

Proceedings for the 16th annual

CONFERENCE ON HIGHER EDUCATION PEDAGOGY™

February 7-9, 2024

The Inn at Virginia Tech &
Skelton Conference Center



Conference on Higher Education Pedagogy

Hosted by



Center for Excellence in
TEACHING AND LEARNING

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16th Annual
**Conference on
Higher Education Pedagogy**

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The Inn at Virginia Tech and Skelton Conference Center
Blacksburg, Virginia

Opening Keynote Address

Thursday, February 8, 2024

8:15 – 10:00 a.m.

Cate Denial

Bright Distinguished Professor of American History

Director of Bright Institute at Knox College



A Pedagogy of Kindness

What does it mean to practice a Pedagogy of Kindness? This presentation will explore three tenets of compassionate teaching: justice, believing students, and believing in students. We'll reflect together on what kindness (and its lack) has meant to us within academia, and how we can - piece by piece - assemble a kind approach to pedagogy that meets the needs of our students and ourselves in a time of great change.

Lunch Plenary

Friday, February 9, 2024

12:00 – 1:30 p.m.

Dale Pike

Virginia Tech

Associate Vice Provost, Technology-Enhanced Learning



Responsible AI for Teaching and Learning

This talk will explore the ethical dimensions and responsible use of artificial intelligence in educational settings, while ensuring validity, reliability, and safety in its applications. Delving into how AI can be harnessed to enhance teaching and learning while adhering to ethical principles, we will discuss the challenges and opportunities presented by AI technologies. We'll go over some potential best practices for implementing AI in a way that respects data privacy, promotes equity, and enhances the educational experience for both teachers and learners.

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CONCURRENT SESSION 1

**Thursday, February 8, 2024
10:15 AM - 11:00 AM**

Academic Accommodations and Universal Design for Students with Disabilities

Cheryl Lawson, *Iowa State University*

Abstract: Many students living with a disability cannot fully access and/or utilize the materials and tools more readily available, understood, or used by other students. This session aims to describe some of the more common disabilities experienced by students, provide illustrative examples or short simulations for these common disabilities, and foster discussion for ideas implementing universal design in the classroom for lectures, laboratories, and assessments.

Approximately 25 to 27% of adults in the United States report living with at least one disability; and includes approximately 20% of undergraduate and 12% of graduate students. Of these students, only 37% of students report their disability and 15-43% of the students reporting their disability do not receive accommodations. As a consequence, many students needlessly struggle throughout their collegiate courses. How can we as professors, instructors, lecturers, and graduate assistants support students who do not have the resources to seek accommodations, or are even denied the accommodations they need? Applying techniques and using tools fostering universal design can be a start!

The goal of universal design is to foster an environment that can be fully accessed, understood, and used by all people regardless of their age, size, and ability or disability. This idea can be applied to the physical environment (e.g., facilities), learning tools (e.g., font size, color, or type on reading materials and presentations), or course design (e.g., flexible assessment scheduling).

This session aims to 1) describe and dispel common myths about disability and accommodations, 2) describe a few of the more common disabilities experienced by students (e.g., anxiety, dyslexia, colorblindness, hearing loss, physical disability), 3) provide illustrative examples or short simulations of common disabilities, 4) describe common accommodations implemented for students with disabilities, and 5) brainstorm ideas for implementing universal design into the classroom with interactive discussion from the audience.

Examples of interactive activities include providing examples of lecture presentations that do not consider visual and/or visual processing challenges (e.g., dyslexia, colorblindness, astigmatism, etc.) versus presentations that incorporate easy-to-read fonts and color palettes, encouraging the audience to take notes with their non-dominant hand to demonstrate physical challenges that can occur in the classroom and limit full participation, and asking the audience members to complete puzzles while playing audio from a person describing the panic being experienced about the assessment to help exemplify the lived experience of students living with generalized anxiety disorder or text anxiety, or the challenges with focus experienced by students with attention deficit hyperactivity disorder (ADHD).

References

CDC.gov

National Center for Education Statistics (NCES). Number and percentage distribution of students enrolled in postsecondary institutions by level, disability status, and selected student characteristics: 2015 - 2016. May 2018. https://nces.ed.gov/programs/digest/d20/tables/dt20_311.10.asp

National Center for Education Statistics (NCES). Use of supports among students with disabilities and special needs in college. April 2022. https://nces.ed.gov/whatsnew/press_releases/4_26_2022.asp

Empowering Minds Through Sound: Crafting Compelling Educational Podcasts

Grant Jolliff, *Davidson-Davie Community College*

Abstract: Podcasts entertain and inform us during commutes, jogs, and cleaning sprees. For 21st century teaching, podcasts promise a unique and student-friendly method of delivering content. We will discuss the many options available for educational podcasting using a matrix to align the special needs of a course to a particular podcast format. A 22 episode, interview-based podcast will be used as an example for how to implement podcasting in a college classroom.

Educators use podcasts to provide content to students. A Magna Faculty Focus blog post titled "Podcasting Professor: Quick, Concise, Creative," "touts", "podcast audio lectures" and "live video broadcast presentations" as simple and effective "methods to connect with students virtual. Brown University's "Teaching with podcasts" discusses the findings of a number of studies on the benefits of lecture podcasts, i.e. reducing the anxiety of large lecture classes (Chan & Lee, 2005), reviewing concepts (Brittain et al., 2006; Evans, 2008; McKinney, Dyck, & Luber, 2009; Lonn & Teasley, 2009) and note review (Brittain et al., 2006). Most inspiring is Julie Roth's "study on the use of narrative podcasts in training medical residents and fellows" which found students viewed "podcasts more engaging and enjoyable than written course materials" (Roth et al., 2020).

Students love podcasting too. Vanderbilt University's Vandy Vox "showcases the best of student-produced audio at Vanderbilt University," the NPR College Podcast Challenge offers a \$5,000.00 dollar prize to college students who use the medium to describe "What does college sound like?", and professors like Derek Bruff and Stacy Margarita Johnson discuss the details of student podcasting assignments in "Leading Lines: A podcast on educational technology." The question is, how do we as educators capitalize off the popular podcast platform to inspire interest and engagement in our classes?

Professors need to think strategically about opportunities to leverage podcasting as an innovative way to draw students into course content, make meaningful connections to students' interests, and expose students to unexplored career possibilities. The challenge to teaching ENG 114: Professional Research and Reporting is connecting students to how this vague course title will do what it seems to promise - connect to their intended careers. Tackling this problem requires answering two big questions. First, what does professional research and reporting look like in the "real world"? Secondly, how can we make sure students see research and reporting as an integral part of their career development? To begin answering these questions I produced an interview-based podcast. The podcast format of the interview aligns with two critical components of technical writing - the informational interview, and exposure to the wide range of professions in writing. My intention is to provide a roadmap for professors in other disciplines to use podcasts as a platform for generating podcasts unique to their fields, informational for their students, and made exclusively for the class. Interactive components will include a matrix through which participants can align the special needs of a course to a particular podcast format, and a live example of how a podcast can be used to generate student knowledge.

References

- Brittain, S., Glowacki, P., Van Ittersum, J., & Johnson, L. (2006). Podcasting Lectures. *Educause Quarterly*, 29(3): 24-31.
- Bruff, D. (2022, March 2). Leading lines. <https://leadinglinespod.com/uncategorized/episode-106stacey-margarita-johnson-and-derek-bruff/>
- Chan, A., Lee, M.J.W. (2005). An MP3 a day keeps the worries away: Exploring the use of podcasting to address preconceptions and alleviate pre-class anxiety amongst undergraduate information technology students. In D.H.R. Spennemann, L. Burr (eds.) *Good practice in practice: Proceedings of the Student Experience Conference*, Wagga Wagga, NSW: Charles Stuart University: 58-70.
- Evans, C. (2008). The effectiveness of m-learning in the forms of podcast revision lectures in higher education. *Computers & Education*, 50(2): 491-498.
- Explore brown university. Teaching with Podcasts | Sheridan Center | Brown University. (n.d.). <https://www.brown.edu/sheridan/teaching-learning-resources/teaching-resources/classroom-practices/teaching-podcasts#:~:text=Using%20student%2Dproduced%20podcasts%20in%20your%20course&text=Integrating%20student%2Dproduced%20podcasts%20into,remote%20or%20hybrid%20learning%20environment.>

- Jerry, B. (2023, March 31). Podcasting Professor: Quick, Concise, and Creative Teaching. Faculty Focus. September 30, 2023, Podcasting Professor: Quick, Concise, and Creative Teaching.
- Lonn, S. & Teasley, S.D. (2009). Podcasting in higher education: What are the implications for teaching and learning? *Internet and Higher Education*, 12: 88-92.
- McKinney, D., Dyck, J.L., & Lubber, E.S. (2009). iTunes university and the classroom: Can podcasts replace professors? *Computers & Education*, 52(3): 617-623.
- Roth, J.; Chang, A.; Ricci, B.; Hall, M.; Mehta, N. (2020). Why not a podcast? Assessing narrative audio and written curricula in obstetrical neurology. *Journal of Graduate Medical Education*, 12(1): 86-91.

Using archival artifacts, historical events, and ecological challenges in active-learning

Brandy A. Burgess, *University of Georgia*

Abstract: Creating engaging content that demonstrates relevance to clinical practice can be key to influencing a student's intent to learn. Educators can leverage multiple pedagogical techniques (active- and service-learning) founded in historical examples (1854 London cholera epidemic), archival artifacts to demonstrate concepts (smoking and lung cancer), and contemporary regulatory challenges (managing brucellosis in the Greater Yellowstone Area) to develop engaging activities. Participants will learn about different pedagogical approaches while being immersed as a student. Attendees will be asked to reflect on the experience and consider how some of these approaches and/or activities may be applied to their courses.

Epidemiology is considered one of the basic sciences in clinical medicine and an integral component of clinical practice, irrespective of the scope of practice (e.g., small animal or large animal veterinary practice, public health) [1, 2]. The American Veterinary Medical Association (AVMA) Council on Education (COE) specifically identifies the necessity for instruction in the principles of epidemiology, biosecurity, and disease prevention; and further requires some hands-on learning [3]. Unfortunately, veterinary students tend to underappreciate the relevance of epidemiology to their future practice, and have historically found this to be a very dry and unengaging topic [1]. Further, through a survey of veterinary epidemiology educators, we found that the majority of educators delivered content in standalone courses and facilitated learning mainly through didactic lectures and a few activities; and found that perceived barriers to student learning included a lack of relevance of content for pre-clinical students and a lack of student interest.

Therein lies the opportunity - creating engaging content that demonstrates its relevance to clinical practice, a key influencer of a student's intent to learn these concepts [1]. What if we drew upon components of active-learning and service-learning [4-7] and created learning experiences founded on key historical events (e.g., 1854 London cholera epidemic and John Snow), using archival artifacts to understand the application of science to a proven causal association (e.g., smoking and lung cancer), and participating in an ecological, regulatory challenge (e.g., managing brucellosis in bison, elk, and cattle in the Greater Yellowstone Area). Further, what if we did this in a 'flipped' classroom environment in a 'large' class (approximately 150 students), and asked for students to self-reflect on the experiences to deepen their understanding of key concepts and identify knowledge gaps. Could we engage pre-clinical veterinary students in learning to use epidemiology as a tool in the practice of medicine?

This session will review active-learning strategies couched in exemplar activities to demonstrate why these approaches are key to student engagement with difficult content. Participants will learn about different pedagogical approaches while being immersed as students working through these activities. Attendees will be asked to reflect on the experience and consider how some of these approaches and/or activities may be applied to their courses to improve student learner outcomes.

References

1. Moffat, M., et al., Epidemiology teaching: student and tutor perceptions. *Med Teach*, 2004. 26(8): p. 691-5.
2. Fosgate, G.T., Veterinary student and veterinarian attitudes toward veterinary public health and epidemiology. *J Am Vet Med Assoc*, 2008. 233(2): p. 240-7.
3. Anonymous. AVMA Council on Education. [cited 2018 April 14]; Available from: <https://www.avma.org/professionaldevelopment/education/accreditation/colleges/pages/default.aspx>.
4. Armbruster, P., et al., Active learning and student-centered pedagogy improve student attitudes and performance in introductory biology. *CBE Life Sci Educ*, 2009. 8(3): p. 203-13.
5. Michael, J., Where's the evidence that active learning works? *Adv Physiol Educ*, 2006. 30(4): p. 159-67.
6. Howell, R.A., Engaging students in education for sustainable development: The benefits of active learning, reflective practices and flipped classroom pedagogies. *Journal of Cleaner Production*, 2021. 325: p. 129318.
7. King, E., et al., Assessing Service-Learning in Community-Based Veterinary Medicine as a Pedagogical Approach to Promoting Student Confidence in Addressing Access to Veterinary Care. *Front Vet Sci*, 2021. 8: p. 644

Promoting Voice & Choice: Student-Led Discussions in the Asynchronous Classroom

Anne Jewett, *University of Virginia*

Abstract: In this session, an experienced online instructor will share best practices for establishing routines and structures that support student-led discussions in the asynchronous classroom. Also, various tools, best practices, and student examples will be discussed in order to share how curiosity, wonder, and creativity can be fostered. Regardless of experience level, participants will walk away with enhanced knowledge and practical strategies that they can implement immediately to support student-led discussions.

Objectives: Participants will be able to identify organizational structures needed to support student-led discussions, plan routines that will be needed to foster student engagement, review and choose tools to enhance student interaction, and examine student examples to determine how to foster curiosity, wonder, and creativity in their own classrooms.

Structure:

Who?-(3 minutes)

Describe the context of the asynchronous classroom for adult learners and review key aspects of andragogy.

Define student voice.

Define student choice.

What? (3 minutes)

Describe the trajectory of discussions and their purpose in online learning.

Define student-led discussions.

Share personal experiences and reflections from my own instructional practice

Where? (10 minutes)

Virtual Tour: Model and share student-led discussion examples (Book Club, sample prompts, Jigsaws).

When? (4 minutes)

Explain key considerations for establishing routines for both instructors and students.

Plan structures for success.

How? (10 minutes)

Highlight various tools (including Flipgrid, Loom, Studio, student projects, boards).

Instructional best practice examples (Book Club, sample prompts, Jigsaw)

Why? (5 minutes)

Share findings Baran & Correria (2009), Snyder & Dingus (2014), & (Woods & Bliss, 2016)

Reflection and Brainstorming (5 minutes): Participants will brainstorm possible applications to their instructional practice. A 3-2-1 graphic organizer will be used for this by each participant. Participants will reflect on their instructional practice and brainstorm an application to enhance their instructional practice.

3 Things I Learned

2 Things I Want To Learn More About

1 Idea That I Can Try

References

Baran, E., & Correria, A. P. (2009). Student-led facilitation strategies in online discussions. *Distance Education*, 30(3), 339-361.

Snyder, M., & Dringus, L. (2014). An exploration of metacognition in asynchronous student-led discussions: A qualitative inquiry. *Online Learning Journal*, 18(2).

Woods, K., & Bliss, K. (2016). Facilitating Successful Online Discussions. *Journal of Effective Teaching*, 16(2), 76-92.

Who Let the Dogs Out?: Engaging Students Through Animal content
Denise Wilkinson, Kathy Stolley, Robin Takacs, *Virginia Wesleyan College*

Abstract: Incorporating animal-related content into higher education classrooms across the curriculum can provide an engaging way to connect with students and teach content. Research shows that students enjoy engaging in animal-related course material and examples, find examples understandable and helpful, and may express attitudinal change in how they consider other species. In this interactive session, the presenters will focus on the "whys and hows" of incorporating fun and simple animal-related content to meet specific course goals and enhance student experience in a variety of disciplines. No animals or animal-expertise necessary!

Anthropologist Claude Levi-Strauss famously observed that nonhuman animals are "good to think." They help us expand our perspectives on human concerns and worldviews. Animals are inextricably woven throughout our lives and institutions in complex and often inconsistent ways. Consider how much of human society is structured through interactions with animals, or through interactions with other humans about animals. As examples, in public spheres, billions of our economic dollars are animal-related. In our most personal spheres, the majority of US households include a companion animal, and if we count fish, more animals than humans live in our homes. However, in our classroom content, textbooks, and higher education curriculum, animals are often conspicuous by their absence.

Including animals in curricular material is beneficial in several ways. Students are interested in animals and animal-related topics. These areas provide opportunities for application, engagement, and action, factors that are associated with choice of major and better overall academic performance. Including animals expands perspectives. More broadly, the implications of our human thinking and actions are incredibly consequential for nonhuman animals as well. Adding animal-focused content acknowledges and validates nonhuman beings, considering them in contexts where they are not always visible.

This interactive session will focus on the "whys and hows" of incorporating animal-related content into courses across the curriculum to meet specific course goals and enhance student experience. First, presenters will provide a quick overview of the value of incorporating animals into course material. Next, presenters will use a variety of fun and simple examples of approaches for adding animal-related material through class exercises, activities, and service. Emphasis will be on ideas that can apply or be adapted across multiple disciplines to include: illustrating the power of language; teaching math concepts; practicing citizen science; exploring social science issues; and building community and transferable skills. A few examples that will be shared are: "Exponential Functions and Animal Decline," "Tracking Campus Animal Sightings," and "Animal-Assisted Therapy Connections." Finally, presenters will share anonymous student evaluation feedback. Participants will have ample opportunity woven throughout the session for discussion and brainstorming on adding animal-related content to their classrooms.

References

- Alger, J. M., & Alger, S. F. 2003. "Drawing the Line Between Humans and Animals: An Examination of Introductory Sociology Textbooks." *The International Journal of Sociology and Social Policy*, 23(3), 69-93. Animals and Society Institute, Ann Arbor, MI. <https://www.animalsandsociety.org/>
- Beggs, Jeri Mullins, John H. Bantham, and Steven Taylor. 2008. "Distinguishing the Factors Influencing College Students' Choice of Major." *College Student Journal*. 42(2): 381-94.
- DeMello, Margo, ed. 2010. *Teaching the Animal: Human-Animal Studies Across the Disciplines*. New York: Lantern.
- DeMello, Margo. 2021. *Animals and Society: An Introduction to Human-Animal Studies*, 2nd ed. New York: Columbia University.
- Grauerholz, L., Weinzimmer, J., Kidder, E.N., & Owens Duffy, N. (2020). "Teaching About Animals: Incorporating Nonhuman Animals into Sociology Classrooms." *Teaching Sociology*. 48(2): 120-139.
- Grauerholz, Liz, Cameron Whitley, Erin Kidder, Kelley Ortiz, and Kathy Shepherd Stolley. "Teaching Animal Studies Courses: Who Are Our Students?" *Society and Animals*. (Forthcoming.)

Collective Trauma and How Students Perceived Faculty Actions

Aimee Hollander, *Harvard University*

Abstract: Using student survey data on how faculty responded to the prior semester's collective traumatic events, hurricane, and the COVID-19 pandemic we share ways faculty applied trauma informed pedagogy principles and how students perceived how "helpful" these practices were in their academic success.

Across the nation, students' lives have been disrupted by the global pandemic, national disruptions, regional and personal events. In the fall 2022 semester Nicholls State University experienced a Category 4 hurricane during the COVID-19 pandemic. The university shut down for 4 weeks after the storm and then went on a hybrid schedule. Faculty were encouraged to attend trauma informed instruction through university and university system-wide professional development during that 4-week shut down. In the spring the center for teaching excellence surveyed the student population on their perception of what was helpful and what posed additional challenges to them succeeding in the previous semester. Overall students felt support by faculty who provided flexibility, transparency and understanding of the student's situation. Some students experienced harmful behaviors such as rigidity and lack of compassion from faculty. There was a difference in perceived logistical and emotional support between colleges and specific student populations.

References

- Read, J. P., Ouimette, P., White, J., Colder, C., & Farrow, S. (2011). Rates of DSM-IV-TR trauma exposure and posttraumatic stress disorder among newly matriculated college students. *Psychological Trauma: Theory, Research, Practice, and Policy*, 3(2), 148.
- Smyth, J. M., Hockemeyer, J. R., Heron, K. E., Wonderlich, S. A., & Pennebaker, J. W. (2008). Prevalence, type, disclosure, and severity of adverse life events in college students. *Journal of American College Health*, 57(1), 69-76.
- Galatzer-Levy, I. R., Burton, C. L., & Bonanno, G. A. (2012). Coping flexibility, potentially traumatic life events, and resilience: A prospective study of college student adjustment. *Journal of Social and Clinical Psychology*, 31(6), 542.
- Huston, T. A., & DiPietro, M. (2007). 13: In the Eye of the Storm: Students' Perceptions of Helpful Faculty Actions Following a Collective Tragedy. *To improve the academy*, 25(1), 207-224.

Student Perceptions of Instructor Actions After a Campus Shooting

Caroline Warren, Rose Buckelew, *University of Virginia*

Abstract: Instructors often turn to educational developers for guidance about teaching in times of crisis, but little research explores student perceptions of instructor actions after critical incidents. This session shares qualitative and quantitative survey data about what students expected, wanted, and found helpful from instructors after an incident of gun violence on campus. We discuss the implications of this research for educational developers and instructors, placing particular emphasis on how this evidence might help educational developers better support the instructors most often expected and likely to do care work in the academy: people of color, gender non-conforming people, and women.

In the past 6 months, there have been two sets of highly-publicized shootings on college campuses in the United States: at the University of Virginia in November 2022, and at Michigan State University in February 2023. Tragedies like these have a profound cognitive and emotional impact on students, even when they are not directly affected by the violence (Boykin, Dunn, and Orcutt 2020; Jackson 2017; Reffi et al. 2022; Hughes et al. 2011). In the wake of such tragedies, students may expect their instructors to provide emotional support and guidance, and faculty often turn to educational developers for guidance about effectively supporting students.

Existing scholarship in this area focuses on how instructors have addressed tragedies in the classroom (e.g. Edwards 2009; Hitchcock et al. 2021; Hosek and Austin 2016). To date, there are only two studies about student perceptions of the helpfulness of faculty responses to traumatic events or crises in a college or university setting (Huston and DiPietro 2007; Linsenmeyer and Lucas 2017). Neither focuses specifically on gun violence. Given that gun violence is uniquely politically and racially fraught in the US context, we cannot assume that scholarship on other kinds of crises is applicable in the case of shootings. With the goal of addressing this gap in the literature, our presentation shares the results of a survey about what students expected, wanted, and found helpful from their instructors after a campus shooting.

This session will share qualitative and quantitative data from a survey of over 350 students enrolled in mid-sized R1 university that recently experienced a campus shooting. The survey is about student perceptions of instructor responses to this incident of community violence.

Our discussion will focus on how this data can be used to improve educational developers' ability to provide evidence-based guidance about best practices for responding to critical incidents and tragedies. We place particular emphasis on the possible implications of this research for the instructors who do a disproportionate amount of care work and emotional labor in the academy.

By the end of the session, participants will be able to describe the types of instructor actions students found most helpful after a campus shooting. Participants will also feel more confident about their ability to offer evidence-based guidance and support to faculty who often serve as "first responders" to students impacted by a crisis, disaster, or tragedy.

We anticipate that this research will contribute to the development of evidence-based, equity-focused guidance for university teaching in times of crisis. It will also add nuance to the educational development field's conversations about best practices for teaching in times of crisis and serve as a starting point for thinking about the unique concerns and challenges raised by a campus shooting. Understanding student needs better will also help educational developers provide nuanced and evidence-based guidance for instructors teaching in the aftermath of community violence. Without this information, we risk offering inappropriate advice and causing additional harm to students and instructors.

References

Emotional Response in Higher Education Classrooms During the Boston Marathon Bombing Crisis." *Qualitative Research Reports in Communication* 17 (1): 68-76.

- Huston, Therese A., and Michele DiPietro. 2007. "In the Eye of the Storm: Students' Perceptions of Helpful Faculty Actions Following a Collective Tragedy." *To Improve the Academy* 25 (1): 207-24.
- Jackson, Skyler D. 2017. "'Connection Is the Antidote': Psychological Distress, Emotional Processing, and Virtual Community Building among LGBTQ Students after the Orlando Shooting." *Psychology of Sexual Orientation and Gender Diversity* 4: 160-68.
- Linsenmeyer, Whitney, and Tommy Lucas. 2017. "Student Perceptions of the Faculty Response during the Civil Unrest in Ferguson, Missouri." *International Journal of Teaching and Learning in Higher Education* 29 (3): 524-33.
- Reffi, Anthony N., Robyn A. Ellis, Benjamin C. Darnell, and Holly K. Orcutt. 2022. "Mental Health Service Utilization Following a Campus Mass Shooting: The Role of Preshooting Emotion Dysregulation and Posttraumatic Cognitions." *Psychological Trauma: Theory, Research, Practice, and Policy* 14: 151-60.

CONCURRENT SESSION 2

**Thursday, February 8, 2024
11:15 AM - 12:00 PM**

Creating Fearless Classrooms: Designing Spaces where Students Can Embrace Risk

Amy Johnson, *East Tennessee State University*

Abstract: All learning requires risk. Learning requires us to admit (at least to ourselves, but often to others) that we don't know something, that we don't have a skill, or that our abilities need sharpening. More importantly, we often have to ask for help in order to learn efficiently and effectively. Because of this risk, classrooms are places of vulnerability and can leave students feeling exposed and insecure. In this session, we will use concepts from psychological safety and inclusive teaching to design safe learning spaces that cultivate a high-functioning community of learners.

Overview:

All learning requires risk. Learning requires us to identify what we don't know and to admit (at least to ourselves, but often to others) that we don't know something, that we don't have a skill, or that our abilities need sharpening. More importantly, we often have to ask for help in order to learn efficiently and effectively. Because of this risk, classrooms (and all learning spaces) are places of vulnerability and can leave students feeling exposed and insecure. As educators, it is our duty to create classrooms (in person and online) that emphasize purpose, invite participation, and honor students holistically - as people and as learners. In this session, we will use ideas from Amy Edmondson's Fearless Organization, Ken Bain's Super Courses, Kelly Hogan and Vijay Sathy's Inclusive Teaching, and Donna Mejia's Chapter in Picture a Professor to design psychologically safe learning spaces that cultivate a high-functioning community of learners. Together, we will explore ideas that can help our classrooms be spaces of courage, compassion, and creative thinking.

