abstract:

Class scheduling can be a major challenge for academic departments, with chairs often having to manually check for conflicts like double-booked rooms or overlapping faculty assignments. This research offers a solution to ease that burden using this Reconstructive Multi-Objective Hybrid Mixed Integer Genetic Algorithm. Our approach addresses the University Course Timetabling Problem (UCTTP) by integrating Mixed Integer Programming (MIP) and Genetic Algorithms (GAs). This combination allows departments to generate schedules automatically, while ensuring that room availability, faculty preferences, and student needs are balanced. It also helps avoid common issues like schedule overlaps or conflicts. By optimizing the process in two phases, our method

reduces the need for manual intervention, making it easier for chairs to create schedules without worrying about crossovers. Case studies show that this approach is not only more efficient than traditional methods but also more adaptable to the evolving needs of academic institutions. For faculty, this means teaching schedules are more aligned with their preferences, and for students, it reduces course conflicts. Chairs and administrators can feel confident that the schedules are conflict-free from the start, saving time and effort.

Culture or Religion? Discerning Comparative Organizational Perspectives

Perwaiz Ismaili

Business, Leadership, and Ethics

Location: Table #3

Abstract:

This study under NDA seeks to compare workforce dynamics at home (USA) with two other offshore locations. Among others, effects of religiosity are studied to discern organizational trust and loyalty, intrinsic or extrinsic motivations, group and cultural orientations. Gender, cultural and religious effects were observed critical for better alignment of organizational dynamics.

POSTERS

Research for Improving Educational Experience

Kerri Busteed and Vickie Heiser

Nursing

Abstract:

Senior nursing students traveled to rural Alaska to work with the Yup'ik Eskimo population. Native elders from the community provided cultural and spiritual education (Calricaraq training) to aide students in their understanding of the Yup'ik people and their beliefs. Students completed pre and post education surveys along with three journal entries describing their experiences caring for the Yup'ik people. Study was completed to identify whether education provided by the elders in the community would increase participant comfort, understanding, and ability to care for the population in a culturally competent manner.

Expanding Social Justice Curriculum: A Collection of Multimedia Text Sets for Elementary Teachers

Melinda Langeberg

Education

Abstract:

This article provides elementary teachers with multimedia text set resources paired with Picower's (2012) established social justice elementary curriculum: *Six Essential Elements of Social Justice Teaching*. Such a union builds student's background knowledge, starts discussions, and spurs writing. Selected resources align with Lexile scores and social justice elements. Materials were sorted into categories such as children's books, chapter books, artwork, or websites. This article includes practical and accessible resources that save teachers time and support social justice teaching goals.

The Impact of Banner Ads on Consumer Attitude and Purchase Intention Toward Golf Products: Using Product Classification and Contextual Congruity

Jun Woo Choi

Business, Leadership, and Ethics

Abstract:

This research investigates the banner ads impact on core golfers' attitude and purchase intention concerning golf products, emphasizing an interaction effect among key variables. Employing a 2x2x2 experimental design, the study scrutinizes the factors of congruity, product value, and level of involvement. Significant results include a positive relationship between core golfers' attitude and purchase intention, aligning with the Theory of Planned Behavior. Notably, the interaction effect of congruity, product value, and level of involvement significantly influences core golfers' attitude. The study contributes substantially to the banner ads literature in sport, extending theoretical frameworks like the Elaboration Likelihood Model and contextual congruity. Practical implications guide marketers in optimizing banner ads strategies based on the identified

interaction effect, offering valuable insights for effective campaigns in the digital marketing landscape.

Exploring the Inductive Effect through Computational Modeling: A General and Organic Chemistry Lab Experiment

Valeria Stepanova

Biology, BioChemistry, and Neuroscience

Abstract:

A straightforward, laptop-friendly computational chemistry laboratory exercise has been developed that facilitates students' understanding of the inductive effect. Students implement DFT modeling of acetic acid and its methyl and fluoro analogues: trifluoroacetic, fluor acetic, propanoic, and 2,2-dimethylpropanoic (pivalic) acids, all at a modest level of theory (revPBE/6-31G*). Individually, students complete all computational aspects in ~45 min using a quad-core laptop computer. Students analyze carbonyl (C=O) vibrational frequencies, C=O bond lengths, and Mulliken charges for the acidic hydrogen in each structure. Students use collected data to compare with literature pK_a values to identify trends of chemical properties (i.e., acidity) and electronic effects (i.e., electron-donating and -withdrawing groups).

Universal Design for Voice Teaching

Adam Moxness

Conservatory for the Performing Arts

Abstract:

The Universal Design for Voice Teaching framework provides voice teachers with vocal pedagogy resources to include singers of all abilities in the studio. According to the Center for Disease Control, one in every four adults in the United States is living with a disability: 11.1% mobility, 10.9% cognition, 5.7% deaf or hearing, and 4.9% vision. Of particular significance is the growth in diagnoses of cognition disorders. In two decades, children diagnosed with autism spectrum disorder increased 269% and attention-deficit/hyperactivity disorder parent reported diagnoses continue to trend upwards. However, there is a dearth of pedagogical research on how vocal pedagogues effectively engage, teach, and support neurodivergent singers. The Universal Design for Learning guidelines, developed by the Center for Applied Special Technology, remove educational barriers for all learners by presenting multiple means of engagement, representation, and action and expression. This research integrates evidence from books, peer-reviewed articles, evidence-based practices, interviews, and statistics to include singers with neurodivergent ways of being in the voice studio.

Four years into COVID-19, where are we with the relationship between Long COVID and Chronic Fatigue Syndrome?

Dale Krageschmidt

Business, Leadership, and Ethics

Abstract:

This is a systematic literature review of data and information published between March 1, 2020, and March 1, 2024. Over two hundred articles have been reviewed to document this long COVID syndrome. Although no universal case definition for long COVID exists, over two hundred different symptoms have been recorded, with chronic fatigue affecting most Long COVID patients. Symptoms may have a delayed onset, appear cyclically, vary in severity, and last for months to years. The association between long COVID and the increased incidence of fatigue and CFS calls out for more education and research. Patients can manifest numerous complications for months or years post-Covid-19 symptom onset. One of these complications is CFS which can lead to increased morbidity and mortality, and a decreased quality of life.