Learning Outcomes:

Participants will describe principles of psychological safety that can be used to reduce fear and anxiety in the classroom. Participants will reflect upon practices they can adopt to their own courses to produce more inclusive learning spaces.

Session Outline:

Participants will reflect upon their own experiences with fear and safety in classrooms. We will also discuss why fear matters and how fear is often expressed in student behavior. The session will then focus on principles from Amy Edmondson's Fearless Organization text and how those can be applied in the classroom. Those principles include:

- o Setting the Stage
- o Providing frames for learning - assumptions and beliefs
- o Setting expectations
- o Emphasizing purpose (relentlessly)
- o Creating shared expectations and meaning
- o Inviting Participation
- o Demonstrating situational humility (not yet-ness · Kevin Gannon)
- o Practicing Inquiry (Ask good questions; model intense and loud listening).
- o Set up structures and processes.
- o Thinking about the silence
- o Using Powerful Questions as Assignment Prompts
- o Generate Curiosity in the Learner
- o Stimulate reflective communication
- o Thought-provoking
- o Surface underlying assumptions
- o Responding Productively
- o Expressing Appreciation
- o Destigmatizing failure
- o Holding learners accountable

Session Engagement:

During the sessions, participants will complete a Classrooms and Fear Assumption Index and respond to prompts using Mentimeter, an audience response tool.

Cultural Competemility and Professionalism: A Pedagogical Approach

Paula Ugochukwu Ude, Darla Wise, Concord University

Abstract: This conference section will focus on facilitating steps educators and students can collaboratively apply to attain pedagogical practice that embraces diversity and inclusion to enhance and promote academic success among students. The application of cultural competemility and professionalism allows for the generation of cultural competency, humility, and professionalism in the classroom environment. Using this model, we will examine various pedagogical approaches we have used successfully to facilitate this collaborative interaction in the classroom. Discussion in groups will examine participants' pedagogy in regard to this approach and how it may be modified to facilitate diversity and inclusion in their classroom.

Since the advent of social constructive theory, teaching has given more importance to culture and students' interaction with their social environment as key factors in promoting active learning (Cooper, 1993; Ertmer & Newby, 1993). A classroom that embraces diverse and inclusive pedagogical teaching emphasizes the learning needs of all students, regardless of their background or identity. Such an environment fosters a sense of ownership in students and motivates them to take an active role in their learning (Ambrose et al., 2011; Saleh, 2013). In this view, the instructor sees the student as the center of attention, an active seeker of knowledge, a creator of viable knowledge, and a discussion leader who requires a responsive environment to function effectively (Ertmer & Newby, 1993; Fisher & Mawr, 2015). Further, it emphasizes the importance of appreciating and respecting the student's experiences and expertise in the learning process, as this leads to better efficiency in the student's learning and enables them to tackle their learning challenges (Exploratorium, 2023; Michaelsen, 2004). This approach not only helps students achieve diverse learning goals but also assists them in making informed decisions regarding their chosen profession (Fisher & Mawr, 2015; Saleh, 2013).

Various pedagogical approaches have been employed to promote best practices in teaching. These approaches include, but are not limited to, team-based learning, effective group work, and alternative grading methods, as well as IDIAAPTsE (identify, define, adopt, apply, plan for accommodation, train and support, and evaluate) (Blum, 2020; Burstable, 2008; Michaelsen, 2004). However, a cultural competence and professionalism approach not only recognizes these methods that enable instructors to foster diversity and inclusivity in the classroom, but also offers a systematic and practical step-by-step process to guide instructors on how to actively engage each student in constructing and shaping their learning experience. Therefore, the primary objective of this approach is to equip instructors with practical knowledge on how to incorporate cultural competence and humility into their pedagogical practices.

At end of this conference session, participants will be able to:

- o define cultural competemility and how it connects to the demonstration of professionalism in pedagogical practices in the classroom.
- o apply the cultural competemility and professionalism model in pedagogical practice.
- o examine how to integrate cultural competence and humility into their pedagogical practices and discuss ways that the model might be helpful to them in generating an environment of learning and respect.

References

- Armstrong, M. A. (2011). Small world: Crafting an inclusive classroom (no matter what you teach). *Thought & Action*, Fall, 51-61.
- Blum, S.D. (Ed). 2020. *Ungrading: Why Rating Students Undermines Learning (and What to Do Instead)*. West Virginia University Press, WV.
- Burgstahler, S. E., & Cory, R. C. (Eds.). (2008). *Universal design in higher education: From principles to practice*. Cambridge, MA: Harvard Education Press.
- Ertmer P.A., Newby, T. J. (1993). Behaviorism, cognitivism, constructivism: Comparing critical features from an instructional design perspective. *Performance Improvement Quarterly*, 6(4), 50-72. doi: 10.1111/j.19378327.1993.tb00605.x.
- Exploratorium. (2023). *Constructivism learning theory*. (<https://www.exploratorium.edu/education/ifi/constructivist-learning>)

- Fisher, A., Mawr, B. (2015). Why culture Matters in Pedagogical Innovation: A look at the Higher Education. *The International Journal of Interdisciplinary Educational Studies*, 9, 11-18.
- Michaelsen, L.K., Knight, A.B., & Fink, L.D (Eds). (2004). *Team-Based Learning: A transformative Use of Small Groups in College Teaching*. Stylus Publishing, LLC. Sterling, VA.
- Saleh, E. S. (2013). Paulo Freire's philosophy on contemporary education. *University Bulletin*, 15(1), 91-111.

Enhancing Student Learning Through Retrieval Practice in Cognitive Learning Science

Evelyn Chiang, Caitlin Brez, *University of North Carolina At Asheville*

Abstract: In any given course, instructors have limited time to cover a multitude of concepts. Consequently, students often have just a single exposure to many concepts. In this session, we will discuss the merits of retrieval practice. Retrieval practice provides students with the opportunity to actively recall a concept learned in a previous class. In a cognitive science of learning framework, retrieval encourages stronger encoding within long-term memory. We will introduce three different types of retrieval practice: free recall, application to a scenario, and generating an example. Retrieval practice can require just a few minutes of class time.

While we are learning more about how students learn, that science is not always making its way into professors' and students' awareness or practice. One goal of the current project was to model for students an empirically-supported learning strategy - retrieval practice. Research demonstrates that retrieval is more effective than recognition for long-term learning (Brown, Rodiger, & McDaniel, 2014). Despite this, students tend to use less effective strategies that common sense tells them work or their past educators, friends, and family have told them work. By embedding retrieval practice into our courses, we can model how this strategy might work. A second goal of this project is to give students information and practice to apply this strategy in other ways into other courses. One hope is that as students see this strategy in practice and hopefully how it is correlated with their own learning, that they may be encouraged to apply this other ways.

The presenters will share their experience implementing this strategy into two different psychology courses (a required 200-level research methods course and a 300-level elective course). In this session, we plan to share with participants the research behind this strategy, demonstrate how this strategy can be applied in their courses, and give participants practice engaging with the retrieval practice. We also hope to allow participants time to reflect on how they might integrate this into their own courses. Three separate retrieval-type tasks will be shared: free recall of a previously learned concept, applying previously learned information to a novel scenario, and student-generation of a novel scenario.

References

Brown, P. C., Roediger III, H. L., & McDaniel, M. A. (2014). *Make it stick: The science of successful learning*. Harvard University Press.

Engaged Teaching: Practical Synchronous Activities for Online and Hybrid Learning

Hong Wang, *Northern Virginia Community College*

Dawn Hathaway, *George Mason University*

Abstract: Synchronous activities have become popular since the outbreak of the pandemic in 2020. Synchronous activities provide an opportunity for instructors to connect in real-time with students, which enables immediate interaction in both online and hybrid courses. This presentation shares practical ideas to engage students with synchronous activities. It will begin with a brief discussion on synchronous activities and three types of interaction, followed by examples and tools for engaged teaching in online and hybrid courses. Presenters will engage the audience through reflection and interactive activities. All attendees will take away practical ideas and free resources for application in online teaching.

Teaching and learning abruptly transitioned to online due to the COVID-19 pandemic. Higher Education faculty responded to the pandemic by introducing more online components or transitioning to fully online mode, such as hybrid courses, emergency remote courses, and online courses. Synchronous activities have become popular in online and hybrid courses since the outbreak of the pandemic in 2020. Synchronous activities provide an opportunity for instructors to connect in real-time with students, which enables immediate interaction in both online and hybrid courses. Synchronous activities allow students and instructors to communicate using audio, video, text chat, interactive whiteboards, screen sharing, instant polling, and reactions via emoticons as if face-to-face in a classroom. Participants can talk, view shared content, see each other through a webcam, respond to each other through text chat or emoticons, and work together in small groups in breakout rooms. Zoom, Blackboard Collaborate, Adobe Connect, Microsoft Teams, and Webex are some of the online technologies prevalent for synchronous activities in higher education.

Synchronous activities provide immediate feedback, encourage the exchange of multiple perspectives, enhance dynamic interactions among participants, strengthen social presence, supply verbal elements, and foster emotional support (Giesbers et al., 2014; Martin et al., 2021; Martin & Parker, 2014; Park & Bonk, 2007). Synchronous activities can be incorporated into both online and hybrid courses to enhance social presence and engage students in learning.

Moore (1989) identified three types of interaction in effective online courses: learner-content interaction, learner-instructor interaction, and learner-learner interaction. Learner-content interaction is the process of intellectually interacting with learning content, which helps learners understand the content and changes their perspectives. Learner-instructor interaction is highly desirable as instructors seek to motivate students to learn and coach them to achieve intended learning outcomes throughout a course. Learner-learner interaction is a valuable resource for students to learn from one another and work together for social support and community building.

This practice session will share practical synchronous activities and tools based on three types of interaction to engage students with learning content and interact with each other. Through engaging activities in real time, students will feel more connected and gain meaningful learning experience through engagement in online and hybrid courses. After the session, participants will be able to

- explain three types of interaction
- develop synchronous activities with digital tools for engaged teaching
- locate free technology resources to facilitate teaching

This session will discuss benefits of synchronous activities and three types of interaction, followed by synchronous activities and tools for each type of interaction. The presenters will share real-world examples from their teaching and discuss how the examples help to engage students in online and hybrid courses. The presenters will engage participants with interactive activities for reflection, discussion, and peer sharing throughout the session.

Both presenters have extensive experience in teaching undergraduate and graduate courses in instructional design and technology in different modalities. They have facilitated professional development programs for higher education faculty and K-12 teachers using a variety of strategies and digital tools.

References

- Giesbers, B., Rienties, B., Tempelaar, D., & Gijssels, W. (2014). A dynamic analysis of the interplay between asynchronous and synchronous communication in online learning: The impact of motivation. *Journal of Computer Assisted Learning, 30*(1), 30-50.
- Martin, F., Dun, T., Turk, M., & Ritzhaupt, A. (2021). A meta-analysis on the effects of synchronous online learning on cognitive and affective educational outcomes. *International Review of Research in Open and Distributed Learning, 22*(3), 205-242.
- Martin, F., & Parker, M.A. (2014). Use of synchronous virtual classrooms: Why, who and how? *MERLOT Journal of Online Learning and Teaching, 10*(2), 192-210.
- Moore, M. G. (1989). Three types of interaction. *American Journal of Distance Education, 3*(2), 1-6.
- Park, Y. J., & Bonk, C. J. (2007). Is online life a breeze? A case study for promoting synchronous learning in a blended graduate course. *MERLOT Journal of Online Learning and Teaching, 3*(3), 307-323.

Using the OKR Goal-setting Framework in the Classroom

Catherine Dobson, *George Mason University*

Abstract: The Objective and Key Result (OKR) Framework is widely used in business. This session addresses how we can use OKRs in the classroom and why we should use OKRs to achieve educational goals.

John Doerr and Andy Grove first presented the idea of using the Objective and Key Result (OKR) framework for achieving goals. Doerr argues that the OKR framework encourages people to pursue and achieve "audacious goals." In the classroom, OKRs give us a goal oriented framework to structure and design what we are teaching. Students think consciously of the goal in the class, and of the steps they are taking to achieve it. This session will inform participants of what the OKR strategy is and how it has been used. Participants will practice setting their own objectives and then develop key results that would help them achieve those goals. Participants will learn how OKRs have been used in the classroom and will discuss and consider how they could incorporate these strategies in their own classroom.

References

"<https://www.whatmatters.com/https://okrinternational.com/10-insightful-okr-examples-in-the-education-industry/>"

Growth-Based Grading: A Non-Traditional Approach to Assessment

Hannah Sunderman, *Virginia Tech*

Abstract: A principal pursuit of higher education is fostering critical thinking, application, and empowerment. However, a gap exists between this pursuit and traditional grading structures, which can restrict students' thinking and motivation. The current research explored one system of non-traditional grading, growth-based grading, that was implemented in five courses at two land-grant institutions. Quantitative results revealed a statistically significant preference for growth-based grading over traditional grading. Qualitative responses emphasized that growth-based grading reduced stress while enhancing focus on class content, learning, and creativity. Participants also shared critiques of and suggestions for growth-based grading, including more feedback.

A principal pursuit of higher education is to foster critical thinking, reflection, application, self-understanding, and empowerment. However, a gap exists between this pursuit and traditional grading structures, which can restrict students' thinking and motivation to achieve a letter grade (Butler, 1988; Hayek et al., 2015; Kohn, 1999, 2006). After teaching my first class in the fall of 2019, I, like other educators before me, sensed incongruity between my values as an educator (e.g., "progress over perfection" and intellectual risk-taking) and the way I was assessing learning (e.g., evaluating student reflections on a ten-point scale). By the end of the 2021 spring semester, it was clear that traditional grading structures were not serving my students' learning, nor were they serving me, the instructor. I was spending more time meeting with students about their grades than meeting with students about their learning. After reading *Ungrading* by Blum (2020), an edited book on non-traditional grading with chapter authors spanning areas of expertise and ages of learners, as well as consulting a handful of published experts (i.e., journal articles) and practical experts (i.e., former students), I drafted a non-traditional grading system, naming it "growth-based grading." The development and implementation of growth-based grading was influenced by three frameworks: (a) constructivist learning (Bright et al., 2016; Knowles et al., 1998; Phillips, 1995), (b) transformative learning (Dyson, 2010; Mezirow, 1978, 2008), and (c) adaptive leadership (Haber-Currant & Tillapaugh, 2015; Heifetz, 1994).

The current research session will discuss this approach to non-traditional grading, which was implemented and examined over five interpersonal skills and communications classes at two large, land-grant institutions (N = 83). Key components of growth-based grading include (a) utilizing complete/incomplete to assess all assignments, (b) providing feedback on each assignment, and (c) having students submit midterm and final portfolios in which they document their learning and utilize a rubric to self-evaluate their perceived grade on factors such as number of complete assignments, engagement with feedback, and self-evaluation of participation.

While participants in the current research spanned a diverse array of majors, all classes that were taught within colleges of agriculture and departments of agricultural leadership. Quantitative results from a Wilcoxon Signed-Rank Test revealed a significant difference between participant perceptions of growth-based grading and traditional grading related with participants evaluating growth-based grading more favorably than traditional grading on all 10 survey items (e.g., "interest in learning," "motivation," "preference for challenging tasks," "quality of thinking," "valid, reliable, and objective," and "discouraging cheating"). Qualitative responses emphasized that growth-based grading reduced stress while enhancing focus on class content, learning, and creativity. Participants also shared critiques of and suggestions for implementing growth-based grading, including providing more feedback on performance throughout the semester. In response to the findings, educators are urged to regard grading as foundational to their pedagogy, interrogating if and how assessment structures align with course content, learning objectives, and overarching beliefs about education.

Faculty impressions of alternative grading practices and barriers to implementation

Breana Bayraktar, *George Mason University*
Indigo Eriksen, *Northern Virginia Community College*

Abstract: This presentation will share results from a study exploring instructor perceptions of and experience with alternative grading practices - such as labor-based grading (Inoue), specifications grading (Nilson), and ungrading (Blum) - in composition courses at a multi-campus two-year college and a large R1 university. Presenters will discuss challenges that prevent interested faculty from making the shift into alternative/holistic grading, instructor positionality/intersectionality, and labor realities of alternative grading practices. Potentially beneficial practices, such as professional development initiatives (e.g., grading retreats, faculty learning communities) that enable instructors to envision and enact change in their classrooms will be discussed.

This research presentation will share results from a small-scale IRB-approved interview study (n=17) exploring the experiences of faculty teaching composition courses in two sites: (1) a large multi-campus two-year college, and (2) a large R1 university with a significant community college transfer student population. This presentation builds on a previous study exploring student experiences of labor-based grading (Bayraktar & Eriksen, in press) and helps connect understandings of student needs and experiences with instructor goals in writing courses. The study described in this presentation explored the phenomenon of grading as experienced by instructors using a variety of grading philosophies and approaches. The goal of this study was to explore how instructors describe their experience implementing diverse grading practices.

As alternative grading practices, such as labor-based grading (Inoue), specifications grading (Nilson), and ungrading (Blum), have become increasingly prevalent in college composition classrooms, research on barriers to faculty implementation of alternative grading is limited. In conjunction with this conversation is an additional need to examine why and how writing faculty evaluate student work. This study revealed that writing faculty currently grade using a hybrid approach of traditional and holistic grading, while also craving more authentic ways to connect with student writers via their grading practice. Previous research (Inoue; Blum; Bayraktar & Eriksen) suggests that alternative grading can support both meaningful interactions between faculty and students as well as student growth as writers. This study addresses the gap between desire to implement holistic grading and challenges to doing so. For example, determining how, and whether, to implement alternative grading is particularly challenging for the large body of part-time/adjunct faculty, who teach two-thirds of all composition classes at the community college level (Center for Community College Student Engagement), and who may have less compensated time, training, and support for working with students still acquiring proficiency in academic English.

This presentation also highlights the need for professional development and institutional support for faculty interested, but unable, to shift into alternative grading practices that support student agency, growth, and confidence (Bayraktar & Eriksen). The presenters argue that institutions of higher education have a responsibility to support instructors in implementing evidence-based and equity-focused grading systems, as well as provide professional development opportunities to facilitate this transition. In this presentation, we advocate for colleges and universities to critically examine institutional barriers that hinder faculty adoption of alternative grading models which research shows enhance student motivation, reduce anxiety, and empower learners. Potentially beneficial practices, such as professional development initiatives (e.g., grading retreats, faculty learning communities) that enable instructors to envision and enact change in their classrooms will be discussed.

References

- Bayraktar, Breana, and Indigo Eriksen. "Reduced Stress through Agency and Autonomy: Community College Student Perspectives of Labor-Based Grading." *Teaching English in the Two-Year College*, In press.
- Blum, Susan Debra. *Ungrading: Why Rating Students Undermines Learning (and What to Do Instead)*. First edition, West Virginia University Press, 2020.
- Carillo, Ellen C. *The Hidden Inequities in Labor-Based Contract Grading*. Utah State University Press, 2021.
- Center for Community College Student Engagement. *Contingent Commitments: Bringing Parttime Faculty into Focus (A Special Report from the Center for Community College Student Engagement)*. The University of

- Texas at Austin, Program in Higher Education Leadership, 2014. <http://files.eric.ed.gov/fulltext/ED561121.pdf>
- Inoue, Asao B. Antiracist Writing Assessment Ecologies: Teaching and Assessing Writing for a Socially Just Future. The WAC Clearinghouse; Parlor Press, 2015. <https://doi.org/10.37514/PER-B.2015.0698>.
- Labor-Based Grading Contracts: Building Equity and Inclusion in the Compassionate Writing Classroom. The WAC Clearinghouse; University Press of Colorado, 2019. <https://doi.org/10.37514/PER-B.2019.0216.0>.

CONCURRENT SESSION 3

**Thursday, February 8, 2024
1:15 PM - 2:00 PM**

ATE: Inclusive Undergraduate Teaching and Research Experiences at VT

David Schmale, *Virginia Tech*

Abstract: Members of Virginia Tech's Academy of Teaching Excellence (ATE) will highlight inclusive undergraduate teaching and research experiences.

Speakers will discuss opportunities for undergraduate students to teach and conduct research at Virginia Tech. Presentations will highlight unique approaches to mentoring undergraduate students for teaching and/or research opportunities, including those that extend to undergraduate students from other universities. Some of these students are publishing their work as lead authors.

Reel Engagement: The Art of Creating Videos Students Will Watch

Tom Doss, *Liberty University*

Abstract: While it's easier than ever before to create and distribute video content, the challenge for educators is to make their message engaging, accessible, and informative. The key is well-designed video content. According to Mayer's Cognitive Theory of Multimedia Learning (2008), learning is more effective when information is simultaneously communicated through auditory and visual channels. Noetel et al. (2021) indicate, that providing supplemental video is a value-add to existing in-person course content. The workshop offers guidance on avoiding common pitfalls in content creation and equips attendees with tools, and best practices for creating instructional videos that enhance student engagement and comprehension.

Faculty-created videos are multifaceted educational tools. Video content may be used to convey key concepts and lay the groundwork for in-depth study, aiding in comprehension. Other benefits of video are that it promotes engagement, encourages discussion, and allows for personalized feedback. As instructional aids, videos provide clear guidance and enable self-paced learning. Furthermore, they can inspire students by fostering curiosity and passion for the subject matter.

When creating video content, faculty may encounter any number of pitfalls that can compromise quality. Insufficient planning can lead to disorganization and an unclear message, reducing the educational impact. Poor audio-visual quality, including inadequate lighting and unclear sound, can distract and disengage students. Overloading videos with information can overwhelm learners, hindering retention (Fyfield, Henderson, & Phillips, 2022). Addressing these common issues is crucial to ensuring the efficacy of faculty-created video content in enhancing the learning experience.

To avoid pitfalls in video creation, faculty can adopt several best practices. Firstly, meticulous planning is essential; a well-structured outline helps in delivering clear and organized content. Prioritizing audio-visual quality is also critical; using a good microphone and ensuring proper lighting can significantly enhance the viewer's experience. Balancing information density is important to avoid overwhelming students; concise, focused content aids in better retention. By adhering to these practices, faculty can significantly improve the quality and effectiveness of their video content, thereby enriching the learning experience for all students.

References

- Fyfield, M., Henderson, M., & Phillips, M. (2022). Improving instructional video design: A systematic review. *Australasian Journal of Educational Technology*, 38(3), 155-183. <https://doi.org/10.14742/ajet.7296>
- Mayer, R. E. (2008). Applying the science of learning: Evidence-based principles for the design of multimedia instruction. *American Psychologist*, 63(8), 760-769. <https://doi.org/10.1037/0003-066X.63.8.760>
- Noetel, M., Griffith, S., Delaney, O., Sanders, T., Parker, P., del Pozo Cruz, B., & Lonsdale, C. (2021). Video improves learning in higher education: A systematic review. *Review of Educational Research*, 91(2), 204-236. <https://doi.org/10.3102/0034654321990713>

Demonstration of Knowledge through Assessments of Practical Skills

Callie Victor, E. Morghen Sikes, Lindsay Leigh, Allison Shearer, Sarah Sidar, *Shenandoah University*

Abstract: The Assessment of Practical Skills has been embedded into our master's occupational therapy program to provide students opportunities to practice and demonstrate their learned skills, knowledge, clinical reasoning, and quick decision-making in a safe and supportive educational environment. Practice with peers and faculty, interactions with simulation performers and community partners, and summative and formative oral and written feedback are highlights of this initiative. Outcomes of this initiative include student-perceived increases in preparation, confidence, and knowledge on clinical rotations further supported by positive feedback from clinical instructors.

Health professions students must demonstrate their competency with basic skills, knowledge, clinical reasoning and quick decision making in order to be successful during their clinical rotations. Our entry level Master's occupational therapy program received feedback that students were struggling on their clinical rotations with these skills and appropriately receiving feedback in a professional manner. After examining our courses and program curriculum, it was determined that students needed opportunities to practice developing skills in simulated clinical situations during their didactic courses.

Various categories of Assessment of Practical Skills (APS) experiences were created with different focuses that have been embedded into our program and courses. Beginning in their first semester, the APS experiences allow students to demonstrate fundamentals of practice skills regarding safety and judgment, clinical reasoning skills during interactive clinical situations, course competency skills and comprehensive skills to ensure proficiency prior to being recommended for clinical placement.

Each APS experience involves direct feedback from the course instructor(s) that appropriately relates to the skill being demonstrated (e.g., oral feedback regarding immediate safety concerns; written feedback on documentation). APS grading varies course by course, but always includes an option for remediation of skills if student performance is unacceptable or below expectations. Some of the APS experiences are summative, involving core skills acquired across the entirety of the semester or program, while others are more formative in nature and specifically designed to measure how effectively a student is able to integrate knowledge immediately and apply to course-specific scenarios. For example, students enrolled in a Neuro-Occupation class engage in multiple formative APS assessments in which the skills associated with the topic of the week (e.g., visual assessments) are practiced with peers prior to coming to a laboratory setting, and then demonstrating on community partners.

Despite initial student resistance, student feedback has been favorable about the value of these APS experiences. One student noted on a midterm course evaluation that the "feedback during APS (and) being afforded the ability to practice these skills in person with instructors present and available to help/correct" was what had been most helpful with their learning in the course. Another student noted that the APS was the most helpful with their learning "even though I get anxious and overwhelmed by them".

We have also reduced our number of clinical instructors indicating that our students were unprepared, lacked confidence or lacked knowledge during their clinical rotations regarding documentation, basic skills (e.g. taking vitals and performing transfers), and being able to problem solve when an initial evaluation or treatment plan didn't pan out.

Our presentation will cover the various categories of APS's, clinical scenario examples, types of professor-provided feedback, student experiential feedback, and grading procedures and examples. A recent student with direct experience engaging in an APS will be present to share an alternate perspective to the APS processes. Steps for creating and implementing APS-type evaluations provided along with professor-experienced challenges and barriers to provision.

References

Donaldson, M.B., Tyler, K., & Carroll, A. (2022). The effect of standardized patients for physical therapy students on behaving and communicating as a professional: A systematic review. *Physical Therapy Reviews*, 27(6), 464-476. <https://doi.org/10.1080/10833196.2022.2141039>

- Olasoji, M., Huynh, M., Edward, K.-L., Willetts, G., & Garvey, L. (2020). Undergraduate student nurses' experience of mental health simulation pre-clinical placement: A pre/post-test survey. *International Journal of Mental Health Nursing*, 29, 820-830. <https://doi:10.1111/inm.12715>
- Sharma, B., Hildingsson, I., & Christensson, K. (2019). The association of teaching-learning methods and self-confidence of nurse-midwives. A survey from one province in India. *Women and Birth*, 32, e376-e383. <https://doi.org/10.1016/j.wombi.2018.07.015>

Transformative Teaching: Exploring Inquiry-Based High Impact Practices

Mary Huffman, Julie Stanley, East Carolina University

Abstract: Join us for an interactive workshop on incorporating inquiry-based High Impact Practices (HIPs) in higher education. Discover the power of inquiry in deepening student learning and engagement. We'll explore practical strategies, innovative tools like inquiry investigations, and technology integration. Participants will actively engage in inquiry-driven activities and leave with resources for immediate classroom implementation

In higher education, fostering deep student engagement and meaningful learning experiences is essential. High Impact Practices (HIPs) offer a transformative approach to achieving these goals. This workshop, titled "Transformative Teaching: Exploring Inquiry-Based High Impact Practices," focuses on harnessing the potential of inquiry in higher education.

The Power of Inquiry

At the heart of effective learning lies inquiry. It encourages students to actively explore, question, and construct knowledge. Inquiry-based HIPs empower learners to take charge of their education, fostering not just knowledge acquisition but also critical thinking, problem-solving, and creativity.

In this interactive session, participants will actively engage in research-backed HIP activities centered on inquiry. These activities go beyond traditional teaching methods, incorporating innovative tools and methodologies. One such tool is inquiry investigations for their ability to capture students' attention and promote active learning. Participants will experience how inquiry investigations can be seamlessly integrated into teaching practices to enhance inquiry and engagement.

Technology offers valuable support for inquiry-based HIPs. We'll explore how digital tools can create interactive, inquiry-driven learning experiences. Attendees will gain insights into effectively using technology to promote inquiry and student engagement. Our primary goal is to equip participants with the knowledge, tools, and inspiration to immediately integrate inquiry-based HIPs into their higher education classrooms. Attendees will not only understand the theory but actively participate in hands-on activities showcasing the transformative power of inquiry.

Furthermore, this session aims to reignite a commitment to inquiry-based HIPs. By the end, participants will leave with tangible samples, art-integration ideas, and a toolkit for implementing inquiry-driven HIPs. They'll be better prepared to nurture students' curiosity and create environments fostering deep learning and active engagement. Join us for a dynamic workshop exploring inquiry-based High Impact Practices. Discover how to deepen student engagement and learning through practical strategies and innovative tools. Walk away ready to incorporate inquiry into your higher education classrooms. Let's transform teaching together!

Presentation Outline:

Introduction

- * Welcome and introduction to the topic
- * Briefly explain the importance of inquiry-based instruction

Activity 1: Engaging Questions

- * Start with an engaging question related to inquiry-based instruction and participants share their thoughts
- * Emphasize the role of open-ended questions in inquiry-based learning

Activity 2: Inquiry-Based Strategies Overview

- * Provide a brief overview of the strategies for inquiry-based instruction
- * Mention that participants will explore these strategies in more depth during the session

Activity 3: Hands-on Experience of an Inquiry Investigation

- * Instruct groups to discuss and plan how they would implement this strategy in a hypothetical classroom scenario using creativity and collaboration
- * Participate in inquiry investigation using envelopes with topics filled with primary and secondary sources

Activity 4: Group Sharing

* Facilitate a brief discussion on the potential benefits and challenges of each strategy while sharing their own expertise and experiences in higher ed

Activity 5: Q&A and Discussion

* Encourage discussion on the practical aspects of implementing inquiry-based instruction

* Share additional insights and resources as needed

References

American Association of Colleges and Universities. (2022). High Impact Practices. <https://www.aacu.org/trending-topics/high-impact>

Arikan, S. Dochy, F., & Segers, M. (2022) (submitted). Effects of High-Impact Learning Practices: A Review.

Refocusing: Introspectively-Directed Volitional Attention to Key Concepts

Lee Pierson, *Thinking Skills Institute*

Shoshana Knapp, *Virginia Tech*

Abstract: Knowledge is both the product and the fuel of thinking, but the knowledge needed to keep thinking moving toward its goal does not always come to mind automatically. Key concepts can slip by too quickly to activate the knowledge needed to keep thinking moving on track to its goal. So, how can we prevent this? By refocusing our thinking, i.e., redirecting our attention more specifically to the key concepts of the situation. In this interactive practice session, we will see how refocusing makes deeper cognition possible in a number of examples of comprehension and creative and critical thinking.

Knowledge is both the product and the fuel of all thinking (including comprehension), but the knowledge needed to keep thinking moving toward its goal does not always come to mind automatically or by simply "trying harder." We know more than we use. Key concepts can slip by too quickly to activate the knowledge needed to keep thinking moving on track to its goal. Here is a simple example of how a key concept can slip by too quickly in the comprehension of a question, resulting in a wrong answer: "There are 10 birds sitting on a fence. All but 7 fly away, how many are left?" The (wrong) answer that pops automatically into many answerers' heads is 3, because the word "but" slips by too quickly for sufficient activation of knowledge of its meaning to lead to the correct answer, 7.

So, how can we prevent key concepts from slipping by too quickly in our thinking? By refocusing our thinking, i.e., redirecting attention more specifically to the key concepts of the situation. Refocusing is a form of "executive function" apt for making sure that the right knowledge is activated for keeping one's thinking moving towards its goal, which obviously can be of fundamental value to any cognitive performance. Even elementary school students can learn how to refocus at an age-appropriate level. By refocusing to activate further useful knowledge, students can go deeper in comprehension or other cognitive processes whenever they so choose.

But how can students ensure that their attention is directed to the right content, to the key concept(s) that has slipped by too quickly in their thinking? Well, they can introspect their thought processes: step back momentarily from the cognitive task to conceptually identify the key concepts to refocus onto keep it moving forward, e.g., by identifying "but" in the "10 birds" question as worthy of further attention.

There is a bonus here for students who learn to be proficient refocusers. We are currently experiencing a tremendous renaissance in Artificial Intelligence that is fueled by the performance of Large Language Models. Despite significant advances in this field, such AI systems exhibit a fundamental weakness in their inability to override their own programs when that is needed to expand or correct their output or avoid "hallucinations." Humans can facilitate AI performance by helping it to go beyond this limitation. Especially valuable in this connection is refocusing on the key concepts in implicit assumptions that make bad critical thinking and break good creative thinking—a self-analytical process of challenging its own assumptions that currently no AI system can even approximate. A human AI manager can refocus LLM output as if it were her own.

In this interactive practice session, we will see how refocusing makes deeper cognition possible in a number of examples of comprehension and creative and critical thinking.

A SoTL Project: Onboarding Instruction for Online Adult Learners

Anne Jewet, *University of Virginia*

Abstract: Do you use an LMS? Do you teach online? How do you support students with learning the routines and key features of an online classroom? This session will provide takeaways from a Scholarship of Learning and Teaching research project which explored how providing onboarding instruction may impact students' confidence with online learning. Many of the approaches can be applied to any setting that uses an LMS including in-person settings. Learn practical and doable ways to enhance your teaching to welcome learners.

Using a learning management system (LMS) and teaching online in some capacity are proliferating higher education. Designing and delivering effective online instruction is complicated. Once the course is designed, a challenge is to ensure that learners are able to navigate the course design to support their engagement. Moore's (1998) transactional distance theory notes a perceived "psychological and communication space" in online learning environments which may result in students minimally engaging. Khan et al. (2017) found engaging students in an online learning environment is challenging. Often, students must interpret the course requirements, expectations, schedule, and technology aspects of an LMS by themselves. Onboarding instruction aims to provide an interactive pathway for students to navigate and engage during their online learning journey with instructor support.

This presentation will share the methodology (interviews, surveys, and reflections) and findings from my current Scholarship of Teaching and Learning (SoTL) research project. It examines a course for adult learners that serves as the entry point for a fully online, asynchronous graduate degree program. The purpose of this project is to understand how onboarding instruction may influence, if at all, students' confidence in navigating the virtual classroom.

Since 2019, the number of adult learners enrolled in an asynchronous online graduate degree program at our institution has tripled. Because the course often reflects graduate students' entry into online learning at the school and possibly for the first time in their educational journey, this challenge transcends higher education as instructors are faced with the challenge of supporting students with the transition to online learning and navigating a virtual classroom.

Session Timetable:

Introduction to Onboarding Instruction (10 minutes): A definition and a virtual tour will provide a peek into the design and content of the onboarding instruction.

Impact of Onboarding Instruction (5 minutes): Findings from the SoTL research will be shared.

Implications & Reflections (5 minutes): The learning journey and next steps will be discussed.

Q & A (5 minutes)

References

- Khan, A., Egbue, O., Palkie, B., & Madden, J. (2017). Active learning: Engaging students to maximize learning in an online course. *Electronic Journal of e-learning*, 15(2), pp 107-115.
- Moore, M. G. (2018). The theory of transactional distance. In *Handbook of distance education* (pp. 32-46). Routledge.

How can autonomous learning foster self-regulation and mastery goals?

Eunbae Lee, *Kyung Hee University*

Tim Baird, *Virginia Tech*

Dabae Lee, *Kennesaw State University*

Abstract: This study investigated autonomous learning in online courses in South Korea and hybrid courses in the United States. Multivariate analyses showed that autonomous learning is related to self-regulated learning and mastery goal orientation, even when considering initial measures and the country factor. Enjoyment during autonomous learning influenced self-regulated learning, while perceived value was linked to mastery goal orientation. U.S. students focused on skill development, while Korean students used more self-regulation strategies. Autonomous learning offers a structured platform for self-authorship with support in formal education. Instructors should model and facilitate learning, respect students' goals, and discuss its challenges and values.

In today's information-rich environment, self-directed learning is increasingly accessible, promoting student-centered open-ended learning (SCOL) where individuals set and navigate their learning goals. SCOL's promise of autonomy often goes unrealized due to imposed standards in education. Studies show that self-regulation (SRL) skills are vital in less structured learning environments like MOOCs, emphasizing the need to support individuals in developing these skills for SCOL.

Motivation theories help understand engagement and goal orientation in SCOL. Intrinsic motivation drives mastery goals, while extrinsic motivation focuses on performance. This study explores SCOL's impact on SRL and goal orientation in diverse online and hybrid higher education settings.

Participants were 89 students from U.S. and South Korean universities during the COVID-19 pandemic. Surveys measured SRL, goal orientation, and SCOL engagement. Results revealed SCOL positively influenced SRL development, especially when students enjoyed the activities and felt related to the instructor. SCOL was also linked to mastery goal orientation, driven by value and relatedness with instructors.

U.S. students prioritized capacity development over performance, while Korean students balanced both. U.S. students exhibited lower academic alienation, indicating a strong commitment to capacity development.

To implement SCOL effectively, instructors should model, facilitate, and discuss challenges. Creating an autonomy-supportive climate with meaningful assignments and clear instructions is crucial. Highlighting the value of individualized, autonomous learning can enhance engagement.

In conclusion, this study sheds light on SCOL's impact on SRL and goal orientation, offering insights for effective implementation in formal education. However, concerns and challenges related to SCOL should be carefully addressed in the evolving educational landscape.

References

- Baird, T. D. (2021). Applying the Own it, Learn it, Share it framework to the flexible Pink Time assignment to scaffold student autonomy online and in person. *Educational Technology Research and Development*, 69, 105-108. <https://doi.org/10.1007/s11425-020-09837-7>
- Baird, T. D., Kniola, D. J., Hartter, J., Carlson, K. A., Rogers, S., Russell, D. & Tise, J. C. (2020). Adapting Pink Time to promote self-regulated learning across course and student types. *International Journal of Teaching and Learning in Higher Education*. 32, 49-63. <https://files.eric.ed.gov/fulltext/EJ1259484.pdf>
- Baird, T. D., Kniola, D. J., Lewis, A. L., & Fowler, S. B. (2015). Pink Time: Evidence of self-regulated learning and academic motivation among undergraduate students. *Journal of Geography*, 114, 146-157. <https://doi.org/10.1080/00221341.2014.977334>
- Barnett, R. (1990). *The idea of higher education*. McGraw-Hill Education (UK).
- Black, A. E., & Deci, E. L. (2000). The effects of instructors' autonomy support and students' autonomous motivation on learning organic chemistry: A self-determination theory perspective. *Science Education*, 84, 740-756. [https://doi.org/10.1002/1098-237X\(200011\)84:63.0.CO;2-3](https://doi.org/10.1002/1098-237X(200011)84:63.0.CO;2-3)

- Deci, E. L., & Ryan, R. M. (2000). The "What" and "Why" of goal pursuits: Human needs and the self-determination of behavior. *Psychological Inquiry*, 11, 227-268. <https://doi.org/10.1207/S15327965>
- Kizilcec, R. F., & Cohen, G. L. (2017). Eight-minute self-regulation intervention raises educational attainment at scale in individualist but not collectivist cultures. *Proceedings of the National Academy of Sciences*, 114(17), 4348-4353. <https://doi.org/10.1073/pnas.1611898114>
- Kizilcec, R. F., Pérez-Sanagustín, M., & Maldonado, J. J. (2017). Self-regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers & Education*, 104, 18-33. <https://doi.org/10.1016/j.compedu.2016.10.001>
- Hannafin, M. J., Hill, J. R., Land, S. M., & Lee, E. (2014). Student-centered, open learning environments: Research, theory, and practice. In M. Spector, M. D. Merrill, J. van Merriënboer, & M. P. Driscoll (Eds.), *Handbook of Research on Educational Communications and Technology* (pp. 641-651). New York: Springer.
- Lee, E., & Baird, T. D. (2021). Roles of autonomous motivation, individualism, and instructor support in student-centered learning in South Korea and the United States. *Educational Technology International*, 22(2), 285-309. <http://hdl.handle.net/10919/107686>
- Lee, E., & Hannafin, M. J. (2016). A design framework for enhancing engagement in student-centered learning: Own it, learn it, and share it. *Educational Technology Research and Development*, 64, 707-734. <https://doi.org/10.1007/s11423-015-9422-5>

CONCURRENT SESSION 4

**Thursday, February 8, 2024
2:15 PM - 3:00 PM**

"We Do This Til We Free Us": Intersectional Curriculum Design

Eli Jamison, Christ Jamison, Christian Matheis, Stephanie House-Niamke, Sonalini Sapra, *Virginia Tech*

Abstract: In this session participants will learn best practices for designing multidisciplinary DEIJB curricular modules for use within broader course design, review examples and templates for interactive intersectional curriculum, and gain access to a step-by-step curriculum design guide.

In our current political climate, what helps instructors create meaningful curricula focused on diversity, equity, inclusion, justice, and belonging (DEIJB)? How do we shift students' sole focus from grade-seeking to gaining skills as systems thinkers who recognize DEIJB issues as critical to the complex challenges within society? Mariam Kaba writes, "What if social transformation and liberation isn't about waiting for someone else to come along and save us? What if ordinary people have the power to collectively free ourselves?" (2021). How do we translate this provocation into curricular interventions?

This practice session will provide three interdisciplinary models of interactive curriculum and introduce participants to a curriculum design rubric - a step-by-step guide to creating and revising curricular modules. Well-designed DEIJB curriculum engages learners in diagnosis of intersecting systems, and enhances our ability to consider, evaluate, and apply problem-solving interventions. By drawing on best practices in curriculum design, participants will gain an opportunity to experience different interactive curricular and pedagogical models, and then learn how to use the curricular component to integrate into your course(s), and examples to adapt as needed. Whether helping students build initial motivation or working on higher-level skills as "systems thinkers" who can analyze complex challenges to discern the causes and symptoms at play, building on a solid pedagogical foundation is key to success.

This session promises to be fun and engaging and sure to provoke questions and curiosities relevant to their own audiences. In summary, participants will leave with three distinct exercises coming from different approaches from sociology, management, and political science and civic engagement as well as a helpful guide for adaptation of their home institutions.

The session begins with a demonstration of an interactive model. We will then present an overview of a curriculum design instrument and provide initial instructions for its use. We proceed to demonstrate two additional interactive curricular models, and then discuss how participants can use the sample models and curriculum design instruments to develop their own curricula.

References

For more information about the curriculum design model visit:

https://learning.asee.org/course_catalog/deliberate-curriculum/

Kaba, M. (2021). *We do this' til we free us: Abolitionist organizing and transforming justice* (Vol. 1). Haymarket Books.

Instructional Design Tools and Strategies in the Age of AI

Mark Bond, Quinn Warnick, Pearl Xie, Larry Cox, Danielle Thacker, Daron Williams, Dale Pike, *Virginia Tech*

Abstract: Artificial intelligence is rapidly changing how faculty teach and how students learn. This interactive session will offer strategies and tips for incorporating generative AI in your classes. Participants will receive practical advice about how A.I. can transform assignments and make course management tasks more efficient.

Introduction

The landscape of higher education teaching and learning is evolving rapidly. From emergency remote teaching to increasing pressure from external political forces, faculty are exhausted by seemingly never-ending changes. Artificial Intelligence (A.I.), specifically generative A.I., is another transformative change impacting faculty and students. This proposed session seeks to address the need for faculty to prepare themselves and courses to ensure students acquire the skills and knowledge required in the age of generative A.I. Faculty attending the session will explore tools and strategies for adapting assignments and assessments to incorporate generative A.I. Faculty will also learn time-saving tips for using generative A.I. to automate course management tasks. The session will be separated into three parts: introduction to generative A.I., assignment redesign incorporating A.I., and efficient course management using A.I.

Introduction to Generative A.I.

Participants will explore the capabilities and limitations of conversational AI platforms, such as their ability to generate text, answer questions, and carry out conversations. Attendees will learn practical tips for "prompt design" and "prompt engineering" to improve the output of generative A.I. platforms.

Assignment Design/Redesign incorporating A. I.

In this part of the session faculty will be given examples of assignments that have been transformed by incorporating A.I. into the assignment. Participants will have time to practice designing an assignment in which students will use generative AI to augment and improve their own original work. Participants will briefly share their ideas with other attendees before moving to the final part of the session.

A.I. for Course Management

The final activity for the session will provide practical advice for using A.I. and other learning technologies including Canvas, Gradescope to help with course management tasks like creating feedback for students, constructing course alignment, grading, and other tasks to help faculty save time.

Conclusion

The integration of generative A.I. in higher education courses is transforming the way we work, teach, and learn. In this session, participants will gain valuable insights and actionable strategies for incorporating A.I. into their teaching and work.

Practical Methods of Teaching Critical Thinking Using Brookfield's Education Research

Ashley Bentley, Michelle Freeman, *East Tennessee State University*

Abstract: many tasks have been automated and roles and responsibilities of new hires have evolved. Critical thinking and problem-solving abilities are imperative for today's students. The traditional lecture-style method of teaching lacks engagement and does not foster active learning or critical thinking. Grounded in the work of Stephen Brookfield's research on critical thinking, this session will provide practical ways in which faculty can modify their classroom to develop critical thinkers based on five key principles of learning.

Expectations of college graduates have changed over time. With advancements in technologies, many tasks have been automated and roles and responsibilities of new hires have evolved. Critical thinking and problem-solving abilities are imperative for today's students and future professionals as employers desire graduates who demonstrate higher-level thinking skills including application, analysis, and evaluation (Vien, 2021). Conventional teaching cannot adequately prepare students for this rapidly changing environment (Albrecht & Sack, 2001). Much of this is due to the dependency on memorization of rules and regulations instead of development of a real-world skill set through research and application (Burke & Gandolfi, 2014). Moreover, the lack of exposure to realistic scenarios does not prepare students for how to deal with the unpredictability of the professional world. Still yet, many college professors continue to use a traditional lecture-style method of teaching in their classroom. One key reason for not changing their pedagogy may include a fear of failure in the classroom because they do not have the necessary skills or lack of resources and support. Most college educators teach the way they were taught and are not experts in the new and innovative pedagogies (Heinerichs et al., 2016). Time restrictions due to a focus on tenure-rewarded research versus teaching excellence can also be a reason for not revising teaching methods (Freeman, 2018).

There are pedagogical methods that research has proven to be more effective in teaching higher order thinking skills, including critical thinking and problem solving. Brookfield (2012) conducted a study using a "Critical Incident Questionnaire" that asked students to reply to five questions on a weekly basis during a class. According to him, five themes emerged regarding how students learn critical thinking which include:

- o The need for social learning opportunities
- o The importance of modeling by the instruction
- o The grounding of material in concrete examples
- o The incorporation of incorporating uncomfortable dilemmas in learning
- o The desire for a non-threatening learning environment

The session will focus on how Brookfield's research on teaching critical thinking can change the traditional classroom where students passively cover content to a classroom where students engage within the content so that they develop the critical thinking skills necessary to work effectively in their chosen profession. Presenters will dive into each of Brookfield's discovered themes and discuss simple modifications that can be made in the classroom to foster critical thinking. Using specific examples, the presenters will demonstrate various ways professors can incorporate active learning, make the course more meaningful and relevant, reduce boredom, and develop critical thinkers. Although examples from the business discipline will be used to explain the concepts, participants will be engaged in activities which allow them to relate the information to their own classrooms.

References

- Accounting Education Change Commission (AECC). (1990). Objectives of education for accountants: Position statement number one. *Issues in Accounting Education* (5): 307-312.
- Albrecht, S. W., and Sack, R. J. (2001). The perilous future of accounting education. *The CPA Journal* 71(3): 16-23.
- American Institute of Certified Public Accountants (AICPA). (2018). The AICPA Pre-certification Core Competency Framework. Available at: <https://www.aicpa.org/interestareas/accountingeducation/resources/corecompetency.html>
- Bakarich, K. M., Burke, J. A., Castonguay, J. & Polimeni, R. S. (2021). Modifying the collegiate accounting curriculum to prepare for the CPA evolution project: Incorporating advances in technology into accounting programs. *The CPA Journal*, 91(8), 32-39.

- Borthick, A. F., Jones, D. R., & Wakai, S. (2003). Designing learning experiences within learners' zones of proximal development (ZPDs): Enabling collaborative learning on-site and online. *Journal of Information Systems*, 17(1), 107-134.
- Brewer, P. C., Sorensen, J. E., & Stout, D. E. (2014). The Future of accounting education: Addressing the competency crisis. *Strategic Finance*, 96(2), 29-37.
- Brookfield, S. D. (2012). *Teaching for critical thinking: Tools and techniques to help students question their assumptions*. San Francisco, CA: Jossey Bass.
- Burke, M. M. and Gandolfi, W. R. (2014). U.S. accounting education: Misalignment with the needs of small and medium companies. *American Journal of Business Education (Online)*, 7(4), 339.
- Dennis, A. (2020, July 14). Best practices for teaching case studies. *Journal of Accountancy (Online)*.
- Duxbury, T., Gainor, M., & Trifts, J. (2016). Increasing active learning in accounting and finance by flipping the classroom. *Journal of the Academy of Business Education*, 17, 35-51. Retrieved from
- Fink, L. D. (2003). *Creating significant learning experiences an integrated approach to designing college courses*. San Francisco, CA: Jossey-Bass.
- Force, M. S. (2002). Authors of accounting education study reflect on current state of education, professional satisfaction. *The Journal of Government Financial Management* 51(3), 8-9. Retrieved from
- Freeman, M. (2018). The CPA exam is changing: Are professors ready? *Accounting Educators' Journal*, 28(2018), 1-32.
- Grantz, R. E., & Gruber, R. (2014). How well did I learn what I learned? The art of self-assessment. *Journal of the Academy of Business Education*, 15, 23-40.
- Heinerichs, S., Pazzaglia, G., & Gilboy, M. B. (2016). Using flipped classroom components in blended courses to maximize student learning. *Athletic Training Education Journal*, 11(1), 54-57. doi:10.4085/110154
- Jaschik, S. (2018, April 2). Lecture instruction: Alive and not so well. *Inside Higher Education*.
- Kibble, J.D. (2017). Best practices in summative assessment. *Advances in Physiology Education*, 41(1), 110-119.
- Neely, P. & Donnelly, K. (2020, October 7). Updating accounting education for the CPA Evolution: A new framework for a new licensure model. *The CPA Journal*.
- O'Flaherty, J., & Phillips, C. (2015). The use of flipped classrooms in higher education: A scoping review. *The Internet and Higher Education*, 25, 85-95. Retrieved from <https://doi.org/10.1016/j.iheduc.2015.02.002>
- Panadero, E., Broadbent, J., Boud, D., & Lodge, J. M. (2018). Using formative assessment to influence self- and co-regulated learning: The role of evaluative judgement. *European Journal of Psychology of Education*, 1-23
- Roelle, Schmidt, E. M., Buchau, A., & Berthold, K. (2017). Effects of informing learners about the dangers of making overconfident judgments of learning. *Journal of Educational Psychology*, 109(1), 99-117.
- Roessner, B. (2023, January 4). 2024 CPA Exam Blueprints released. *Journal of Accountancy (Online)*. Retrieved from <https://www.journalofaccountancy.com/news/2023/jan/2024-cpa-exam-blueprints-released.html>
- Schleifer, L. L. F., & Dull, R. B. (2009). Metacognition and performance in the accounting classroom. *Issues in Accounting Education*, 24(3), 339-367.
- Springer, C. W., & Borthick, A. F. (2004). Business simulation to stage critical thinking in introductory accounting: Rationale, design, and implementation. *Issues in Accounting Education*, 19(3), 277-303.
- Trumbull, E., & Lash, A. (2013). *Understanding formative assessment: Insights from learning theory and measurement theory*. WestEd.
- Vella, J. (2000). *Taking learning to task: Creative strategies for teaching adults*. San Francisco, CA: Jossey-Bass.
- Vien, C.L. (2021, October 12). The abilities employers seek from accounting graduates. *Journal of Accountancy*
- Wass R., Harland, T., & Mercer, A. (2011). Scaffolding critical thinking in the zone of proximal development. *Higher Education Research & Development*, 30(3), 317-329.

Breaking Habits to Improve Student Research

Margaret Gregor, Michael Howell, Lynn Searfoss, *Appalachian State University*

Abstract: Across academic institutions, faculty are often disappointed in the quality of research that students produce. Although students acknowledge a need for information, their habits for locating and evaluating that information are often unsatisfactory. We believe contributing habits can be ameliorated through faculty-librarian collaboration, data-driven information-literacy instruction, and scaffolded assignments. Drawing upon our own research and practice, this interactive session will introduce participants to techniques for assessing student research preparedness and encourage them to reconsider their own research assignments and modes of information-literacy education.

Across academic institutions, faculty are often disappointed in the quality of research that students produce (Blankstein & Wolff-Eisenberg, 2019; Brodie, 2017; Dubicki, 2013; Huddleston et al. 2019; Meer [sic] et al., 2012; Schonfeld & Housewright, 2013; Stebbing et al., 2019). While faculty design research projects and discuss the need for information literacy with their students, they often overestimate their students' abilities. Faculty proceed with habitual research assignments that many students are ill-prepared to accomplish. In contrast, we believe that faculty disappointment stems from an overestimation of student preparedness, at least in part.

Although students can identify a need for information, their ability to locate and evaluate that information is often unsatisfactory (Stebbing et al., 2019). Moreover, students often fail to transfer information skills acquired in previous classes or employ skills inadequate to the challenge of new educational contexts (D' Couto et al., 2015). Instead, students often fall back upon familiar habits (such as "Googling"), regardless of their propriety and avoid seeking assistance such as that available from librarians (Hlavaty & Townsend, 2010; Insua et al., 2018; Nov & Ye, 2008).

Believing that students simply need a greater familiarity with database searches, faculty often ask librarians to lead a "one-shot" instructional session (Booth et al., 2015; Kelly, 2019). In this context, many librarians will agree to deliver one general class session—a longstanding habit for providing library instruction. However, studies demonstrate that these sessions neither improve students' information-seeking habits nor result in increased student skill retention (D' Couto et al., 2015). Students, faculty, and librarians must all break these unproductive habits.

A better approach to improving student research literacy relies upon integrating librarians into courses through faculty-librarian collaboration as highlighted by Junisbai and colleagues (2016). Furthermore, we suggest implementing a data-driven approach that enables tailored library instruction. In our empirical study, we partnered faculty and librarians in order to assess student information-seeking knowledge and skills. The assessment data allowed faculty and librarians to understand the students' levels of proficiency in a way that is typically ignored. Faculty and librarians subsequently scaffolded assignments through information literacy instruction sessions and activities tailored to address students' identified needs. We evaluated the effectiveness of the library instruction using pretest-posttest data and analysis of student reference lists. Our librarian-instructor model reflects the value of collaboration and data-informed information literacy instruction.

Through interactive activities and large and small group discussions, this session will engage participants in opportunities to consider their own research assignments, the assessment of the quality of information their students present in their assignments, and how to establish a successful faculty-librarian collaboration. Participants will be introduced to techniques to assess their students' research proficiency to collaboratively design more effective information literacy instruction. They will consider how an information-seeking model that we have developed could benefit their students.

References

- Blankstein, M., & Wolff-Eisenberg, C. (2019, April 12). Ithaka S+R US Faculty Survey 2018. <https://doi.org/10.18665/sr.311199>
- Booth, C., Lowe, M. S., Tagge, N., & Stone, S. M. (2015). Degrees of impact: Analyzing the effects of progressive librarian course collaborations on student performance. *College & Research Libraries*, 76(5), 623-651. <https://doi-org.proxy006.nclive.org/10.5860/crl.76.5.623>

- Brodie, P.H.(2017). Information literacy in the sciences: Faculty perception of undergraduate student skill. *College and Research Libraries*, 78(7), 964-977. <https://doi-org.proxy006.nclive.org/10.5860/rl.78.7.964>
- Bury, S.(2016). Learning from faculty voices on information literacy: Opportunities and challenges for undergraduate information literacy education." *Reference Services Review*, 44(3), 237-52.
- D’Couto, M. & Rosenahn, S.H.(2015). How students research: Implications for the library and faculty. *Journal of Library Administration* 55, 562-576. <https://doi.org/10.10870/01930826.2015.1076312>
- Dubicki, E.(2013). Faculty perceptions of students’ information literacy skills competencies. *Journal of Information Literacy*. 7(2), 97-125.
- Hlavaty, G., & Townsend, M.(2010). The library’s new relevance: Fostering the first-year student’s acquisition, evaluation, and integration of print and electronic materials. *Teaching English in the Two-Year College*, 38(2),149-160.
- Huddleston, B. S., Bond, J. D., Chenoweth, L. L., & Hull, T. L.(2019). Faculty perspectives on undergraduate research skills: Nine core skills for research success. *Reference & User Services Quarterly*, 59(2),118-130.
- Insua, G.M., Lantz, C., & Armstrong, A.(2018). Navigating roadblocks: First-year writing challenges through the lens of the ACRL Framework. *Communications in Information Literacy*, 12(2), 86-106.
- Junisbai, B., Lowe, M.S., & Tagg, N.(2016). A pragmatic and flexible approach to information literacy: Findings from a three-year study of faculty-librarian collaboration. *The Journal of Academic Librarianship*, 42(5), 604-611. <https://doi.org/10.1016/j.acalib.2016.07.001>
- Kelly, S. L.(2019). Faculty perceptions of librarian value: The moderating relationship between librarian contact, course goals, and students’ research skills. *The Journal of Academic Librarianship*, 45(3), 228-233. <https://doi.org/10.1016/j.acalib.2019.03.003>
- Meer, P. F. V., Perez-Stable, M. A., & Sachs, D. E.(2012). Framing a strategy: exploring faculty attitudes toward library instruction and technology preferences to enhance information literacy. *Reference & User Services Quarterly*, 52(2), 109-122.
- Nov, O. & Ye, C.(2008). Users’ personality and perceived ease of use of digital libraries: The case for resistance to change. *Journal of the American Society for Information Science and Technology*, 59(5), 845-851. DOI: 10.1002/asi
- Schonfeld, R. C., & Housewright, R.(2013, April 8). US Faculty Survey 2012. <https://doi.org/10.18665/sr.22502>
- Stebbing, D., Shelley, J., Warnes, M., & McMaster, C.(2019). What academics really think about information literacy. *Journal of Information Literacy*, 13(1): 21-44. <https://doi-org.proxy006.nclive.org/10.11645/13.1.2338>

Beyond Voice and Empathy: A Pedagogy of Polyphony

Jeffrey Murray, *Virginia Commonwealth University*

Abstract: This session will explore the value of developing student voice and empathy, and proffer a "pedagogy of polyphony" (first presented at the 2020 conference), which seeks to synthesize and transcend voice (of self) and empathy (for other) toward an agency-driven empathic awareness of a plurality of other voices (in polyphony). Based on results from an on-going two-year pilot study, sample assignments that foreground voice, empathy, and polyphony will be shared, and participants will brainstorm ways to foreground those elements in their own courses. Participants will leave with a general understanding of, and concrete ideas about incorporating, a pedagogy of polyphony.

At the 2020 Conference on Higher Education Pedagogy, I presented a work-in-progress that I called "'A Pedagogy of Polyphony.'" In that presentation, I discussed the philosophical framework and pedagogical objectives of a pilot project that I was about to undertake. Despite a one-year delay due to the pandemic, I am now in my second year of the pilot project, which has also been adopted as part of Virginia Commonwealth University's First-Year Pedagogy Initiative.

This practice session will begin with a quick review of the importance of voice-building and empathy-building in undergraduate curricula, particularly in the first-year seminar. It will then provide an updated overview of a "pedagogy of polyphony," including discussion of its theoretical grounding in Mikhail Bakhtin's *Problems of Dostoevsky's Poetics*. A pedagogy of polyphony seeks to move beyond voice (of self) and empathy (for other) to an agency-driven empathic awareness of a simultaneously-present plurality of other voices. As Bakhtin argues, Dostoevsky was able to represent "A plurality of independent and unmerged . . . consciousnesses, a genuine polyphony of fully valid voices" (6, original emphasis). Dostoevsky was able to see "the world in terms of interaction and coexistence" (31). Appreciation for plurality, coexistence, and the autonomy of others' voices, therefore, is at the heart of a pedagogy of polyphony.

To help conceptualize a pedagogy of polyphony, consider a trajectory from monological to dialogical to polyphonic assignments. In monological assignments, students are asked to report their own observations or develop their own arguments. Students might be asked to write about a personal experience or to state and defend a position on a controversial issue. In dialogical assignments, students are asked to consider and engage in conversation with an alternative viewpoint. Students might be asked to write a letter in the voice of a character in a book, rewrite a scene from another character's perspective, or consider and respond to an opposing viewpoint. In polyphonic assignments, students are asked to simultaneously engage multiple viewpoints - and perhaps to do so in a collaborative (i.e., multi-voiced) group project. Students might be asked to write a play in which they give voice to multiple characters, or take part in a policy roundtable in which they not only present but also respond to multiple other viewpoints.

Following that overview, this practice session will review the experiences and lessons learned (thus far), in the second year of this on-going pilot project. Sample assignments designed to foreground voice, empathy, and polyphony, and which have been implemented in the pilot, will be shared and analyzed. Participants will then have time to brainstorm and discuss in small work groups ways in which they could (1) introduce or emphasize voice-building or empathy-building in their own courses, and/or (2) transform existing assignments beyond voice and empathy toward polyphony. Work groups will report out their main insights and ideas. Participants should leave the session with (1) ideas about incorporating empathy-building and moving from empathy to polyphony, and (2) a draft of one new or transformed assignment that can be implemented immediately.

References

- Bakhtin, Mikhail. *Problems of Dostoevsky's Poetics*. Trans. Caryl Emerson. U of Minnesota P, 1984.
- Buber, Martin. *I and Thou*. 2nd ed. Trans. Ronald Gregor Smith. Macmillan, 1958.
- Eubanks, Peter. "Can Empathy Be Taught in the Classroom." Presentation. Conference on Higher Education Pedagogy. Virginia Tech., 2019.
- Fink, L. Dee. *Creating Significant Learning Experiences: An Integrated Approach to Designing College Courses*. Jossey-Bass, 2103.

- Foss, Sonya K., and Cindy L. Griffin. "'Beyond Persuasion: A Proposal for an Invitational Rhetoric.'" *Communication Monographs*, Vol. 62, 1995, pp. 2-18.
- Keen, Suzanne. *Empathy and the Novel*. Oxford UP, 2007.
- Murray, Jeffrey W. "Bakhtinian Answerability and Levinasian Responsibility: Forging a Fuller Dialogical Communicative Ethics.'" *Southern Communication Journal* Vol. 65, No. 2 & 3, 2000, pp. 133-150.
- Murray, Jeffrey W. "Beyond Empathy: Toward a Pedagogy of Polyphony." [Interactive Session.] Conference on Higher Education Pedagogy, Virginia Polytechnic Institute and State University. Blacksburg, VA: 6 February 2020.
- Murray, Jeffrey W. "Skills Development, Habits of Mind, and the Spiral Curriculum: A Dialectical Approach to Undergraduate General Education Curriculum Mapping." *Cogent Education*, Vol. 3, No. 1, 2016, pp. 1-19.

EEG Study: Podcast Learning Effects on Attention in Medical Trainees.

Saman Jamshid Nezhad Zahabi, Sol Lim, Serkan Toy, *Virginia Tech*
John Wolpaw, *John Hopkins University*

Abstract: In this study we investigated the effectiveness of podcast-based learning in comparison to traditional reading, using EEG data. The study results indicated that while participants performed better on knowledge tests for podcast learning, their EEG patterns showed less typical markers of high attention (decreased theta and beta power, increased alpha power). This may be due to the difference between the attentional recourses which are required to complete each learning modalities (Visual versus Auditory).

The popularity of podcasts as an accessible and engaging education tool is on the rise. In contrast to traditional learning methods, such as reading, podcasts offer learners the flexibility to access content at their convenience, transcending temporal and spatial limitations. While existing evidence supports the effectiveness of podcast-based learning, primarily relying on subjective and self-reported data, a notable gap remains in employing objective measures to assess the comparative efficacy of podcast learning versus conventional methods. Thus, this study aims to evaluate the effectiveness of podcast-based learning in enhancing attention by utilizing Electroencephalography (EEG) data. To achieve this, we collected EEG signals from a cohort of 65 medical trainees using a 14-channel EEG headset, capturing neural activity from diverse brain regions. Participants completed two distinct learning tasks in a randomized order: podcast listening and textbook chapter reading, while covering three distinct medical topics. Additionally, to gauge participants' proficiency in mastering the material, a knowledge test comprising 13-16 multiple-choice questions was administered at three different time points (baseline, post-learning, and a follow-up after four weeks) for each topic. Raw EEG data underwent preprocessing to eliminate artifacts, and power spectral density (PSD) was calculated for each learning condition during three time intervals (beginning, middle, and end). Subsequently, absolute power within three frequency bands (Alpha, Theta, and Beta) was derived from the PSD. The absolute power at these frequency bands values were used to evaluate the differences in attention levels among participants when performing two different tasks. As established in prior research, an increase in absolute power within the theta and beta frequency bands is typically associated with higher attention, while an increase in alpha power serves as an indicator of decreased attention. We found a significant decrease in the absolute power of the theta and beta frequency bands during podcast listening compared to the reading condition. Conversely, absolute power of the alpha band was significantly higher during podcast listening compared to chapter reading. No significant differences were observed for the effect of time interval on the power of these frequency bands. Knowledge test scores demonstrated significantly higher performance in the podcast condition, both immediately post-learning and during the follow up after four weeks. While participants exhibited better performance in knowledge test when engaging in podcast listening, their EEG activity pattern showed an opposite pattern that is often observed with higher attention (i.e., an increase in theta and beta power and a decrease in alpha power). Rather, such a pattern was aligned more consistently with the chapter reading. This discrepancy may be attributed to the greater attentional demands placed on the brain when processing visual information (as in reading) compared to auditory tasks (as in podcast learning). Overall, these findings highlight the influence of learning modalities on individual brain activity, driven by variations in attentional resources required for each learning condition.

Virtual Presence in F2F Classes to Facilitate Active Learning

Brian Krohn, *Indiana University*

Abstract: Active Learning Classrooms (ALCs) are often viewed as 'special places' by faculty that are not able to teach in technology enabled classrooms. This project investigated the use of virtual meeting software (Microsoft Teams) to manage active learning in face-to-face classes that are not scheduled in technology enhanced or spatially robust classrooms. Initial results suggest students are unable to differentiate between the integrated technology in ALCs from aspects of virtual meetings utilized for active learning. Faculty can feel empowered to develop high-impact active learning courses without worry of what room they may be assigned.

Active learning has become a central focus of pedagogy development due the positive relationships with improved academic performance and learning (Freeman et al., 2014; Knudson & Wallace, 2021; Odum et al., 2021). In response to research in Active Learning Classrooms (ALCs) and the development of SCALE-UP at University of North Carolina (Beichner et al., 2007), several universities sought to adapt all or part of the design elements and/or design their own programs such as TEAL (Dori et al., 2003), TILE (Morrone et al., 2017; Van Horne et al., 2014), and MOSAIC (Birdwell & Uttamchandani, 2019; Morrone et al., 2017). While the objectives of these programs often focus on faculty development, resulting perceptions seem to focus more on space design and/or technology of the (ALCs). These perceptions can lead to lack of innovation in non-ALC spaces and be intimidating for "untrained" faculty. In a previous examination of faculty perceptions of ALCs (Morrone, 2018), faculty shared that technology is both empowering and limiting when classroom assignments, and thus availability of technology to support active learning, change from semester to semester. The purpose of this project is to investigate the potential for using common virtual meeting software to manage in-class collaborative work to allow integration in both ALCs and more standard classrooms.

Using Microsoft Teams, students were exposed to collaborative technology in a sandbox room at Indiana University (Learning Spaces ALCOVE) as well as a more standard classroom, both with the same instructor. The instructor utilized collaborative elements of Teams to facilitate group learning as well as a virtual meeting to facilitate activities a fully face-to-face class (not hybrid or HyFlex). Following collaborative activities in both settings, researchers used both surveys and interviews to measure student's perceptions of how much the physical room or software helped facilitate, or not, active learning and group activities. The surveys integrated aspects perceptions of ALCs from Peng (Peng et al., 2022) along with items to rate effectiveness of specific aspects of the project (virtual meetings to facilitate collaboration). Follow-up interviews were utilized to glean additional insight about the overall effectiveness in facilitating learning.

Initial analysis of data and preliminary interviews suggest that students were not aware of the differences between the integrated technology in the ALC and the leveraging of the virtual space to accomplish the same pedagogical goals. The number one factor influencing student perceptions was physical space. The fact that students only realized the differences in technology when pointed out suggests the value of using virtual meeting software for management of work in physical classrooms.

These results are a powerful suggestion that faculty can use aspects of ALC pedagogy in any room in which students can connect using personal devices. Faculty can thus develop robust active learning courses without worry of what room they may be assigned. Examples of how MS Teams can be utilized will be shared during the presentation.

References

- eichner, R. J., Saul, J. M., Abbott, D. S., Morse, J. J., Deardorff, D., Allain, R. J., Bonham, S. W., Dancy, M. H., & Risley, J. S. (2007). The student-centered activities for large enrollment undergraduate programs (SCALE-UP) project. *Research-based reform of university physics*, 1(1), 2-39.
- Birdwell, T., & Uttamchandani, S. (2019). Learning to Teach in Space: Design Principles for Faculty Development in Active Learning Classrooms. *Journal of Learning Spaces*, 8(1), 19-27.
- Dori, Y. J., Belcher, J., Bessette, M., Danziger, M., McKinney, A., & Hult, E. (2003). Technology for active learning. *Materials Today*, 6(12), 44-49.

- Freeman, S., Eddy, S. L., McDonough, M., Smith, M. K., Okoroafor, N., Jordt, H., & Wenderoth, M. P. (2014). Active learning increases student performance in science, engineering, and mathematics. *Proceedings of the national academy of sciences*, 111(23), 8410-8415.
- Knudson, D., & Wallace, B. (2021). Student perceptions of low-tech active learning and mastery of introductory biomechanics concepts. *Sports Biomechanics*, 20(4), 458-468. Learning Spaces ALCOVE.
- Morrone, A. (2018). IUPUI Classroom Needs Analysis 2018.
- Morrone, A., Flaming, A., Birdwell, T., Russell, J., Roman, T., & Jesse, M. (2017). Creating Active Learning Classrooms Is Not Enough: Lessons from Two Case Studies.
- Odum, M., Meaney, K., & Knudson, D. V. (2021). Active learning classroom design and student engagement: An exploratory study.
- Peng, L., Deng, Y., & Jin, S. (2022). The evaluation of active learning classrooms: Impact of spatial factors on students' learning experience and learning engagement. *Sustainability*, 14(8), 4839.
- Van Horne, S., Murniati, C. T., Saichaie, K., Jesse, M., Florman, J. C., & Ingram, B. F. (2014). Using qualitative research to assess teaching and learning in technology-infused TILE classrooms. *New Directions for Teaching and Learning*, 2014(137), 17-26.

CONCURRENT SESSION 5

**Thursday, February 8, 2024
3:15 PM - 4:00 PM**

Challenges in decolonizing and conscientizing education from within the system

Mae Hey, *Virginia Tech*

Abstract: Colonial systems impose ideas on us that normalize extractive and consumptive behaviors. We have all been touched and injured by colonial forces, especially through education. This creates a situation that makes it challenging to recognize and dismantle colonial education so that we do not perpetuate it. In this session we will critically reflect on the subtle, invisibilized, and normalized ways we have been shaped and impacted by colonial education so we can recognize it and its harmful impacts and offer a more appropriate, beneficial, and nurturing system in which excellence can be realized without intrusion of colonial practices.

Description: We learn to be people from other people. In our modern world it is difficult to evade colonial influences. Colonial systems impose ideas on us that are counter-intuitive to our natures and negatively impact our thinking to normalize extractive and consumptive behaviors. To get a population to cooperate, punitive measures must be imposed and enforced. We have all been touched and injured by these punitive forces, especially through education. This creates a situation that makes it challenging to recognize and dismantle colonial education so that we do not perpetuate it. In this session we will critically reflect on the subtle, invisibilized, and normalized ways we have been shaped and impacted by colonial education so we can recognize it and its harmful impacts and offer a version of teaching and learning--a more appropriate, beneficial, and nurturing system--in which excellence can be realized without intrusion of colonial practices.

Purpose: to brainstorm and identify how we subtly perpetuate colonial practices through teaching and learning so that we can remedy our approaches.

Approach: The participants' interest will be engaged through a few examples of how we perpetuate colonialism in everyday ways in schools. They will then work in groups to brainstorm additional examples they believe also result in students learning and normalizing colonial ways. We will then work in groups to begin imagining other ways to teach this material that results in a decolonized and conscientized approach. We will also discuss challenges to decolonizing our praxis.

Learning outcome: Participants will be exposed to ways colonialism is perpetuated almost invisibly in schools. They will then brainstorm other approaches that could be used as alternatives, resulting in decolonized and conscientized outcomes. They will also think about how they may meet challenges in decolonizing their approaches.

College Students' Use of AI: What's OK and What's Not?

Lloyd Rieber, *University of Georgia*

Abstract: The sudden availability of generative artificial intelligence in popular culture due to the introduction of tools such as ChatGPT has raised questions about what are and are not appropriate uses of AI in higher education. So far, the advice from university administrators has been ambiguous at best on this issue. Missing so far are the voices of students. The purpose of this practice session is to present an activity college instructors could use to enlist the help of their students in figuring out where is the line between appropriate and inappropriate uses of artificial intelligence in college teaching.

Much concern has been expressed by both university faculty and university upper administration about the emerging role of generative artificial intelligence (AI) in higher education. Faculty have been advised to clearly state their position on how students may or may not use AI in their courses. Recently, the U.S. Department of Education (2023) issued a report on "Artificial Intelligence and the Future of Teaching and Learning" to assist educators in making decisions on when and when not to allow AI as part of educational activities. Lacking in the rhetoric so far has been the point of view of students. The purpose of this session is to provide an example of how university faculty can begin conversations with their students about where is the line between appropriate and inappropriate uses of AI in their courses.

The lesson activity is conducted in two parts. In part 1, instructors create a simple survey to ask students to submit at least one example of what they believe is an appropriate use of AI in college education and one example they believe is not appropriate. Students are specifically asked to think of examples that are near the imaginary line between what's OK and what's not OK.

Using their responses, the instructor creates a slideshow with the examples, but with the name of the student who submitted the example kept secret temporarily. Then, in the next class, each example is discussed as to its appropriateness, culminating in a class vote of "OK" or "Not Ok." After the vote, the identity of the student who submitted the example is revealed with the opportunity to give their reasoning for why it is either OK or not OK. A brief follow-up discussion is then held.

An interesting outcome of the discussion with doctoral students is that context matters. That is, the example written in just a few words could be viewed in multiple ways depending on the context. For example, using AI to help coach good writing versus using AI in an open book exam offers very different perspectives on the appropriateness of how AI is used. A particularly interesting outcome of the activity was the seriousness with which the graduate students are taking this issue. A point that was repeatedly made during the discussions is that they do not want AI to "rob" them of learning opportunities. They were not looking for shortcuts just to get the degree. Instead, they were interested in ways that AI can support or enhance their graduate education. The discussion is reminiscent of the literature from the 1990s on the role and benefits of cognitive tools to amplify student cognitive abilities (e.g., Lajoie, 2000). Of course, doctoral students have different world views about their education from other college students, such as freshman or sophomore undergraduate students. But, exploring the line between appropriate and inappropriate uses of AI in higher education is well served by including students in the conversation at the beginning.

References

- Lajoie, S. (Ed.) (2000). *Computers as cognitive tools, volume two: No more walls: theory change, paradigm shifts, and their influence on the use of computers for instructional purposes* (2nd ed.). Mahwah, N.J.: Lawrence Erlbaum Associates.
- U.S. Department of Education, Office of Educational Technology, *Artificial Intelligence and Future of Teaching and Learning: Insights and Recommendations*, Washington, DC, 2023.

Diversifying your Assessment Strategies

Jae Archer, *Lincoln Memorial University*

Abstract: Do you find yourself assigning papers as your culminating assessment? Do you want a break from reading 10-page papers to assess what your students have learned? Join me in this session on Diversifying your assessment strategies. I will share a variety of methods to assess students' comprehension of course content, critical thinking, lectures, and discussions. There will also be time for participants to share their most effective assessment strategies, and how they know students are learning. Participants will leave with applicable assessment methods that can work with a variety of courses. Let's spice up our assessment practices!

The existing literature on student assessment states, If we choose assessment strategies that demand critical thinking or creative problem solving, we are likely to realize a higher level of student performance or achievement (Yambi & Yambi, 2020).

During this session, participants will have the opportunity to:

- Evaluate the validity and reliability of their current assessment practices to determine how well students are learning.
 - Analyze rubrics to determine effectiveness, barriers, and transparency within assessments.
- Create a rough draft of an assessment tool to replace a research paper assessment.

The presenter will engage with the audience by:

- sharing examples of assessment improvements, they have made
- modeling how to revise an assessment.
- discussing best practices and strategies to improve student assessment through whole group and table talk discussions throughout the session.

Handouts will be provided to participants as well, to support them in completing assessment revision.

References

- Suskie, L. (2018). *Assessing student learning : a common sense guide* (3rd ed.). John Wiley & Sons, Incorporated. Retrieved October 11, 2022, from <https://public.ebookcentral.proquest.com/choice/publicfullrecord.aspx?p=5215462>.
- Yambi, T. & Yambi, C. (2020). *Assessment and evaluation in education*.

Empowering Students Through the Use of Career Readiness Language

Joe Wirgau, Cora Burt, Jennifer McDonel, *Radford University*

Participants in this session will learn to use the NACE (National Association of Colleges and Employers) Career Readiness Competencies as a unifying language to help families, students, and employers see and articulate the value of higher education. There has never been a more critical need for higher education and employers to align in their vision and messaging with the public. Survey data clearly demonstrates employers are more likely to hire individuals with a college degree, however, majorities of executives (56%) and hiring managers (53%) believe that colleges and universities need to make improvements to ensure graduates' success at the entry level. Even larger proportions, (65% of executives and 65% of hiring managers) believe improvements are needed to ensure graduates have the skills and knowledge to advance within their companies (Finley, 2021). Despite growing demand for college graduates in the workforce, there is a decline in confidence regarding the positive impact of higher education on student development. College student responses to the survey also indicate less than half (41%) of college students feel they have the skills needed to enter the workforce (Strada, 2017). There were three million fewer college students in 2022 than in 2010, due in part to the net impact of difficulty students and families have in being able to see and clearly articulate the value of higher education (Berg, et. al., 2023).

In this session we will help participants leverage existing resources to help students make more meaning out of their educational experiences. Significant efforts are underway, both nationally and within Virginia, to help prepare students for the work force. Resources leveraging the NACE Career Readiness Competencies such as the Virginia Talent and Opportunity Partnership (VTOP) have been developed to connect students with employers and provide support to students and faculty within higher education. These competencies are key skills that employers are seeking while hiring, with an emphasis on critical thinking, or problem solving, and communication skills (Lipson, et. al.2007).

The session will be organized in the following manner:

- o 10 minutes - We will introduce the NACE Career Readiness Competencies, our experiences, and an introduction to the available recourses for using them with students.
- o 10 minutes - Attendees will map their work with students to the competencies and discuss in small groups
- o 10 minutes - Presenters will share specific examples of how they work with students with the competencies.
- o 10 minutes - Participants will share plans to incorporate what they have learned in small groups.
- o 5 minutes - Any remaining questions will be addressed along with closing statements.

References

- Berg, B., Lee, S., Randolph, B., Ryu, M., & Shapiro, D. "Current Term Enrollment Estimates: Spring 2023." National Student Clearinghouse Research Center, May 2023, Herndon, VA.
- Finley, Ashley. "How College Contributes" to " Workforce Success: Employer Views on What Matters Most." Association of American Colleges and Universities (2021).
- Lipson, Alberta, et al. "Students' perceptions of Terrascope, a project-based freshman learning community." *Journal of Science Education and Technology* 16 (2007): 349-364.
- Strada Education Network (US) Gallup (Firm). "2017 College Student Survey: a nationally representative survey of currently enrolled students." (2017).

Teaching Collaboration in the Architecture Studio Environment
Sallie Hambright-Belue, Caileigh Treash, Valerie Ulloa, *Clemson University*

Abstract: Collaboration is an essential skill for architects. As part of the architectural education, schools of design expect students to work collaboratively, and this study will investigate how collaboration is taught. While collaboration is a part of most architecture programs, there is little research in the discipline about the specifics of teaching collaboration. We simply expect students to do it. Feedback and research will be used to develop curricula that can be implemented in future studio curricula at the school.

Collaboration is an essential skill for architects. Most projects today are designed and built with large teams as the scope of projects has increased. While collaboration is a part of most architecture curricula, there is little research in the discipline about the specifics of teaching collaboration.

Collaboration is defined by the article *Understanding the Differences between Teamwork and Collaboration* as a group of people who work together as equals, usually without a leader to complete a goal. Psychologically, collaboration is "a way of working in harmony with others..." (McDaniel, 2016), and it requires a set of specific skills. These skills "...need to be taught and made explicit," (Riebe, et al, 2010) for students to learn collaboration effectively.

Collaboration is beneficial to students beyond simply professional preparation. Collaboration teaches students to respect multiple points of view, gain new perspectives, develop empathy for others, and develop critical thinking skills (Doren, 2017). Students who do not engage in collaboration do not learn as much or as well as those that do (Emam, et al, 2019).

This study uses quantitative and qualitative research including literature reviews, surveys, observations, and interviews with students and faculty to gauge the effectiveness of collaborative instruction and learn ways that it can be improved. The purpose of the study is to use the findings to develop curricula that can be implemented in the design studio to teach this very important skill.

In our school, the design process "...is primarily taught as an individual process" (Pressman, 2014) until the third year when collaboration is introduced. The collaborative third year studio was taught in the Fall 2022 semester, and the surveys and interviews were conducted in the Spring 2023 semester. The studio had 82 students and 5 faculty. The students worked in teams of 2 or 3 and designed a multi-story office building in New York. The survey was shared via email and a random sampling of 10% of students were interviewed. The faculty were also surveyed, and each faculty member was interviewed.

Preliminary results show that collaboration, while a learning objective of the studio, is not explicitly focused upon. Instead, students are required to work collaboratively but are given little instruction on how to do so effectively. Students also state that collaboration significantly increases their stress which leads to conflict between partners, lower project quality, and can allow social dynamics of authority and privilege to occur (Peri, Kalay, 2000). It is clear from these results that changes need to be made to ensure students receive this crucial instruction.

This project will give students and professors an understanding of how effectively collaboration is being taught in the undergraduate architecture program at one school of architecture. This understanding will be used to improve collaborative teaching techniques which will better prepare students for the profession and improve individual learning and well-being.

References

Doren, Mariah. "Working Collaboratively-Teaching Collaboration." *Transformations: The Journal of Inclusive Scholarship and Pedagogy*, vol. 27, no. 2, 2017, pp. 180-94. JSTOR, <http://www.jstor.org/stable/10.5325/trajinschped.27.2.0180>. Accessed 16 Jan. 2023.

- Emam, Maii, et al. "Collaborative Pedagogy in Architectural Design Studio: A Case Study in Applying Collaborative Design." *Alexandria Engineering Journal*, vol. 58, 6 Jan. 2019, pp. 163-170., [https://doi.org/10.1016/s1110-0168\(19\)30064-x](https://doi.org/10.1016/s1110-0168(19)30064-x). Accessed 26 Jan. 2023.
- Peri, Christopher, and Yehuda Kalay. "2000 ACSA Technology Conference." ACSA, <https://www.acsa-arch.org/chapter/archville-a-distributed-virtual-reality-system-for-teaching-real-time-design-collaboration/>. Accessed 16 Jan. 2023.
- Pressman, Andrew (faia). *Designing Relationships: The Art of Collaboration in Architecture*. Taylor & Francis Ltd, 2014.
- McDaniel, S. H. (2016, February 1). The collaborative habit. *Monitor on Psychology*, 47(2). <https://www.apa.org/monitor/2016/02/pc>
- McDaniel, S. H. (2016, May 1). Why teamwork surpasses the individual approach. *Monitor on Psychology*, 47(5). <https://www.apa.org/monitor/2016/05/pc>
- Riebe, Linda, et al. "Teamwork: Effectively Teaching an Employability Skill." *Education + Training*, vol. 52, no. 6/7, 2010, pp. 528-539., <https://doi.org/10.1108/00400911011068478>.

Teaching Online Collaboration Skills in a Graduate PBL Class

Wendy Zajack, *Georgetown University*

Abstract: Group projects strike fear in the hearts of students and educators alike. But we often fail to teach our students how to utilize group interactions. This presentation will focus on the results of a design-based research study conducted in a bichronous graduate project-based learning course. When participants spoke about collaboration they highlighted five broad themes in the collaboration journey. In the beginning and the end students were focused on positive themes including creativity and growing from the experience. In the middle of the semester students focused on three main pain points including communications; responsibility and accountability; and team conflict.

Group projects in academic settings strike fear in the heart of students and educators alike. But like other soft skills - we often fail to teach our students how to utilize group interactions - in a real-world way. This presentation will focus on the results of a design-based research (DBR) study conducted in a bichronous graduate project-based learning (PBL) course at a private university in the mid-Atlantic.

PBL has been shown to be a highly effective pedagogy in developing a wide range of soft skills including creativity, critical thinking, collaboration, and communication (Rohm et al., 2021). While PBL has existed for more than thirty years it has faced a slow adoption into higher educational practice (Pascarella & Terenzini, 2005; Stains et al., 2018). This may be because of challenges around collaboration, which was cited again and again by both teachers and students, as a major stumbling block (Blumenfeld et al., 1991; Lee et al., 2014; Warr & West, 2020).

The central research question which will be discussed in this session is: In what ways do the key processes and emotional elements of Value-Based Collaboration Model impact student collaboration in online graduate project-based learning?

This question was explored by fourteen detailed interviews of seven students and one faculty member, observations and analysis of the enactment phase of a DBR intervention that was introduced based on these principles to a graduate-level PBL bichronous marketing course. This study contributed to the body of PBL collaborative research in three significant ways:

- Identified that students recognize the benefits of collaborative environments, but need more support to achieve it
- Identified which of the key pain points during the collaboration journey need more attention support during the semester and
- Evolved future thinking around design principles and provides recommendations for the next iteration of a value-based collaboration model

When student participants spoke about collaboration they talked in terms of five broad themes that made up their collaboration journey. In the beginning and the end students were focused on the positive themes including boosting creativity and ideas and growing from the experience. In the middle of the semester students focused on three main pain points including communications; responsibility and accountability; and team conflicts and feedback. Two other themes that will be discussed were foundational to the overall academic experience of the course including teacher interaction and technology preferences. These elements were critical, but because in this study they worked well, they were less discussed by students.

The findings of this study are particularly useful to faculty and instructional designers who are looking for practical and tangible design and content strategies for facilitating collaboration online. However, this study should also provide some broad-based ideas and practices that can be applied to any practice area in courses that are engaging in PBL-based collaborative work. The principles in this study are also likely to also be useful in any course modality.

References

Blumenfeld, P., Soloway, E., Marx, R., Krajcik, J., Guzial, M., & Palinscar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational Psychologist*, 26, 369-398.

- Lee, J. S., Blackwell, S., Drake, J., & Moran, K. A. (2014). Taking a leap of faith: Redefining teaching and learning in higher education through project-based learning. *Interdisciplinary Journal of Problem-Based Learning*, 8(2), 2.
- Pascarella, E. T., & Terenzini, P. T. (2005). *How college affects students*, Vol. 2, San Francisco, CA: Jossey-Bass.
- Rohm, A. Stefl, M., & Ward, N. (2021). Future proof and real-world ready: The role of live project-based learning in students' skill development. *Journal of Marketing Education*, 43(2), 204-215. <https://doi.org/10.1177/02734753211001409>
- Stains, M., Harshman, J., Barker, M. K., Chasteen, S. V., Cole, R., DeChenne-Peters, S. E., Eagan, J., Esson, J. M., Knight, J. K., Laski, F. A., Levis-Fitzgerald, M., Lee, C. J., Lo, S. M., McDonnell, L. M., McKay, T. A., Michelotti, N., Musgrove, A., Palmer, M. S., Plank, K. M., ... Young, A. M. (2018). Anatomy of STEM teaching in North American universities. *Science (American Association for the Advancement of Science)*, 359(6383), 1468-1470. <https://doi.org/10.1126/science.aap8892>
- Warr, M., & West, R. E. (2020). Bridging academic disciplines with interdisciplinary project-based learning: Challenges and opportunities. *The Interdisciplinary Journal of Problem-Based Learning*, 14(1). <https://doi.org/10.14434/ijpbl.v14i1.28590c>

POSTER SESSIONS

**Thursday, February 8, 2024
4:00 PM - 6:00 PM**

Adoption of Humanistic Pedagogy to Leadership Education in Higher Education

Israel Oyedare, Eric Kaufman, *Virginia Tech*

Abstract: The use of humanistic pedagogy in leadership education is an approach that puts into perspective the four important viewpoints in teaching leadership - the educator, student, learning procedures, and learning circumstances - but places more emphasis on the "human or humane" end of the learning process and perceptions students hold about the world. This poster gives insight into the importance and priorities of humanistic pedagogy in leadership education across higher institutions.

The leadership education and development of students and young professionals have become a composite focus area for many higher institutions, particularly business schools (Allen et al., 2022). This has consequently inspired an increase in research on the different approaches and frameworks for teaching leadership to students (Allen et al., 2022; Watkins et al. 2017).

The use of humanistic pedagogy in leadership education is an approach that puts to perspective the four important viewpoints in teaching leadership - the educator, student, learning procedures, and learning circumstances - but places more emphasis on the "human or humane" end of the learning process and perceptions students hold about the world (Javadi & Tahmasbi, 2020; Purswell, 2019). Allen et al. (2022) asserted that relevant leadership skills such as problem-solving, relational, change, and innovation skills require a variety of humanistic approaches for students to fully embrace and internalize them. This approach prioritizes students' learning on the value of their self-identity and focuses on their full development (Rustan Effendi et al., 2020).

Integral to humanistic pedagogy is the human learning theory that has its roots in the psychological study and observation of the individual student and their relationships with the learning environment (Purswell, 2019). Johnson (2014) asserted that this theory pays attention to the affective dimension of students such as their self-concept, individual values, and emotions; which are a natural extension of how they perceive and learn leadership. A conceptual review of selected literature revealed the following characteristics of humanistic learning theory:

- Emphasis on the formation of the human values of students, the educators' ability to understand the student, the attention of educators to the emotions of students during a learning process, and the involvement of students throughout this process (Tolstova & Levasheva, 2019).
- Prioritises these four elements - confidence in progress, reasons, inclusiveness, and focus on individualism (Rustan Effendi et al., 2020).
- Giving students opportunities to take an interest in what is to be learned, ensuring self-directed learning, and creating a conducive learning environment (Johnson, 2014).

Notably, Allen et al. (2022) posited that using humanistic pedagogy to teach leadership courses in higher education helps students become self-aware of their need for leadership education and value the importance of the concept of self-leadership. This further leads to students finding their purpose in leadership as against seeing leadership as a problem-solving approach (Waddock, 2016). Moreover, an essential aspect of adopting humanistic pedagogy in teaching leadership is that it inspires commitment to lifelong learning among leadership students that extends beyond their college education (Waddock, 2016).

References

- Allen, S. J., Rosch, D. M., & Riggio, R. E. (2022). Advancing leadership education and development: Integrating adult learning theory. *Journal of Management Education*, 46(2), 252-283. <https://doi.org/10.1177/10525629211008645>
- Javadi, Y., & Tahmasbi, M. (2020). Application of humanism teaching theory and humanistic approach to education in course. *Theory and Practice in Language Studies*, 10(1), 40-48. <http://dx.doi.org/10.17507/tpls.1001.06>
- Purswell, K. E. (2019). Humanistic learning theory in counselor education. *Professional Counselor*, 9(4), 358-368. <https://eric.ed.gov/?id=EJ1237586>

- Rustan Effendi, Y., Bafadal, I., Degeng Sudana, I. N., & Arifin, I. (2020). Humanistic approach to principal's leadership and its impacts in character education strengthening. *Humanities & Social Sciences Reviews*, 8(2), 533-545. <https://doi.org/10.18510/hssr.2020.8261>
- Tolstova, O., & Levasheva, Y. (2019). Humanistic trend in education in a global context. *SHS Web of Conferences*, 69, 00121. <https://doi.org/10.1051/shsconf/20196900121>
- Waddock, S. (2016). Developing humanistic leadership education. *Humanistic Management Journal*, 1, 57-73. <https://doi.org/10.1007/s41463-016-0003-5>
- Watkins, D., Earnhardt, M., Pittenger, L., Roberts, R., Rietsema, K., & Cosman-Ross, J. (2017). Thriving in complexity: A framework for leadership education. *Journal of Leadership Education*, 16(4), 148-163. <https://doi.org/10.12806/V16/I4/T4>

An innovative Method to Teach Mineral Identification, Starting from Scratch

John Chermak, Neil Johnson, *Virginia Tech*

Abstract: In the Geosciences Department at Virginia Tech we teach introductory laboratory courses that have mineral identification as one of the most critical and fundamental learning objectives. Mineral identification is important for further rock identification and understanding their physical and chemical properties. We found that students find mineral identification very challenging and frustrating. To improve student learning and engagement we have developed a "simpler" approach using first a concept which is unambiguous and familiar to the students, hardness which they also have prior knowledge of. We will share our initial survey results and observations from students and the graduate teaching assistants.

After Identifying the teaching and student learning challenges, we surveyed approximately 20 commonly used laboratory manuals and found primarily tables and occasionally flow charts are used to aid in mineral identification. There are pros and cons to both tables and flow charts but generally tables contain a lot of information and have a high word density and include technical language which can be a challenge for students and flow charts alone allow yes/no considerations but can lead to an entirely incorrect answer with no way to confirm the decision. This is why we decided to come up with a different teaching and learning approach.

Student learning using the Starting from Scratch Methodology was evaluated at Virginia Tech using in-class surveys and polling information during and after select laboratory exercises, input from graduate teaching assistants regarding student's mineral identification progress and learning, and mineral identification focused questions included in the end of semester laboratory pathways assessment and outcome analysis. GTA Student Perception of Teaching (SPOT) scores will also be evaluated to see if there is mention of this methodology and its impact on their learning.

Preliminary discussions on teaching and student's learning with Graduate students who are piloting this methodology have been encouraging.

References

- Chermak J.A., and Johnson, N., 2022, An improved mineral identification teaching strategy for Introduction to Earth Science Laboratories, Geologic Society of America (GSA) Annual Meeting, Denver Colorado
- Chermak, J. A., and Drezek McConnell, K. 2015, Authentic Assessment of Student Learning in Large Classrooms: Oxymoron or Opportunity?, GSA National Meeting, Baltimore, MD
- Svinicki M., 1993, What They Don't Know Can Hurt Them: The Role of Prior, Knowledge in Learning, Univ. of Minnesota

An Unanticipated Outcome of Course Modifications

Michael Nolan, John McNamara, *Virginia Tech*

Abstract: Curricular revision in medical education represents an ongoing process aimed at the development of curricula that will facilitate the acquisition of knowledge and skills needed by tomorrow's physicians. Reforms typically reflect the addition of new and important content, often times added to important information and experiences already included in the curriculum, or the adoption on new pedagogical approaches. We describe here the effects on student performance on end of course summative examinations in a medical neuroscience course following changes in teaching methods.

Topics in medical neuroscience at the Virginia Tech Carilion School of Medicine are included in a 10-week block of instruction scheduled during the spring months of the first year. Prior to AY2019-2020, the course included formal lectures, cadaver-based laboratory sessions, weekly formative review sessions using practice questions similar to those included on the summative examination and a group of "applied neuroanatomy" workshop sessions linked to specific topics addressed during the scheduled lectures and laboratory sessions. The applied neuroanatomy sessions involved small groups of students working together using psychomotor behaviors and techniques similar to those used in the performance of the neurologic examination as a complement the more traditional learning methods included throughout the course. The applied neuroanatomy activities were designed to help students learn human neuroanatomy by "applying" neuroanatomical principles in an active, faculty-assisted small group setting; an approach based on the concept of "learning by doing." Fourteen topic-specific applied neuroanatomy sessions were included in the course, each placed to follow and reinforce preceding lecture and independent study activities dealing with a particular topic.

Beginning in AY2019-2020 the weekly formative assessments were reduced in number, retaining only a mid-course and end of course formative assessment. The applied neuroanatomy learning activities were deleted in their entirety with independent study time inserted in their place. Most lecture topics were retained with many reassigned to other faculty. The final summative examination, comprised of retired National Board of Medical Examiners (NBME) STEP 1 questions, was retained. Overall class performance on the final 150 question final examination, defined as the mean score of all students taking the examination, was compared to the mean examination score provided by the NBME based on the scores for each question when those questions were ""live"" questions included on previous STEP 1 examinations.

During the seven years prior to implementation of changes to the course, students scored an average of 11% points above the NBME calculated mean score. During the three years following the changes to the course, mean examination scores dropped to an average of 1.5% points above the NBME mean.

While curricular changes most often result in positive outcomes, the changes implemented, though based on current theories related to teaching approaches, had an unintended negative effect on learning as measured by examination scores. It is possible that factors inadequately considered and addressed when implementing the particular curricular changes described were responsible for the performance declines observed. These results call attention to the importance of a thorough and objective analysis of changes intended as part of the curricular reform process, including their possible effects on measures of student learning such as scores on summative course examinations.

Anyone? Anyone? Improving Discussion in Quiet Classrooms

Amber Smith, *Virginia Tech*

Abstract: Whenever I teach discussion facilitation, I hear a common fear: "What if nobody talks?" New teachers want to lead discussions, but they feel it's not really up to them--they either get a talkative group who will participate, or they get a quiet group who makes it impossible.

This presentation will make the case for discussion as a way of teaching, and it will cover specific actions teachers can take within four main suggestions for improving discussion. Additionally, participants will learn several discussion-based activities that include all voices--even those who choose not to talk."

Whenever I train people on how to facilitate class discussion, I hear a common fear: "What if nobody talks?" They want to lead discussions with their students, but they seem to feel that it's not really up to them--they either get a talkative group of students who will participate in discussion, or they get a quiet group who makes it impossible and requires them to lecture instead.

The research reminds us of discussion's undeniable benefits: it encourages active learning by helping students develop their thoughts; it increases intellectual agility; it helps students explore a diversity of perspectives they would never encounter alone; it honors the diversity and value of student experiences; it builds awareness of and tolerance for ambiguity and complexity; it affirms students as cocreators of knowledge; it develops habits of collaborative learning; it helps students bond with each other; it demonstrates that you care about students and their ideas, helping them bond with you, making them more receptive to further participation; and on and on. Therefore, making discussion work is more than a matter of comfort.

So when new teachers ask me how to get their students talking, I suggest that they try four things:

Warm up their brains (e.g., free write, think-pair-share)

Evaluate your questions (e.g., is your phrasing opening or closing discussion?)

Give enough time to come up with good answers (e.g., strategic silence)

And if all else fails, accept the students you have and try alternative types of discussion

These suggestions improve discussion by giving students a chance to identify, develop, and refine answers before sharing them, which builds both student confidence as well as the quality of their answers, which then improves the subsequent discussion. These suggestions also return a sense of control (and calm!) to teachers by focusing them on specific skills within their control that are likely to influence the quality of discussion.

This presentation will make the case for discussion as a way of teaching, and it will explore specific actions teachers can take for each of these suggestions. We will slowly walk through the discussion process so teachers can reflect on the effects of their questions and facilitation actions. Participants will also learn about some discussion-based activities that include all voices without requiring everyone to actually speak, such as Snowball Discussion, Sticky Note Brainstorm, Chalk Talk, and Rotation Stations (plus two variations). Participants will also get to try one or more of these activities--and they won't have to talk if they don't want to.

References

- Bean, John C. *Engaging Ideas: The Professor's Guide to Integrating Writing, Critical Thinking, and Active Learning in the Classroom*. San Francisco: Jossey-Bass, 2001.
- Brookfield, Stephen D. and Stephen Preskill. *Discussion as a Way of Teaching: Tools and Techniques for Democratic Classrooms*. 2nd ed. San Francisco: Jossey-Bass, 2005.

Authentic Learning: Using Social Justice Interests to Connect with History

Erin Fay, *George Mason University*

Abstract: Many higher education programs require a course on the history of higher education. Often students with limited experience studying history struggle to make connections between history and its relevance to their life, academic studies, and future profession. In this study, five Virginia colleges offered an asynchronous learning activity assignment in their history of higher education courses that used primary sources and historical thinking to engage students on self-selected topics. We share impacts of students' authentic learning, and how giving students choice led to strong connections between their individually-held social justice concerns and the history of higher education.

The history of higher education is a required course in higher education programs throughout the United States. According to the Council for the Advancement of Standards in Higher Education (CAS), student learning and development outcomes include critical thinking skills and acquiring, integrating, and applying knowledge (CAS, 2015). Yet it can be difficult for students to develop research skills, critical historical thinking, and digital literacy when they have little or no background in history, and similarly difficult to stay motivated when they conceptualize history as a set of facts to memorize rather than as something connected to their lived experience.

Inquiry-based learning is a useful way to involve students in the construction of historical knowledge. As students learn by doing, they develop the necessary skills for historical research and thinking by locating information in context, by considering primary and secondary sources interpretively, and by using analysis to draw conclusions and develop deeper understanding (Voet & De Wever, 2016). Culturally sustaining pedagogy can increase equity when students are able to choose their topics, thereby expanding learning beyond a classroom exercise to address real-world concerns (Ladson-Billings, 2014). This type of authentic learning engages students directly as the work is meaningful to them and raises their sociopolitical consciousness (Ladson-Billings, 2014).

Under a 4VA funded grant, five institutions of higher learning in Virginia cooperated to use the same culminating assignment for their history of higher education courses. This provided students with opportunities to present their work asynchronously to peers across universities. Students selected current issues relevant to them, researched the historical roots of that topic in higher education, and created asynchronous learning activities that centered primary sources. Learning outcomes included historical thinking, primary source analysis, and digital literacy skills.

Interviews and reflections collected from participating students at two of the institutions, Virginia Tech and George Mason University, showed that an authentic learning experience where students chose personally meaningful, culturally relevant topics improved student engagement. Providing students choice in topic selection revealed a high level of social justice concerns and a deep connection with the relevance of history. Nearly half of student-selected projects addressed social justice topics, including student activism, discrimination, and gender issues.

In the poster session, we share students' personal reflections on the value of a justice-informed asynchronous learning assignment. We show the efficacy of an authentic learning activity for students learning to use primary sources for historical research, and provide insight into the question, what does it mean to give students choice in topic selection? Students often chose issues with personal meaning and dug into their historical roots. We find strong threads of social justice concerns in their responses which connect to personal, family, and cultural histories and aspects of student identity development. These connections helped students discover the relevance of history and historical research to their future roles as higher education professionals.

References

- Council for the Advancement of Standards in Higher Education (2015). CAS learning and development outcomes. In J. B. Wells (Ed.), *CAS professional standards for higher education* (9th ed.). Washington, DC
- Ladson-Billings, G. (2014). Culturally relevant pedagogy 2.0: a.k.a. the remix. *Harvard Educational Review*, 84(1), 74-84.
- Voet, M., & De Wever, B. (2016). History teachers' conceptions of inquiry-based learning, beliefs about the nature of history, and their relation to the classroom context. *Teaching and Teacher Education*, 55, 57-67.

Automated Targeted Semantic Feedback in Engineering Mechanics Exercise Problems

Arinjoy Basak, Clifford A. Shaffer, Nicole P. Pitterson, Jacob Grohs, David Dillard, Sneha Davison, *Virginia Tech*

Abstract: We discuss a novel approach for analyzing providing targeted semantic feedback on student's attempts on engineering mechanics exercise problems. We present the different technical problems involved in creating such a system such as ambiguity in solution approaches and alternative approaches, and the solutions proposed to address these issues. Finally, we present results from comparing the traditional feedback and the automated feedback provided by our system in a collection of student attempts of a set of exercise problems used in an offering of the engineering mechanics course.

A core part of undergraduate engineering mechanics course curriculum requires students learning fundamental concepts through application to real-life scenarios. This involves exercising these concepts by solving mathematical problems depicting these scenarios by constructing and solving algebraic systems of equations. However, with increasing sizes of classes, it has become difficult in traditional course settings to provide targeted feedback to students to facilitate learning. To solve this problem, we have created an intelligent exercise system that can provide instantaneous targeted feedback on solution attempts submitted by a student on an interactive problem-solving interface. The aim of our system is to provide targeted feedback designed to help students understand points of error in their solution attempt, and high turnaround times for solution attempts on exercise problems.

Our problem-solving system is built within the OpenDSA eTextbook system, and consists of an interactive interface where students can see the problem prose, relevant figures, and workspace areas with clickable elements. Students can solve single-step and multistep problems by constructing and solving systems of equations using simple click and drop interactions and palette-based equation entry. Following this, students can receive two types of feedback on their solution attempt: i) syntactic feedback on the consistency of the system of equations constructed, delivered at the time of solving equations, and ii) semantic feedback, delivered after submitting a solution attempt.

Our semantic feedback engine is responsible for providing targeted feedback by comparing a student's problem-solving attempt to an instructor's ground-truth solution, and then commenting on the differences between the two solutions. Steps are first taken to account for alternative solution approaches that students can take relative to the instructor's solution, followed by transforming the solution into consistent canonical forms that would allow the sets of equations from the solution attempts to be compared. After comparison, the differences between pairs of equations from the student's attempt and the instructor's solution are reported. These errors can range from notifying about incorrect/missing parameters plugged in, incompatibility in quantities used, to marking wrong/missing equations and incorrectly constructed systems of equations.

We are already able to provide fast feedback to students compared to traditional modes of practicing exercise problems in courses. To evaluate the quality of the automated feedback messages generated, we compared the automated feedback generated to instructor feedback. In particular, we took previously graded student papers for a set of exercises from an offering of an undergraduate engineering mechanics course. We worked with instructors to train our system on errors that are commonly observed in student submission attempts. We then entered the student solution attempts into our exercise system to generate the automated feedback version, and then manually compared the quality and relevance of these generated feedback messages against the feedback previously provided by instructors and teaching assistants on these same submissions. We present our findings from this study.

Blind Design: Advances in Non-Visual Pedagogy

Andrew Gipe-Lazarou, *Virginia Tech*

Abstract: Each spring, the Virginia Tech School of Architecture collaborates with the Department of the Blind and Vision-Impaired to organize a week-long design workshop for vision-impaired learners, aged 14-24, from across the state of Virginia. Architecture students, under the guidance of faculty advisor and lead coordinator, Dr. Andrew Gipe-Lazarou, receive university credit for preparing and instructing the workshop's non-visual learning program. This poster session will showcase the innovative, multi-sensory teaching methods and tools developed for the Blind Design Workshop, to empower vision-impaired individuals with an understanding that they can have agency in the space-making process.

This poster session will showcase the innovative, multi-sensory teaching methods and tools developed for Virginia Tech's Blind Design Workshop, an annual collaboration with the Department for the Blind and Vision-Impaired designed to empower vision-impaired individuals with agency in the space-making process. The proposed session accompanies the development of a scholarly article, made possible by the generous support of the Virginia Tech Center for Humanities, which will assess the learning outcomes of the workshop's first two years of operation (2022/23) and evaluate the practical limitations and possibilities of meaningfully involving individuals with vision-impairment in the acquisition of a professional architecture degree. It is the author's intent during this poster session to not only convey the highlights of his ongoing contributions to inclusive pedagogy, but to engage with conference attendees in critical and constructive dialogue about the direction of his teaching and research.

(Further detail about the workshop: https://news.vt.edu/videos/k/2022/04/1_9m8yckp4.html).

Organized by the Virginia Tech School of Architecture in collaboration with the Department of the Blind and Vision Impaired (DBVI), the Blind Design Workshop has taken place twice since 2022, and is planned again for the spring of 2024. Architecture students, under the guidance of faculty advisor and lead coordinator, Dr. Andrew Gipe-Lazarou, receive university credit for preparing and instructing the workshop's non-visual learning program. For vision-impaired participants, the workshop is an opportunity to engage in career exploration and experience student life in higher education by navigating across campus each day, using university maker spaces, and dining at D2.

The itinerary is organized around a single design prompt (in 2023, it was to design a space between two portals), for which participants are expected to create and present models and drawings. Exposure to spatial analysis and design thinking, together with tools for accessibly crafting and communicating design ideas are developed across a variety of multi-sensory learning activities, including group listening sessions of well-known spaces; interaction with 3D-printed models and embossed drawings of architectural precedents; and a sequence of drawing and design exercises using wax sticks on raised graph paper and assorted modelling materials. These activities are supplemented by guided tours of spaces on campus, including the Creativity and Innovation District (CID) building, where participants explore student-designed installations made of atypical building materials including bamboo and cork; hands-on introduction to emerging design technologies (e.g. 3D printing, robotic fabrication, and CNC milling); and interaction with professional mentors like Chris Downey, one of the few practicing blind architects in the world, who participated in 2022. The workshop team's reliance on tactile and auditory communication proves generally effective, but also involves unforeseen limitations which will be raised as open questions during this poster session: e.g. that each person needing to physically interact with a model or else carefully describe it affects a slower-paced group communication; and that some drawings are altogether impossible to read (namely tactile axonometric drawings and perspectives).

References

- Bakir, D., Mansour, Y., Kamel, S., Moustafa, Y., & Khalil, M. (2022). THE SPATIAL EXPERIENCE OF VISUALLY IMPAIRED AND BLIND: AN APPROACH TO UNDERSTANDING THE IMPORTANCE OF MULTISENSORY PERCEPTION. *Civil Engineering and Architecture* 10(2), 644-658.
- Barker, P., Barrick, J. & Wilson, R. (1995). *Building Sight: A handbook of building and interior design solutions to include the needs of visually impaired people*. HMSO.
- Bowe, F. (1999). *Universal Design in Education: Teaching Non-Traditional Students*. Greenwood.
- Diderot, D. (1999[1749]). LETTER ON THE BLIND FOR THE USE OF THOSE WHO SEE. *Thoughts on the Interpretation of Nature and Other Philosophical Works* (ed. Adams, D.). Clinaman Press.

- Fernando, N. & Hettiarachchi, A. (2016). BLIND SENSE OF PLACE: A SENSORY ETHNOGRAPHIC STUDY ON THE PARAMETERS OF OPTIMAL DESIGN. 9th Intl. Conference of Architecture Research, 97-110.
- Guffey, B. & Williamson, B. (2020). Making Disability Modern: Design Histories. Bloomsbury Pub.
- Hamraie, A. (2017). Building Access: universal design and the politics of disability. University of Minnesota Press.
- Holl, S., Pallasmaa, J., & Gomez, A. (2006). Questions of Perception: Phenomenology of Architecture. William Stout Publishers.
- Keller, H. (2003[1908]). The World I Live In (ed. Shattuck, R.). New York Review of Books.
- Kleege, G. (2005). BLINDNESS AND VISUAL CULTURE: AN EYEWITNESS ACCOUNT. Journal of Visual Culture, 4(2), 179-190.
- Magee, B. & Milligan, M. (1995). On Blindness. Oxford University Press.
- Meuser, P. (2012). Construction and Design Manual: Accessible Architecture. DOM Publishers.
- Mitchell, W.J.T. (2002). A CRITIQUE OF VISUAL CULTURE. Journal of Visual Culture 1(2), 165-81.
- Ostroff, E. (2001). Universal Design Handbook. McGraw-Hill.
- Pallasmaa, J. (2012). The Eyes of the Skin (3rd ed.). Wiley and Sons.
- Pink, S. (2011). What is Sensory Ethnography? SAGE Publications.
- Pullin, G. (2009). Design Meets Disability. MIT Press.
- Titchkosky, T. & Michalko, R. (2017). THE BODY AS A PROBLEM OF INDIVIDUALITY: A phenomenological disability studies approach. In Boys, J. (Ed.), Disability, Space, Architecture: A Reader, 67-77.
- Vermeersch, P. & Heylighen, A. (2022). INVOLVING BLIND USER/EXPERTS IN ARCHITECTURAL DESIGN: CONCEPTION AND USE OF MORE-THAN-VISUAL DESIGN ARTEFACTS. International Journal of CoCreation in Design and the Arts 17(1), 50-69.
- Williamson, B. (2019). Accessible America: a history of disability and design. NYU Press.

Blueprinting the Future: Unifying Course Elements in an Online MSW Program

Terry Locklear, Alice Locklear, *University of North Carolina - Pembroke*

Abstract: Join Terry Locklear and Dr. Alice K. Locklear in a transformative discourse on refining UNC Pembroke's MSW program by implementing unified blueprint Canvas sites. This initiative has fostered a harmonized approach to hybrid and fully online courses, bringing standardized assignments and activities. This session, rooted in existing literature, will delve into the intricacies of the transition, emphasizing the 'why-to' alongside the 'how-to.' Engage in an interactive exploration of the potential and practicality of unified pedagogical strategies in the dynamic landscape of higher education.

In the continually progressing sphere of higher education, adaptable and reliable educational strategies are pivotal. UNC Pembroke's initiative of refashioning its MSW program underlines a significant stride in this direction, capitalizing on unified Canvas blueprint sites' efficacy to facilitate hybrid and fully online courses, leveraging standardized assignments, activities, and assessments.

Join Terry Locklear and Dr. Alice K. Locklear as they chronicle this meticulous journey of transformation rooted deeply in scholarly discourse, drawing from a wealth of resources, including Bates' exploration of teaching in a digital age (2015) and Garrison's seminal work on the community of inquiry framework (2000). The session plans to guide attendees through the intricate lattice of theoretical foundations and practical executions that underscored this profound transition.

The introductory segment sheds light on the initial landscape of the MSW program, elucidating the pressing need for a transition and establishing the fundamental rationale guiding this decision. It sketches a vivid narrative of the envisioned efficiencies of integrated blueprint Canvas sites, laying a foundational understanding grounded in adaptive learning principles as explored by Dabbagh and Bannan-Ritland (2005) and Siemens' critical insights into the connectivist learning approach (2005).

As we delve deeper into the framework, we unfold the meticulous planning and execution involved in actualizing this vision, encompassing a detailed discussion on the standardization of various elements to foster a harmonized learning pathway, echoing Anderson's emphasis on the interaction equivalency theorem (2003). It offers attendees an enriching exploration of the essential pillars of flexibility and standardization, immersing them in the heart of the implementation phase.

Moreover, we will share transparent insights into the rich tapestry of lessons learned through this evolutionary path, from synchronizing diverse faculty expectations to circumventing unforeseen hurdles. This critical segment fosters a realistic understanding of the complexities involved, grounded in an intricate understanding of the practical realities, and informed by the works of scholars such as Biggs and Tang, focusing on constructive alignment in university teaching (2011).

This session will go beyond a presentation and stand as a collaborative learning space, encouraging participants to actively engage in a rich discussion through interactive segments facilitated by breakout rooms. This hands-on approach promotes a deeper understanding of the practical applications of unified pedagogical strategies in diverse educational landscapes, drawing upon the rich repository of experiences and insights from various educators present.

As we conclude, we encapsulate the vital takeaways, guiding attendees to envision a future where unified, adaptable frameworks will characterize higher education. This discussion aims to foster a vivid discourse encouraging attendees to delve into the dynamic interplay of 'how-to' and 'why-to' in pedagogical strategies, grounded in scholarly insights and poised to pave the path for a more cohesive and adaptable higher educational paradigm.

References

Anderson, T. (2003). Getting the mix right again: An updated and theoretical rationale for interaction. *The International Review of Research in Open and Distributed Learning*, 4(2).

- Bates, A. W. (2015). *Teaching in a digital age: Guidelines for designing teaching and learning*. Tony Bates Associates Ltd.
- Biggs, J., & Tang, C. (2011). *Teaching for quality learning at university: What the student does* (4th ed.). McGraw-Hill/Society for Research into Higher Education/Open University Press.
- Dabbagh, N., & Bannan-Ritland, B. (2005). *Online learning: Concepts, strategies, and application*. Pearson/Prentice Hall.
- Garrison, D. R., Anderson, T., & Archer, W. (2000). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105.
- Siemens, G. (2005). Connectivism: A learning theory for the digital age. *International Journal of Instructional Technology and Distance Learning*, 2(1), 3-10

Bringing global challenges to First Year Experience courses

Joseph Daniel, Janice Chatham Chatham, Jason Johnson, Helene Goetz, *Virginia Tech*

Abstract: This presentation seeks to showcase the efforts of Virginia Tech's University Studies major to extend the value of First Year Experience (FYE) courses beyond teaching students how to function in a college environment to include deeper connections in critical thinking, long term planning, and greater understanding of the larger world around them in their UNIV 1824 course. The UNIV 1824 course is one of 39 FYE classes at Virginia Tech and one of four that also counts toward general education requirements. This is accomplished through the melding of FYE teaching with major/career planning and a course long Global Challenges project.

Employers continue to ask for graduates who are skilled in communication, problem solving, and effective teamwork. To this end, this proposal seeks to offer an instructional course design to improve long-term outcomes for Virginia Tech University Studies (US) students. The US major is designed for undecided students and functions as a space for student learning and exploring both in their path as a student and their place in the world at large. We offer our UNIV 1824 First year experience (FYE) course to both US and non-US students interested in exploring new majors on campus. This course is designed around six core concepts:

1. Introduce the components of decision making and development theory related to real-life issues and problems facing college students.
2. Apply development theory to college transition.
3. Explore how development theory informs a relevant major decision.
4. Integrate multiple sources of information to inform a relevant major decision.
5. Identify values and skills needed for academic success through culture immersion.
6. Examine research for global challenges and propose a solution using credible sources to validate the argument based on a student's perspective major.

The students are led through lecture and small group activity lessons that immerse the student in a space that they learn about themselves, the structure of the university, the breadth of major options available to them, and how to apply critical thinking to themselves and the world at large. Students are provided with regular lectures on university honors code, student development theory, self-assessment, and academic support services. Included with this instruction the student is also exposed to a series of guest lectures from other colleges and university opportunities greatly expanding the student experience and understanding of Virginia Tech. Perhaps what is most unique about the course is the inclusion of two long capstone projects within the class. The first is a Major exploration project which has the students individually make a deep dive in a chosen major in which they fully explore the curriculum and potential jobs for that major. The second is a group-based assignment called the global challenges project. Based on 2015 UN Global goals for sustainable development the students are placed in groups based on goal interest and provided opportunity over the course of the semester to develop a solution to these large-scale wicked problems. The students are encouraged to think about their solutions based on their majors of interest and work together to develop a common strategy. This project introduces transdisciplinary work, teamwork, and critical thinking in an open and exploratory setting. At the end of the semester the students provide a deliverable in the form of a graphic and presentation. This program has seen success with students showing great awareness of academic support services and 85% of student respondents saying that they were better academically prepared after taking the UNIV 1824 FYE class.

Challenges to Anatomy Instruction at Virginia Medical Schools

John McNamara, Michael Nolan, *Virginia Tech Carilion School of Medicine*

Abstract: In light of recently publicized misadventures involving cadaver donor materials, anatomy course directors at the six Virginia medical schools initiated an effort to identify concerns impacting anatomy teaching within the state related to cadaveric materials as well as other factors that might negatively affect teaching resources and approaches. Identified were several, widely acknowledged, challenges affecting pedagogical approaches related to anatomy instruction mostly related to the availability of cadaver donor material as well as others concerns associated with fiscal and administrative matters. We summarize these findings and outline plans now underway to preemptively address these problems and concerns.

Introduction

Anatomy course directors from the six Virginia medical schools were queried under the auspice of the Virginia Association of Human Anatomical Sciences (VAHAS) to identify concerns related to anatomy instruction, to share adaptations made in their teaching approaches and their effects on learning. The intent of this effort was to identify problems and share approaches and solutions that might help guide the efforts of other VAHAS members dealing with similar issues.

Methods

We solicited input from the course directors of the six Virginia medical schools asking each to list up to ten concerns and challenges they perceived regarding anatomy education in the foreseeable future. Responses were received from all six schools with a total of 55 concerns identified. Those reported most frequently and judged to be most significant and likely to have the greatest impact on anatomy education in medical schools are indicated below.

Results

Identified concerns/challenges fell into two major categories, those related to overall anatomy instruction in medical school and those related more directly to issues intrinsic to their own school. We describe those related to overall anatomy instruction identified most often by the course directors:

1. Decreasing scheduled curricular time for teaching anatomy during foundational (pre-clinical) years, making success increasingly difficult for students who lack formal premedical coursework.
2. Gradual reduction in the number of qualified and experienced anatomy faculty resulting in the substitution of faculty less able to maintain high quality educational offerings.
3. Decreasing curricula time requiring reductions in course content, thereby requiring students to learn these topics independently or the advancement of students inadequately prepared for the learning activities therein.
4. Utilization of teaching methods that produce ""surface learning"" and ""teaching to the test"" (i.e., the ability to recite lists of structures from memory using mnemonic aids) rather than those pedagogical approaches that facilitate durable learning.
5. Decreasing scheduled curricula time for teaching during foundational (preclinical) years requiring faculty to eliminate or significantly reduce the use of certain teaching approaches (i.e. lectures or dissection laboratory sessions).
6. Future reductions of human cadaver donor material for teaching purposes, the result of factors including reduced number of donations stemming from publicized misadventures with human donor material, increasing cost related to preparation, storage, transport and disposition of donor material and administrative decisions based on factors other than those predicated on well-established pedagogical principles.

Discussion

The VAHAS meeting provided an opportunity for anatomy educators at the six Virginia medical schools to identify current and future challenges and obstacles to maintaining effective instruction at their respective institutions. The results reflected a remarkable similarity of concerns regardless of class size, course structure or institutional affiliation. Most of these concerns related to curricular changes resulting in reduced time for anatomy instruction particularly during the pre-clerkship period, declining numbers of qualified and experienced anatomy faculty, and reductions in the availability of human cadaver donor material resulting from illegal and unethical actions. These observations have set in motion collective efforts among the participants to overcome these challenges.

Choose Your Own Adventure: Empowering Student Choice in Music Theory

Jennifer Shafer England, *Montana State University*

Abstract: This poster presents a case study of a "choose your own adventure" design in a first-year music theory course, wherein students choose both the grade they intend to work towards and how to earn it. Students stated that the "course structure ... was intricate, wonderfully fair, and gave us the space to forge our own paths" and that it was "actually focused on learning rather than getting assignments in." Based on the results of the students' final projects, this approach created a course that gives students deeper motivation for their work through increased autonomy and power over their own learning.

What would a classroom look like where students could strategically choose which assignments they plan to complete and, consequently, the final grade they intend to earn? According to in-the-trenches experiments and results, course designs that place power and responsibility in the hands of individual students contribute to more equitable approaches to education (Inoue 2019), result in higher levels of engagement (Mittell "Return" 2016), permit better feedback on assessments (Danielewicz and Elbow 2009), and decrease stress over grades and learning in general (Nilson 2016). This poster will present a case study of a "choose your own adventure" course design in a first-year music theory course. Though its status is slowly changing, first-year music theory has a reputation as a "weed-out" course due to the difficulty and foreignness of the content. In addition, equity issues often arise due to variances in educational opportunities available to students pre-college. Finally, since students in a typical classroom will have widely divergent career paths, student-perceived relevance of both content and assignments also has a strong impact on engagement. The "choose your own adventure" design, which utilizes specifications grading principles, attempts to mediate some of these issues.

The course design features a small group of required core assignments (ensuring that all students gain a baseline understanding of key concepts) and a set of common homework assignments. Students then have a library of other assignments to choose from, allowing them to tailor much of their class experience to their individual interests, comfort zones, and/or career paths. Each student therefore "chooses [their] own adventure" through the curriculum, including creating their own plan to arrive at their desired grade. Students who choose to work towards a lower grade complete fewer assignments, but at the same level of competency as students working towards a higher grade. All assignments are graded as satisfactory/unsatisfactory, with allowance for revision and resubmission. This permits students to safely fail, learn from failure, and try again, without detrimental impact to their final grade. Simultaneously, nontraditional content is foregrounded throughout most of the course, and the more traditional content is primarily contained in separate, self-paced assignments. The nontraditional content focuses on elements of musical design that are applicable to a more diverse range of music, promoting relevance and engagement, and the scaled approach to traditional content offers opportunities to narrow the equity gap.

Students have responded very positively to these class structures, stating on anonymous evaluations that the "course structure ... was intricate, wonderfully fair, and gave us the space to forge our own paths" and that it was "actually focused on learning rather than getting assignments in." As the instructor, I found that the quality of student work and levels of student engagement improved notably compared to traditional course designs, without creating an unmanageable instructor workload. Most importantly, based on the level of work in students' final projects and the extra effort visible in assignments, this approach created a course that gives students deeper motivation for their work through increased autonomy and power over their own learning.

References

- Alegant, Brian and Barbara Sawhill. "Making the Grade (Or Not): Thoughts on Self-Design, Self-Assessment, and Self-Grading." *Engaging Students: Essays in Music Pedagogy* 1 (2013).
<http://flipcamp.org/engagingstudents/alegantSawhill.html>
- Danielewicz, Jane, and Peter Elbow. "A Unilateral Grading Contract to Improve Learning and Teaching." *College Composition and Communication* 61, no. 2 (2009): 244-68.
<http://www.jstor.org/stable/40593442>.
- Inoue, A. B. *Labor-Based Grading Contracts: Building Equity and Inclusion in the Compassionate Writing Classroom*. Perspectives on Writing. Fort Collins, Colorado: The WAC Clearinghouse and University Press

- of Colorado, 2019. <https://wac.colostate.edu/books/perspectives/labor/>
- Kohn, Alfie. "The Case Against Grades." November 2011. <https://www.alfiekohn.org/article/case-grades/>
- Mittell, Jason. "Return to Specifications Grading." Just TV (blog), September 12, 2016. <https://justtv.wordpress.com/2016/09/12/return-to-specifications-grading/>
- Naxer, Meghan. "Malleable Mindsets: Rethinking Instructional Design in Undergraduate Music Theory." PhD diss., University of Oregon, 2016.
- Niemiec, Christopher P., and Richard M. Ryan. "'Autonomy, competence, and relatedness in the classroom: Applying self-determination theory to educational practice.'" *Theory and research in Education* 7, no. 2 (2009): 133-144.
- Nilson, Linda B. *Specifications grading: Restoring rigor, motivating students, and saving faculty time*. Stylus Publishing, LLC, 2015.
- Nilson, Linda B. "Yes, Virginia, There's a Better Way to Grade." *Inside Higher Ed*, January 19, 2016. <https://www.insidehighered.com/views/2016/01/19/new-ways-grade-more-effectively-essay>
- Shaffer, Kris. "Part 3: assessing Problem-Based Learning." *Engaging Students: Essays in Music Pedagogy* 2 (2014). <http://flipcamp.org/engagingstudents2/essays/shaffer.html>
- Shor, Ira. *When students have power: Negotiating authority in a critical pedagogy*. University of Chicago Press, 2014.

Closing the Articulation Gap: Undergraduate Research & Career Readiness

Jeanne Mekolichick, *Radford University*

Abstract: Built on a desire to close the articulation gap between the benefits of undergraduate research, scholarship and creative inquiry and the skills, knowledge and dispositions employers are seeking in new hires, this poster will present information and examples drawing from, and expanding on, the Council on Undergraduate Research (CUR) Position Paper, "Recognizing Undergraduate Research, Scholarship & Creative Inquiry as a Career-Readiness Tool" to assist faculty in leveraging this powerful inclusive pedagogical practice to best position all of our students for successful next steps.

Since 2015, the national narrative on the value of higher education began to shift. Americans are losing faith in the value of a college education, higher education costs are increasing significantly, and as a result, fewer students are choosing to go on to college. Employers in the U.S. are also losing confidence in a college degree. The 2021 Hart Study of employers commissioned by AAC&U shows a decrease in employer confidence in higher education from 49% in 2018 to 41% in 2021. The data is concerning and offers a clear call to action for all of us in higher education. This poster focuses on one strategic course of action to address this challenge: Develop a clear articulation of the positive impacts of undergraduate research, scholarship and creative inquiry (URSCI) as career readiness skills in ways that students and stakeholders beyond the academy can understand and value.

There is a substantial body of evidence demonstrating the value of undergraduate research experiences for all students, with disproportionately positive gains for underserved populations. Studies consistently report increased college retention persistence and graduation, and greater likelihood of enrolling in a graduate program of study for students who participate in URSCI. Beyond these traditional student success measures, the data also consistently demonstrate advancements in dispositions and social psychological constructs including confidence, ability to work independently and overcome obstacles, increases in self-efficacy, cultivation of a professional identity, clarification of career path, leadership and professionalism. More, undergraduate research experiences are also found to enhance student learning including growth in communication skills, critical thinking and teamwork, a greater understanding of the research process, and technical skills and data analysis competencies.

Indeed, the valuable skills, knowledge, and dispositions gained through these research experiences often appear as employer priorities in making hiring decisions and can help our students secure valuable positions and navigate the workplace. We see this demonstrated in data from the 2021 AAC&U's Hart Study sharing that employers are 85% more likely or somewhat more likely to hire a student who had a mentored research experience.

To fully realize the transformative impact of URSCI, as faculty, mentors and higher education administrators we are called to extend our definition of student success to include students' first destination, learn how the valuable skills, knowledge and dispositions that our students gain and hone through participating in URSCI experiences relate to desirable career competencies, and help our students learn and articulate how their URSCI experiences help prepare them for their next steps. As we continue to invest in our collective future, it is imperative that we educate ourselves and others how to transparently and explicitly articulate the value of URSCI for the world of work.

Presented here are the National Association of Colleges and Employers (NACE) career readiness competencies with illustrations of how we can articulate the associated sample behaviors within URSCI projects, programming and courses in visible, transparent, and consumable ways for our students to recognize the relevancy, value and the ability to tell their URSCI stories in consumable ways for talent recruiters.

College Students' Beliefs About the Government's Role in American Economics

Lloyd Rieber, *University of Georgia*

William Rieber, *Butler University*

Abstract: Teaching college economics poses challenges in engaging students and fostering critical thinking, given the subject's abstract and intimidating nature. To address these challenges, this study explored the integration of an adaptation of Q methodology, termed Q pedagogy, in a college undergraduate macroeconomics course. The study involved 31 students who completed a Q sort to express their views on the role of government in American economics. Factor analysis revealed four distinct viewpoints among the students. This study provides preliminary evidence of using Q pedagogy to promote "big think" critical thinking among economics students.

Teaching college economics presents a complex array of challenges and opportunities for educators and students alike. Economics can often be perceived as abstract and intimidating. Consequently, instructors face the task of making the subject matter engaging and accessible. Instructors must also wrestle with the diversity of students' prior knowledge and backgrounds which requires striking a balance between catering to beginners while still challenging advanced learners. Most economic instructors encourage their students to think critically about economic issues. Siegfried and Colander (2022), referring to Edward Glaser's (1941) conception of critical thinking (2022, p. 73), suggest that Glaser conceived critical thinking as consisting of "(1) a disposition to consider problems and subjects in an objective, thoughtful way; (2) knowledge of methods of logical inquiry; and (3) skill in applying those methods."

The view of Siegfried and Colander (2022, p. 74) "considers various interpretations of critical thinking and distinguishes 'big think' from 'little think' critical thinking, arguing that both are necessary. Teaching little think critical thought involves teaching the tools, models, and methods that economists use in understanding some aspect of economics, while teaching big think critical thought involves teaching textbook economic models' applicability to the real world and how value judgements are integrated with scientific evidence to reach supportable policy positions."

Instructors often face the difficult task of establishing a learning environment where students feel able and safe in expressing their personal views on class topics, even if they perceive their views to be counter to the dominant opinion. The objective of this research is to address this challenge by integrating Q pedagogy (Rieber, 2023) - an adaptation of Q methodology - into the teaching of economics. Q methodology is a research methodology focused on the study of subjectivity (Stephenson, 1953; Brown; 1993).

The following research question guided this research:

What are the personal views of college students enrolled in an economics course on the role of the government in American economics?

We conducted this study in an undergraduate course on intermediate macroeconomics at a midwestern university. This research was conducted within a one-week period with both in-class and out-of-class components. Two 50-minute in-class sessions were included. The students completed a Q sort on the topic of the role of the government in American economics. The factor analysis of the Q sort data revealed four distinct factors or affinity groups. The students in each group described themselves in the following ways:

Group 1: Team Free Market: Free markets operate better than government regulated economies.

Group 2: Team Interventionist, or We Hate Laissez-Faire: The Federal Reserve should be independent of Congress and the Executive branch of government.

Group 3: Team Spend Your Money: Interactions between consumers and businesses often produce superior results to crafted government decrees.

Group 4: Team Some Government over No Government: There was a role for government intervention in the economy, but with very strict limits.

The results of this study offer preliminary evidence of Q pedagogy promoting "big think" critical thinking by college students in economics.

References

- Brown, S. R. (1993). A Primer on Q Methodology. *Operant Subjectivity*, 16(3/4), 91-138.
doi:<https://doi.org/10.22488/okstate.93.100504>
- Glaser, E. M. (1941) An experiment in the development of critical thinking. New York: Columbia University, Teacher's College.
- Rieber, L. P. (2023). Q Pedagogy: Bringing Students' Subjectivity into the Design of Instruction. *International Journal of Designs for Learning*, 14(2), 87-97. doi:<https://doi.org/10.14434/ijdl.v14i2.34715>
- Siegfried, J., & Colander, D. (2022). What does critical thinking mean in teaching economics?: The big and the little of it, *The Journal of Economic Education*, 53:1, 71-84, DOI: 10.1080/00220485.2021.2004278
- Stephenson, W. (1953). *The study of behavior: Q-technique and its methodology*. Chicago: University of Chicago Press.

Designing a PR Course Integrating OER Strategies & #GivingTuesday Campaign

Sonya DiPalma, *University of North Carolina at Asheville*

Abstract: This poster illustrates how to design a public relations course integrating open education resource (OER) strategies with the national Giving Tuesday fundraising campaign. Increasingly, faculty are encouraged to create courses using OER to lower the textbook cost for students. Simultaneously, academic departments are expected to become more involved in fundraising campaigns like #GivingTuesday, held the last Tuesday in November. Students learn public relations principles through OER resources and design and implement a #GivingTuesday campaign within the course. The real-time results of the campaign allow students to evaluate their campaign efforts and build their student portfolios.

Strategic Communication is a 200-level workshop course that involves developing and practicing media production skills for public relations. The course provides an overview of public relations practices by exploring the function and history of public relations, the PRSA Code of Ethics, diversity awareness, and public relations tactics such as media advisories, news releases, storytelling, and social media. Following the public relations model known as ROPES - research, objectives, programming, evaluation, and stewardship - students design and implement a #GivingTuesday campaign as their final project. The University's Office of Advancement works with the class to develop the campaign timeline and guidance on fundraising messaging.

Students set the overall campaign goals and strategy, write objectives, and create the campaign slogan, video, alum email messaging, and social media posts. In groups, students also create fundraising plea videos and messaging to promote the campaign on their social media and GiveCampus, an education fundraising technology platform. The 24-hour giving campaign allows students to realize real-time results of their efforts. Rather than focusing on a specific fundraising amount, students set an engagement goal based on the number of donors, and groups compete for the highest number. Their reflective evaluation of the #GivingTuesday campaign incorporating principles learned in the course serves as their final exam. Students in the Fall 2022 course exceeded their donor goal and covered costs to attend the Spring 2023 North Carolina College Media Association Conference.

References

- Association for Education in Journalism and Mass Communication. (2022). <http://aejmc.org/>
- Institute for Public Relations. (2022). <https://instituteforpr.org/>
- McGreal, R. (2019). A survey of OER implementations in 13 higher education institutions. *The International Review of Research in Open and Distributed Learning*, 20(5), 141-145.
- Public Relations Society of America. (2022). About Public Relations. <https://www.prsa.org/about/all-about-pr>
- The Museum of Public Relations. (2022). <https://www.prmuseum.org/>
- Varma, S., & Ren, X. (2021, November). Developing OER-based general education courses to improve student retention in higher education. In *Innovate Learning Summit* (pp. 272-276). Association for the Advancement of Computing in Education (AACE).
- Wily, D. (n.d.). Defining the "open" in open content and open educational resources. <http://opencontent.org/definition>
- Wiley, D., & Hilton, J. L. (2018). Defining OER-enabled pedagogy. *The International Review of Research in Open and Distributed Learning*, 19(4).
- Zhao, Y., Satyanarayana, A., & Cooney, C. (2020). Impact of Open Educational Resources (OER) on Student Academic Performance and Retention Rates in Undergraduate Engineering Departments.

Designing CTL Initiatives to Build a Teaching Community

Alison Barton, Philip Smith, *East Tennessee State University*

Abstract: Centers for Teaching and Learning (CTLs) must often operate with limited resources, making it difficult to reach instructional faculty with scaled learning opportunities. At ETSU's Center for Teaching Excellence, we are piloting new models that help build a teaching community while expanding, at low to no cost, the number of personnel willing to share innovative teaching methods with the greater university community.

In this poster, we will explore:

The Problem: A review of CTLs' limitations with resources, based on available literature, as well as the imperative to redirect/re-center institutions' focus on teaching. Limited resources impede CTLs' capabilities to act to meet this need.

Case Example: A review of ETSU's Center for Teaching Excellence's existing resources and existing/upcoming needs for CTE involvement, advising, and support.

Challenges and Concerns: A review of the number of faculty served in 2022-2023, as well as a data regarding the "core" teaching faculty that regularly attend CTE learning events.

Initiatives: We will review the design and process of two new programs, one begun in Spring, 2022 and the other in Fall, 2023. Both programs take advantage of our core advocates as volunteers, rewarding them primarily with institutional recognition and, for a few more dedicated faculty, a modest honorarium.

Initiative 1: Flash Mentoring. This initiative, shared at last year's POD Conference (Rentschler, 2022), brings together two faculty "mentors" for a specific teaching topic (e.g., "Showing Students You Care"). In 30-minute, online sessions, these two mentors share their best ideas, then open up the remaining time for discussion and questions.

Initiative 2: CTE Affiliates and Associates. This fall, we are piloting a program wherein we solicited targeted volunteer service at two levels for the CTE. Affiliates, who can be full-time or part-time faculty or staff who teach, agree to provide 6 or more "service credits" for the CTE, and select from among a menu of ways this can be done (menu will be available as a handout). Associates are limited-spot, faculty-only service opportunities, and are selected from among qualified applicants. Associates are considered CTE staff for the year, attend staff meetings, and agree to serve a minimum of 12 or more CTE service credits; the position is renewable for a maximum of 3 years. Both groups are given the title for the academic year, are recognized by university officials, and are invited to exclusive CTE recognition events; Associates are given a modest honorarium for their service.

Outcomes: Anecdotal evidence of efficacy and reach will be explored (for example, the CTE now has 18 Affiliates and 2 Associates for 2023-24); we will include theoretical exploration of the benefits of building a teaching community through dedicated service. Emerging questions and issues will be shared.

References

- Campbell, C., & Gyurko, J. (2023). *Great college teaching: Where it happens and how to foster it everywhere*. Cambridge, MA: Harvard Education Press.
- McMurtrie, B. (Sept. 20, 2023). Americans value good teaching. Do colleges? The evidence doesn't look good. *The Chronicle of Higher Education*.
- Rentschler, E. (November, 2022). Flash mentoring conversations for reenergizing and reimagining faculty support networks. POD Conference (Online), 2022.

Developing Career Readiness Through Undergraduate Research: A Qualitative Analysis

Cora Burt, Joseph Wirgau, John Brummette, *Radford University*

Abstract: The primary motivation for students and their families to pursue higher education is to improve their employment prospects, lifetime earnings potential, and to gain marketable skills. Institutions have implemented experiential learning opportunities, such as undergraduate research programs, in response to the necessity of these skills for the workforce. This presentation will share the results of a qualitative content analysis analyzing prompted graduating students' reflections on their undergraduate research experiences. The themes that have emerged from our inductive, thematic coding will be discussed, as well as the contribution of undergraduate research to the development of career readiness.

Since 2010, 86% of incoming freshmen nationally state that improving their job prospects is their primary motivation towards earning a college degree (Gallup & Strada, 2017). According to organizations such as the National Association of Colleges and Employers (NACE), employers are seeking "soft skills," or "Career Readiness Competencies," that many graduates lack, such as critical thinking or communication (National Association of Colleges and Employers, 2019). Nationally, 41% of currently enrolled students feel as if they will graduate with the skills required for their field. Even less, 39%, have stated that they feel prepared to enter the job market (Gallup & Strada, 2017). With this in mind, it is crucial that these "Career Readiness Competencies" are developed within students during their academic careers. One way that has been shown to increase these skills are Experiential Learning Opportunities, such as undergraduate research (Laursen, 2015) and Course-based Undergraduate Research Experiences (CUREs) (Newell & Ulrich, 2022). CUREs have been shown to have a variety of benefits, such as increasing students' confidence, self-efficacy (Barker, 2009) cognitive development, and critical thinking skills (Newell & Ulrich, 2022). Our institution, classified as a midsized public university, offers CUREs to a cohort of newly enrolled freshmen and transfer students. Additionally, our undergraduate research office provides support to any student who engages in research projects and presents their findings. Students who have completed a minimum of one year of research and are about to graduate are awarded a research designation on their diploma. As part of this designation, they are required to compose a reflective essay in response to a specific prompt, discussing the influence of their undergraduate research experiences on their professional and intellectual development. Based on the students' reflections, a qualitative content analysis was performed utilizing Grounded Theory methodology, specifically employing inductive Open, Axial, and Selective Coding techniques (Strauss & Corbin, 1990). Upon analyzing the coded reflections, it has been noted that various themes have emerged within the text. These themes include the development of communication and critical thinking skills, students gaining niche skills within their field, an increased sense of belonging, as well as personal and professional growth. Within our presentation, we will provide an overview of NACE's Career Readiness Competencies, as we are using them as a framework for our project, as well as present our results for our qualitative content analysis. Using the themes that have emerged, we will show through student perspectives the transformative power of undergraduate research experiences in enhancing career readiness.

References

- Corbin, J., and Strauss, A. 2008. *Basics of Qualitative Research: Techniques and Procedures for Developing Grounded Theory*. SAGE Publications, Incorporated.
- Gallup and Strada. 2017. *2017 College Student Survey: A Nationally Representative Survey of Currently Enrolled Students*. Washington D.C.: Gallup
- Laursen, S. L. 2015. *Challenges and Opportunities for Measuring Student Outcomes of Undergraduate Research*. *Ethnography & Evaluation Research*, University of Colorado Boulder.
<https://doi.org/10.1119/perc.2015.plenary.002>.
- National Association of Colleges and Employers. 2019. *Job Outlook Survey 2019*.
<https://ww1.odu.edu/content/dam/odu/offices/cmc/docs/nace/2019-nace-job-outlook-survey.pdf>.
- Newell, MiKayla J., and Paul N. Ulrich. 2022. Gains in Scientific Identity, Scientific Self-Efficacy, and Career Intent Distinguish Upper-Level CUREs from Traditional Experiences in the Classroom. *Journal of Microbiology & Biology Education* 23 (3). <https://doi.org/10.1128/jmbe.00051-22>.

Engaging Students with Responsive Teaching Practices in Online Learning Environments

Camille Goins, *University of North Carolina - Pembroke*

Abstract: The presenter of this session is a researcher of Culturally Responsive Teaching Practices in Higher Education and a certified Online Teacher Excellence Instructor. This session will allow participants to explore the development of an online learning environment through a culturally responsive lens. Through integrating multimodal technology, and creating and infusing cultural components, this session will provide a fully immersive experience to empower higher education educators to lead in cultivating critical consciousness and promote educational advancement for all students.

The presenter of this session works at UNCP, one of the most diverse institutions in the UNC System. They have engaged in research on Culturally Responsive Teaching Practices in Higher Education and is a certified Online Teacher Excellence Instructor. As part of the Teaching and Learning Center, the presenter has actively engaged with the Scholarship of Teaching of Learning (SoTL) and has successfully implemented their research into their work as a higher education instructor. The presenter shares a common interest in intentionally engaging students in the learning process through a technology-enhanced learning environment by successfully incorporating Culturally Responsive Teaching practices to ensure students have the capacity to embrace rigor and succeed in higher education. By developing strong relationships with students and humanizing the learning process, the presenter incorporates a variety of instructional technology tools that allow for a transformed online learning environment that actively engages students by making connections with their everyday lived experiences. Participants of this session will be exposed to a variety of technology tools used in the online learning environment that allow students to engage with their learning. By incorporating research-based practices, this session will provide knowledge and resources to participants to illustrate how to create an online learning environment that is culturally inclusive and student-centered.

References

Goins, C.L. (2023). Engaging Students with Culturally Responsive Teaching Practices in an Online Learning Environment. *UNC System Learning and Technology Journal*, 1(1). <https://journals.charlotte.edu/ljtj/article/view/1619>

Enhancing Instructor Social Presence in Asynchronous Courses Using Weekly Videos

David Marshall, *Auburn University*
Savanna Love, *Randolph-Macon College*

Abstract: The purpose of this exploratory action research project was to understand how incorporating weekly videos in asynchronous graduate-level coursework impacts instructor social presence. A total of 36 students completed the survey, and they rated the courses high in instructor social presence ($M=6.40$, $SD=.74$; 7-point scale). Responses to open-ended items reveal that students perceived the weekly videos helped: (1) by making the instructor seem like a 'real person;' (2) with understanding course content; and (3) with making the instructor seem more engaged and accessible in the course.

Recent literature has demonstrated the ways in which asynchronous, one-to-one, video feedback is advantageous to building student-teacher relationships and increasing engagement in online courses (Borup et al., 2014; identifying reference). However, the incorporation of weekly videos for the consumption of an entire class also holds the potential of increasing instructor social presence in asynchronous coursework. The purpose of this exploratory action research project was to understand how incorporating weekly videos in asynchronous coursework impacts instructor social presence. This study aims to answer a single research question: To what extent does the incorporation of weekly videos in asynchronous coursework impact instructor social presence?

Instructor social presence has been defined as the ability to include affective expression, enhance open communication and group cohesion, and the instructor's ability to present themselves as a 'real person' (Garrison et al, 1999). Scholars have found instructor social presence to be a significant contributor to positive learning communities (e.g., Pollard et al., 2014). The weekly videos that were incorporated in the asynchronous courses involved the instructor recording a video at the start of each week that reviewed common mistakes made on the previous week's assignments, touched on key concepts for the week to come, and reviewed the expectations for the assignments to come. They were posted at the start of each week in the course's learning management system (i.e., Canvas).

To answer our research question, we examined our student course evaluations for the last three semesters in which each of us taught asynchronous courses that incorporated weekly videos. We also analyzed survey data that were initially collected for non-research purposes and included an instructor social presence scale (Yang et al., 2006). A total of 36 students completed the survey, and they rated the courses high in instructor social presence ($M=6.40$, $SD=.74$; 7-point scale). Three-fourths (75.0%) of students either strongly agreed or agreed with the statement I feel connected to the instructor in this course. Responses to open-ended items reveal that students perceived the weekly videos has helped: (1) by making the instructor seem like a 'real person;' (2) with understanding course content; and (3) with making the instructor seem more engaged and accessible in the course.

Findings from this research may provide important insight into effective practices for online asynchronous courses. As coursework continues to be offered online and instructors are asked to find ways to actively engage their students, video components offer a potential strategy to increase social presence without overburdening the instructor. Thus, findings will also discuss the instructor's perspectives on the value added in terms of student experience compared to instructor time spent on incorporating these weekly.

References

- Borup, J., West, R. E., Thomas, R., & Graham, C. (2014). Examining the impact of video feedback on instructor social presence in blended courses. *International Review of Research in Open & Distance*, 15(3), 1-15. <https://doi.org/10.19173/irrodl.v15i3.1821>
- Garrison, D. R., Anderson, T., & Archer, W. (1999). Critical inquiry in a text-based environment: Computer conferencing in higher education. *The Internet and Higher Education*, 2(2-3), 87-105. [https://doi.org/10.1016/S1096-7516\(00\)00016-6](https://doi.org/10.1016/S1096-7516(00)00016-6)
- Pollard, H., Minor, M., & Swanson, A. (2014). Instructor social presence within the community of inquiry framework and its impact on classroom community and the learning environment. *Online Journal of Distance Learning Administration*, 17(2).

Yang, C., Tsai, I., Kim, B., Cho, M., & Laffey, J. (2006). Exploring the relationships between students' academic motivation and social ability in online learning environments. *The Internet and Higher Education*, 9(4), 277-286. <https://doi.org/10.1016/j.iheduc.2006.08.002>

Enhancing Students' Online Learning Experiences Through a Hands-On Research Project

Oscar Solis, Eric McKee, *West Texas A&M University*

Abstract: This study aimed to investigate pedagogical strategies that instructors teaching online classes can utilize to create a hands-on research project. We implemented a research project in three online finance undergraduate courses and utilized the Wharton Research Data Services (WRDS) database. Students completed a hands-on research project using the WRDS database, analyzed a publicly traded company, and wrote a report. The researchers developed the Student Perceptions of WRDS online survey to examine the perceptions of online students toward using WRDS for research and to explore the benefits and challenges of a hands-on research project, which the poster highlights.

This study aimed to investigate pedagogical strategies that instructors teaching online classes can utilize to create a hands-on research project. In the spring 2022 semester, we implemented a research project in three online finance undergraduate courses and utilized the Wharton Research Data Services (WRDS) database. WRDS is widely used by researchers in finance, economics, and many other areas, and it also offers materials suitable for the classroom. Students completed a hands-on research project using the WRDS database, analyzed a publicly traded company, and wrote a report. The researchers developed the Student Perceptions of WRDS online survey to examine the perceptions of online students toward using WRDS and the specific assignment, and to explore the benefits and challenges of a hands-on research project in general. Student feedback was mostly positive, and the feedback emphasized that instructors are essential to fostering student learning, developing online students' skills, and providing practical guidance in hands-on projects for online classes. The purpose of this poster is to highlight a hands-on online research project, instructional strategies used for the project, and the benefits and challenges of the project. This project supported the finance area's initiative to engage students with hands-on research activities and utilize a widely used national dataset.

Enhancing Teaching Observation and Promoting Professional Identity Formation

Mariah Rudd, Sarah Harendt, Shari Whicker, Jennifer Cleveland, *Virginia Tech Carilion School of Medicine*

Abstract: Peer observation is a required exercise within many teaching fields. However, within higher education we find that while faculty stay up to date in their areas of relevant subject matter they are not always as fastidiously updated in the areas of teaching and learning. Teaching observation serves as a professional development opportunity that provides educators with self-directed learning, reflective practice, and diverse perspectives. In this workshop we will discuss the value of peer observation, the critical role it can play in promotion and personal growth, and how to focus observations.

Peer observation is a required exercise within many teaching fields. It serves as a developmental exercise to help assess deficits and identify areas in which to enhance teaching. However, within higher education we find that while faculty stay up to date in their areas of relevant subject matter they are not always as fastidiously updated in the areas of teaching and learning. Peer observation can provide educators with insight, strategies, and feedback to enhance their teaching practices towards continuous improvement. Albert Bandura's Social Learning Theory supports the importance of peer observation as a process for learning and centers the value of modeling and feedback. Teaching observation also serves as a professional development opportunity providing educators with self-directed learning, reflective practice, and diverse perspectives. Additionally, peer observation is a process that fosters both self-reflection and peer evaluation.

In this workshop, we will discuss the value of peer observation within higher education, the critical role it can play in promotion and personal growth, and how to focus observations to provide constructive and actionable feedback that supports growth.

Participants will leave this session with tools for leveraging peer observation within promotion and as a tool for enhancing professional identity formation as an educator.

Learning Objectives

- o Articulate the benefits of peer observation of teaching
- o Describe what teaching observation is and is not
- o Recognize ways to tailor the teaching observation process to enhance professional identity formation

Outline

o20 minutes: Large Group Discussion

Review the importance of, and strategies for, effective teaching observation

Discuss the role of teaching observation within the promotion process and professional growth

Explore the relationship between teaching observation and professional identity formation and review techniques to promote professional identity through teaching observation

o10 minutes: Think Pair Share

Collaborate with a peer(s) to think about how you could utilize peer observation as a tool for self-reflection

Identify areas of your own teaching you would want to focus on during peer observation

o10 minutes: Small Group Exercise

Review the provided observation tool and tailor to fit your own teaching venue and focus areas (do not focus on content)

o10 minutes: Case Study Review

Review a selection of case studies with identified venues, teaching challenges, and include different levels of learners to help identify how observation could be beneficial and how feedback should be tailored to their development as an educator

o 10 minutes: Wrap-up

Teaching observation plays a critical role in an educator's professional journey. By engaging in self-reflection and peer evaluation, educators can enhance their teaching practices, promote their professional growth, and establish a strong sense of professional identity as an educator. This workshop aims to provide participants with valuable insights and practical strategies to leverage the power of teaching observation in their careers.

References

Bandura, Albert, and Richard H. Walters. Social learning theory. Vol. 1. Prentice Hall: Englewood Cliffs, 1977.

Evaluating Impact of Food Science Cyberbiosecurity OER in University Classrooms

Rebekah Miller, *Virginia Tech*

Abstract: Open education resources (OER) can support inclusive and accessible education in any discipline. When looking at multidisciplinary topics, OER have the potential to be extremely beneficial. Cyberbiosecurity is an emerging discipline with increasingly important applications. An OER module focused on cyberbiosecurity, 'Securing the Food Industry: An Introduction to Cyberbiosecurity for Food Science,' was published for use in university classrooms of varying disciplines, including food science, computer science, and related disciplines. As quality assessment and review of OER is not common, this work utilized surveys to identify the module's effectiveness as it was implemented in classrooms.

Open education resources (OER) have seen increased use and versatility as accessible education has continued to be a focus in academic institutions¹. Use of OER can also benefit the instructor, as utilizing OER can reduce the instructor input required when implementing a new topic into a course, which can be especially helpful when looking to add emerging or multidisciplinary topics such as cyberbiosecurity. Cyberbiosecurity focuses on securing biological data and systems from cyber related threats and is quickly becoming an important discipline in many existing fields of study and business^{2,3}. 'Securing the Food Industry: An Introduction to Cyberbiosecurity for Food Science', an introductory course module published as OER, was developed to support instructors in the implementation of cyberbiosecurity into their courses at the university level especially into introductory food science, food safety, cybersecurity, or information technology courses². The module includes lecture materials addressing security of the food industry, cyberbiosecurity definition and meaning, and types of cyber-attacks, and 3 distinct case studies with discussion questions on the security of (1) digital data, (2) processing controls, and (3) traceability information². Like most OER, this module has not been evaluated for quality or effectiveness prior to its publication⁴. Understanding how instructors utilized the module and student learning impacted by the module verifies the module's appropriateness on OER sites and in classrooms. This study utilized pre- and post- module surveys from both students and instructors to determine the module's effectiveness in increasing student awareness, interest, and understanding of cyberbiosecurity and how it relates to food science and the food industry as well as the implantation methods used by the instructor. Initial data collection focused on one university course's implementation of the module. Future research will look to expand data collection to multiple campuses, departments, and courses to better understand the overall versatility and impact of the module.

References

1. Hilton, John. (2016). Open educational resources and college textbook choices: a review of research on efficacy and perceptions. *Educational Technology Research and Development* volume 64, 573- 590. <https://doi.org/10.1007/s11423-016-9434-9>
2. Miller, R., Yin, Y., Ray, A., & Duncan, S. (2022). *Securing the Food Industry*. VTechWorks. [Course module]. <http://hdl.handle.net/10919/111375>
3. Murch, R. S., So, W. K., Buchholz, W. G., Raman, S., & Peccoud, J. (2018). Cyberbiosecurity: An Emerging New Discipline to Help Safeguard the Bioeconomy. *Frontiers in Bioengineering and Biotechnology*, 6. <https://www.frontiersin.org/article/10.3389/fbioe.2018.00039>
4. Sutton, S. W., & Geuther, C. (2020). Open Educational Resources: Building Collaborative Bridges. *The Serials Librarian*, 78(1-4), 64-68. WorldCat.org. <https://doi.org/10.1080/0361526X.2020.1697138>

Faculty Community of Practice to Support Teaching with UDL Principles

Abiodun Stephen Ijeluola, Chelsey Bahlmann Bollinger, Dayna Henry, *James Madison University*

Abstract: This poster will describe the development of an interdisciplinary faculty community of practice to support faculty teaching with Universal Design for Learning (UDL) principles. Learning Access through Universal Design (LAUD) CoP blends a self-paced canvas course and a professional learning community with consultations. Through this CoP model (Bollinger, et al., 2023), faculty learned UDL principles with self-reflection and practices. Faculty were supported iteratively with examples to develop UDL course components (e.g., instructional media, or assessment items). The poster will present the CoP framework with design for teaching examples from the LAUD initiative, a cross-campus collaboration initiated by two colleges.

This poster will describe the development of an interdisciplinary faculty community of practice to support faculty teaching with Universal Design for Learning (UDL) principles. Learning Access through Universal Design (LAUD) CoP blends a self-paced canvas course and a professional learning community with consultations. Through this CoP model (Bollinger, et al., 2023), faculty learned UDL principles with self-reflection and practices. Faculty were supported iteratively with examples to develop UDL course components (e.g., instructional media, or assessment items). The poster will present the CoP framework with design for teaching examples from the LAUD initiative, a cross-campus collaboration initiated by two colleges.

Community of practice (CoP) (Wenger, 2010) was adopted to sustain experiential learning for faculty in real-world contexts with proper guidance, mediation, and support through a networked body of shared interest and resources (de Carvalho-Filho, et al., 2020; Stark, & Smith, 2016). Since members in a CoP are building, contributing, and experimenting based on a common goal for inclusive teaching excellence, we used the following strategies in designing the LAUD project: 1) selecting and convening a core group of members with shared interests based on clearly articulated common goals and identified essentials of the knowledge base; 2) making the starting point and process doable and flexible so team members can locate where and how to contribute with their respective competencies; 3) communicating with care, intention, and invitation to new ideas, with a central facilitation point to ensure smooth project management from multiple directions (Bollinger, et al, 2023; de Carvalho-Filho, et al., 2020).

Based on the goal of pursuing inclusive teaching excellence, the community focuses on collaborative learning, UDL content building, and design research around the areas of:

UDL strategies

Inclusive pedagogy

Practical skillsets to build UDL content

Workflow and venues for an educational design research effort

Co-sponsored by JMU's College of Health and Behavioral Studies, Libraries, and collaborated through the Center for Faculty Innovation, the program scaffolded faculty participants to plan and generate course components for UDL applications. The LAUD initiative outcomes included:

Appreciating the effect of UDL practices on scaffolding inclusive learning experiences.

Identifying accessibility functions with day-to-day digital tools for teaching and learning and possibly physical classroom settings.

Developing a UDL-oriented syllabus.

Building an accessible and inclusive assessment item for a class.

Optionally, documenting design research for scholarly work development.

References

1. Bahlmann Bollinger, C. M., Chenevey, L., Liu, J. C., Lantz, J., Henry, D., Bryson, B. J., & King, R. (2023). Universal Design for Learning Access: Faculty-Centered Community Design. In *Reimagining Education: Studies and Stories for Effective Learning in an Evolving Digital Environment* (pp. 223-237). Cham: Springer International Publishing.
2. de Carvalho-Filho, M. A., Tio, R. A., & Steinert, Y. (2020). Twelve tips for implementing a community of practice for faculty development. *Medical teacher*, 42(2), 143–149. <https://doi.org/10.1080/0142159X.2018.1552782>
3. Stark, A. M., & Smith, G. A. (2016). Communities of practice as agents of future faculty development. *The Journal of Faculty Development*, 30(2), 59-67.
4. Wenger, E. (2010). Communities of Practice and Social Learning Systems: The Career of a Concept. In C. Blackmore (Ed.), *Social Learning Systems and Communities of Practice* (pp. 179-198). London: Springer. https://doi.org/10.1007/978-1-84996-133-2_11

Faculty Perspectives and Student Responses to the Persistence Project

Melanie Trexler, Meg Steinweg, *Roanoke College*

Abstract: How do faculty and first-year students respond to the Persistence Project? We invited faculty teaching courses with 50%+ first-years to participate in the Faculty Persistence Project aimed at creating relationship-rich environments in our classrooms to bolster student persistence. Our poster shares AY 2022-2023 data about faculty perceptions of the Persistence Project, and its impact student persistence as evidenced through student usage of subject tutoring, course withdrawal rates, and student GPAs. Our data suggests that the Persistence Project is one small element that positively shapes first-year student persistence and faculty perspectives of their relationships with first-years.

Working at a small liberal arts college, students, faculty, and administration share a baseline expectation of a relationship-rich campus. Faculty strive to memorize students' names early in the semester, meet with students one-on-one, and intentionally work with students to encourage their success in individual classes. Historically, these strategies aid student success and create relationship-rich environments in the classroom that extend across campus.

However, on our campus, rarely did all these relationship-rich tasks occur intentionally in the first three weeks of the semester. Looking into the data, our institutional progress-reports (captured for first-year students at the three-week point), our institution recognized that many faculty did not return an assignment with formative feedback. Additionally, both faculty and students reported fewer students attending office hours during and since the pandemic. Many students indicated confusion over the term "office hours."

To address some of these differences we were seeing we began the Faculty Persistence project in AY2022-2023. Faculty could volunteer to participate in the project which asked them to complete five tasks in the first three weeks, (1) learn students names, (2) change office hours to student hours, (3) return an assignment to each student with formative, success-oriented feedback, (4) express high academic standards for the class and send a clear message that students who struggle are not doomed, and (5) Meet one-on-one with students for a ten to fifteen-minute conversation. The Persistence Project offered an opportunity for our faculty to create intentional community with our first-year students and, ideally, bolster student collegiate persistence and success by forming stronger faculty-student relationships early in the semester.

Of the twenty-six faculty who participated in the final survey, 65% reported that engaging in the Persistence Project resulted in a positive difference in student-professor relationships; 61% indicated a positive classroom dynamic as a result of those relationships. First-year students, in turn, also benefitted. 78% of first-year students were enrolled in a Persistence Project class. While GPAs among Persistence Project and non-Persistence Project students remained similar, those in Persistence Project courses did utilize campus tutoring services above what we would expect. Further, those students enrolled in a Persistence Project class were less likely to withdraw from their Persistence project class compared to a non-Persistence Project class. Finally, students enrolled in a Persistence Project class were less likely to withdraw from the college than students in non-persistence class. Our data suggests that the Persistence Project is one small element that positively shapes first-year student persistence and faculty perspectives of their relationships with first-years.

References

- "Community College." The Mixed Methods Blog at Columbia University, May 9, 2018, <https://ccrc.tc.columbia.edu/easyblog/faculty-leadership-student-persistence-oakton-community-college.html>. Accessed September 29, 2023.
- Felten, Peter and Leo M. Lambert. *Relationship-Rich Education: How Human Connections Drive Success in College*. Baltimore, Maryland: John Hopkins University Press, 2020.
- 2021 Oakton College President's Annual Report to the Community. <https://online.flippingbook.com/view/473355562/>. Accessed September 29, 2023.
- Smith, Ashley A. "'The Persistence Project.'" *Inside Higher Ed*, March 12, 2018. <https://www.insidehighered.com/news/2018/03/13/oakton-community-college-builds-faculty-student-relationships-increase-persistence>. Accessed September 29, 2023.
- Supiano, Becky. "To Improve Persistence, This College Asks Professors to Have a 15-Minute Meeting With Each

Student." The Chronicle of Higher Education February 6, 2020,
<https://www.chronicle.com/newsletter/teaching/2020-02-06>. Accessed September 29, 2023.

Formative Assessment Strategies to Promote Student Engagement in STEM

Katrina Palmer, Katherine Mawhinney, Jennifer Cecile, Amanda Howell, *Appalachian State University*

Abstract: This poster demonstrates examples of mathematics and chemistry activities that encourage every student's input to increase engagement and build understanding. The examples shown are used in our calculus and chemistry support classrooms, many of the types of tasks can be generalized to other STEM courses.

To help students persist in their STEM degree, more universities are developing ways to support calculus and chemistry students. Research suggests that math and chemistry tend to be barriers for STEM students. At Appalachian we created both calculus and chemistry corequisite courses. One of the many design aspects for these courses is to include active learning and self-regulated learning to promote student interaction and increase student confidence. The purpose of this poster is to share alternate questioning techniques designed to increase engagement and build understanding in both chemistry and calculus.

From Helpful Resource to Burdensome Demand: Email Impact on Faculty

Mariah Rudd, Shari Whicker, *Virginia Tech Carilion School of Medicine*

Abstract: The phenomena of faculty burnout and well-being have garnered attention within the medical education literature in recent years, however the role played by email communication remains relatively unexplored. The authors surveyed faculty across institutions to assess experiences with email management. Results indicated that faculty were challenged by spending a considerable amount of time on email-related tasks. These stressors were reported to negatively impact faculty well-being. This study illuminates the evolving role of email communication from its intended purpose as both a helpful communication resource to both a resource and a burdensome demand for modern faculty.

Purpose: The phenomena of faculty burnout and well-being have garnered substantial attention within the medical education literature in recent years. While the impact of electronic health records on burnout and well-being has been broadly studied and documented, the role of email communication remains relatively unexplored. This study investigated the impact of email challenges on faculty well-being. using the Job Demands-Resources model as a framework.

Methods: The authors surveyed a diverse group of faculty across medical institutions to assess their experiences with email management. They collected data on email communication practices, difficulties, and the related effects on their well-being.

Results: Responses from 447 faculty represented 115 unique institutions. Results indicated that faculty members were challenged by spending a considerable amount of time on email-related tasks. Respondents indicated that basic email demands are exacerbated by institutional firewalls, managing multiple professional email accounts, frequent password changes, automatic deletion/archiving, and other technical issues.

Notably, these stressors were reported to negatively impact faculty well-being. Faculty indicated that they commonly use workarounds to navigate these challenges, often at the expense of information security and personal resources. Positive institution-level changes, while infrequent, included reduced password change frequency, expanded storage space, increased autonomy for email deletion/ archival, and enhanced IT support.

Conclusions: This study illuminates the evolving role of email communication from its intended purpose as both a helpful communication resource to both a resource and a burdensome demand for modern clinical faculty. The results of this study serve as a call to action for institutions to address email-related challenges, and thereby promote faculty well-being.

References

- Bakhai A, McCauley L, Stones L, et al. Shining a light on an additional clinical burden: work-related digital communication survey study - COVID-19 impact on NHS staff wellbeing. *Humanities and Social Sciences Communications*. 2022;9(1):1-11. doi:<https://doi.org/10.1057/s41599-022-01427-7>
- Bakker AB, Demerouti E. The Job Demands-Resources Model: State of the Art. *Journal of Managerial Psychology*. 2007;22(3):309-328.

Geriatric Education Meets VR Pedagogy: Preparing for an Aging Society

Harold Philippi, Jr., Mingyang Zheng, Benjamin Pinckney, Pamela Frasier, *Radford University*

Abstract: Currently, professional education provides minimal exposure to geriatric populations and limited training in the assessment and treatment of older adults. Studies consistently show that negative attitudes towards aging and a lack of confidence in knowledge and skills are major factors that discourage healthcare workers from working with aging populations. This project proposes a novel pedagogical strategy, Virtual Reality (VR) simulation, coupled with ongoing exposure and social interaction between undergraduate health sciences students and an aging population. The findings will provide insight into the effectiveness of this method, possibly improving gerontological education for health sciences students.

Introduction

"Very few health professionals are trained in geriatrics and less than 5% have any type of licensing for geriatrics care" (Flaherty & Bartels, 2019). Overall, 4% of social workers, 2.6% of advanced practice registered nurses, and less than 1% of registered nurses, physicians assistants, and pharmacists are certified in geriatrics (Institute of Medicine, 2008). Studies consistently show that negative attitudes towards aging and a lack of confidence in knowledge and skills are major factors that discourage healthcare workers from working with aging populations. These factors often lead to negative health outcomes for older adults (Nemiroff, 2022). Currently, professional education provides minimal exposure to geriatric populations and limited training in the assessment and treatment of older adults (Altman et al., 2016). To address the lack of knowledge, ageism, and lack of confidence, researchers recommend programs to boost confidence, increase knowledge and skills, encourage professionals to enter geriatric care and gerontology fields (Faronbi et al., 2017; Friedman & VanPuymbrouck, 2021; Meiboom et al., 2015; Neville et al., 2014). Additionally, a systematic review suggests a combination of education and intergenerational contact as a promising intervention (Burnes et al., 2019). Therefore, this project proposes a novel pedagogical strategy, Virtual Reality (VR) simulation, coupled with ongoing exposure and social interaction between undergraduate health sciences students and an aging population.

Methods: Guided by the Theory of Planned Behavior (Ajzen, 1991), this study employs a one-group pretest/posttest design to assess the effectiveness of this pedagogy. Setting the effect size of 0.3, and with a desired power level of 0.8, the study includes 64 participants. The first part of the intervention (i.e., VR simulation) includes student exposure to five VR training modules. The second part of the intervention includes weekly student participation in intergenerational activities with assigned clients aged 65 or above. Before participating in the program, participants complete a pre-assessment survey. This survey collects demographic information (e.g., gender, age) and assesses participants' knowledge of the training topics, their attitudes towards aging, their intentions to work with aging populations, and their confidence in knowledge and skills in interacting with older adults, and the ease/difficulty in caring for an older population. Following the completion of the intervention, participants complete a similar post-assessment survey. Descriptive and inferential statistics are completed using R.

Results: The first phase of the study reports the baseline data from the pretest. The results include participants' demographic information, as well as their baseline perception of aging, intentions to work with an aging population, and their confidence, knowledge, and skills in interacting and caring for older adults.

Discussion and Implications: This is the first known study using VR simulation and ongoing intergenerational exposure with undergraduate health sciences students. The findings will provide insight into the effectiveness of this specific pedagogical method. This finding may also aid in addressing the workforce shortage issue, facilitating opportunities for more health professionals to enter gerontology."

References

- Ajzen, I. (1991). The theory of planned behavior. *Organizational Behavior and Human Decision Processes*, 50(2), 179-211. [https://doi.org/10.1016/0749-5978\(91\)90020-T](https://doi.org/10.1016/0749-5978(91)90020-T)
- Altman, S. H., Butler, A. S., & Shern, L. (Eds.). (2016). *Assessing Progress on the Institute of Medicine Report the Future of Nursing*. National Academies Press. <https://doi.org/10.17226/21838>

- Burnes, D., Sheppard, C., Henderson, C. R., Wassel, M., Cope, R., Barber, C., & Pillemer, K. (2019). Interventions to reduce ageism against older adults: A systematic review and meta-analysis. *American Journal of Public Health, 109*(8), e1-e9. <https://doi.org/10.2105/AJPH.2019.305123>
- Faronbi, J. O., Adebowale, O., Faronbi, G. O., Musa, O. O., & Ayamolowo, S. J. (2017). Perception knowledge and attitude of nursing students towards the care of older patients. *International Journal of Africa Nursing Sciences, 7*, 37-42. <https://doi.org/10.1016/j.ijans.2017.06.004>
- Flaherty, E., & Bartels, S. J. (2019). Addressing the community-based geriatric healthcare Workforce shortage by leveraging the potential of interprofessional teams. *Journal of the American Geriatrics Society, 67*(S2), S400-S408. <https://doi.org/10.1111/jgs.15924>
- Friedman, C., & VanPuybrouck, L. (2021). Ageism and ableism: Unrecognized biases in occupational therapy students. *Physical & Occupational Therapy In Geriatrics, 39*(4), 354-369. <https://doi.org/10.1080/02703181.2021.1880531>
- Institute of Medicine (US) Committee on the Future Health Care Workforce for Older Americans. (2008). *Retooling for an Aging America: Building the Health Care Workforce*. National Academies Press (US). <http://www.ncbi.nlm.nih.gov/books/NBK215401/>
- Meiboom, A. A., de Vries, H., Hertogh, C. M. P. M., & Scheele, F. (2015). Why medical students do not choose a career in geriatrics: A systematic review. *BMC Medical Education, 15*(1), 101. <https://doi.org/10.1186/s12909-015-0384-4>
- Nemiroff, L. (2022). We can do better: Addressing ageism against older adults in healthcare. *Healthcare Management Forum, 35*(2), 118-122. <https://doi.org/10.1177/08404704221080882>
- Neville, C., Dickie, R., & Goetz, S. (2014). What's stopping a career in gerontological Nursing?: Literature review. *Journal of Gerontological Nursing, 40*(1), 18-27. <https://doi.org/10.3928/00989134-20131126-02>

Hi My Name Is: Creating Unique Introductory Videos

Chris Valluzzo, M. Aaron Bond, *Virginia Tech*

Abstract: Remarkably, "Hi my name is" is not always the best way to start an introductory video. In this course participants will learn that there are better, more unique ways to do an introductory video. We'll discuss what message you are trying to impart, and how to plan a video that will reflect that message. As well as planning the narrative arc of your intro video, allowing you to tell a more meaningful story of yourself. We'll also look at tips and techniques. Faculty will leave this session with a feeling of empowerment to tell their stories more completely.

Introduction

This course is designed to provide Faculty with a new lens in which to create introductory videos for their class. We'll talk about the who, what, when, where, and why of an introductory video as well as giving consideration to the message each faculty wants to impart. Additionally we'll talk tips and techniques on producing an engaging and memorable introductory video.

What is an introductory video?

An introductory video may be the most important video you make for a class. This is your chance to be more than a face on a screen talking about accolades, research, or areas of study. It is a chance for you to show who YOU are to your class. Outside of your faculty job or the specific class you're teaching. It may be the one opportunity you have for your students to connect to you personally. And you should take advantage of the moment and let your students get to know you more deeply. You can also use some of the same techniques for class introductory videos as well.

Crafting the message

There are many aspects of crafting your message that you must consider before you create it. Generally, as a faculty, you know that students are your main audience. But within that main audience there are sub groupings. Are they full time students on campus, fulltime off campus, working adults working on a master's degree? How does your audience affect the style of delivery? What do you want to introduce about you that will give students a window into who you are? Deciding on the message of your video, the means (style), and the output is critical.

Deciding on a production plan

Now you know what you want to say via your introspective look at your message. Now how do you bring that to life? In this section we'll first identify what mode of introductory video it is (Zoom, Studio, Field). Then we'll discuss how to apply what we've learned about crafting our message and fit it into any one of the 3 modes of production. Additionally we'll look at best practices in each video scenario.

Gathering content for video (pics, slides, videos, etc)

Here we'll discuss best practices for identifying, naming and organizing various media content on a drive for editing. This process is essential just prior to editing of your final video. Organized media and access to it keeps editing times to a minimum.

Takeaways

At the end of the session each participant will receive a packet with affordable camera/lights/sound packages, a list of vetted Zoom cameras/lights/and sound vetted by TLOS for use at home, and we will provide a curated list of free or inexpensive editing software.

Icebreakers: Does pre-class discussion lead to higher classroom engagement?

William Putt, Vince Shaw, Jeff Yao, *The United States Military Academy*

Abstract: Seeking ways to increase student engagement by building a stronger sense of community in the classroom, the researchers tested whether introducing a discussion topic unrelated to the course material prior to the start of the class period could serve to engage students and if that engagement carried throughout the class period. Further, the researchers tested whether this treatment led to better course outcomes, chiefly, higher grades in the treated sections.

In a world of ever-growing distractions, educators are fighting an uphill battle to gain and maintain the attention of students. Drawing on research that suggests building a community in a classroom leads to better engagement, we are attempting to measure the engagement improvement of a single community-building practice, specifically having a pre-class "icebreaker" discussion with students via a randomized control trial. In a single course, with identical material covered in each section for a given lesson, we randomized our sections as either treatment or control sections. For the treatment sections we display an "icebreaker" question on the front board, whose topic was unrelated to any course material, prior to the start of class. As students enter the room, we engage each one by name and ask for their thoughts on the question. We actively contrast or relate students' answers to their classmates to encourage discussion amongst the class, not just multiple one-on-one interactions with the instructor. We repeat this practice for every lesson of this semester, but do not apply the icebreaker discussion to the control sections. At the end of each lesson, all students -treatment and control- complete an in-class reflection on the material covered that day. The reflections are captured in an online form and the responses will be analyzed using word count as a proxy measure for each student's level of attention and engagement in the class on that date. We use word count as the measure of engagement to avoid any bias in measurement that may occur in other techniques, such as self-reported survey data. We chose the "icebreaker" as our community-building exercise of choice because, as economists we are acutely aware of trade-offs, and we wanted to dedicate minimum in-class time to the experiment while not placing any additional burden on students outside of the classroom. If we find a statistically significant difference in the level engagement between the treatment and control sections, this will prove to be an extremely low-cost event to help gain and maintain student attention in the classroom. Additionally, if we find a difference in engagement levels, we will analyze course learning outcomes, specifically course grades and grades on the final examination, to see if there is positive correlation between higher levels of engagement and higher learning outcomes.

References

- Alrashidi, Oqab, Huy P. Phan, and Bing H. Ngu. "Academic Engagement: An Overview of Its Definitions, Dimensions, and Major Conceptualizations." *International Education Studies* 9, no. 12 (2016): 41-52.
- Elliott, Dedreana, Marlen Gamino, and J. Jacob Jenkins. "'Creating community in the college classroom: best practices for increased student success.'" *International Journal of Education and Social Science* 3, no. 6 (2016): 29-41.
- Fredricks, Jennifer A., McColskey, W. "The measurement of student engagement: A comparative analysis of various methods and student self-report instruments." In *Handbook of Research on Student Engagement*, edited by Amy Reschly and Sandra Christenson, 763-82. Springer, 2012.
- Fredricks, Jennifer A., Blumenfeld, P. C., & Paris, A. H. (2004). School engagement: Potential of the concept, state of the evidence. *Review of educational research* 74, no 1. (2004): 59-109.
- Fredricks, Jennifer A., Michael Filsecker, and Michael A. Lawson. "'Student engagement, context, and adjustment: Addressing definitional, measurement, and methodological issues.'" *Learning and instruction* 43 (2016): 1-4.
- Lang, James. "Distracted: Why Students Can't Focus and What You Can Do About It." Basic Books, 2020.
- Lotlung, Mareike Seska Diana. "Highschool Student Engagement in Active Learning Classrooms." *Journal on Education* 5, no. 2 (2023): 2729-2741.
- McKinney, John Paul, Kathleen G. McKinney, Renae Franiuk, and John Schweitzer. "The college classroom as a community: Impact on student attitudes and learning." *College Teaching* 54, no. 3 (2006): 281-284.

Identifying appropriate social science learning objectives for STEM-H postgraduate students

Anne-Lise Velez, Todd Schenk, Maaz Gardezi, *Virginia Tech*

Abstract: We will review our experience with and best practices in engaging STEM-H postgraduate students social science and policy studies threshold concepts and foundational knowledge within the Science, Technology, & Engineering in Policy graduate certificate program. We will then lead participants through a series of short interactive activities to help identify threshold concepts in their own disciplines that are often not well understood by those without similar disciplinary training, to help unpack underlying assumptions to highlight and interrogate, and to help identify simple exercises for students outside the discipline to engage particular concepts depending on the related assumptions.

For this practice session, we will review our experiences in engaging graduate students in science, technology, engineering, math and health (STEM-H) disciplines to threshold concepts (Cousin, 2006) and foundational knowledge in decision-making. We do so within the context of VT's Science, Technology, & Engineering in Policy graduate certificate program. We focus on our adjustments in the levels of Bloom's cognitive learning objectives employed across the certificate program courses and alignments in class structure and materials over time and reasons behind our changes in approach. We will then engage participants in an exercise to identify opportunities for them to do so in their teaching. We center our discussion in relation to the revised conception of Bloom's taxonomy of learning (Anderson & Krathwhol, 2001), exploring how best to teach threshold concepts and identify appropriate levels of engagement and learning across disciplinary boundaries for postgraduate students.

While it is generally accepted that post-graduate programs focus on analytical and evaluative skill development rather than understanding, there are different considerations based on context. For example programs such as MBAs where students are entering postgraduate programs from different undergraduate disciplines, others have noted that students possess "mixed knowledge, skills, abilities and experience" meaning that instructors must balance providing introductory "catch-up" information for those deficient in baseline knowledge while continuing to engage students with existing knowledge at the same time (Betts, 2008, p100). While these considerations exist to a certain degree in the STEM-H context, most of the students in these disciplines have more than one degree in the same of very similar fields, and are trained in disciplinary thinking as "a set of actions, ways of working, or habits of mind" of a particular discipline, such as mathematics (Yeo and Choy, 2023, p. 126), often accompanied by the complexity of having to learn the language of the discipline, as with engineering (Perpingnan et al., 2020). Therefore much of the work on cross disciplinary training in STEM-H fields is centered on integrating STEM fields (Leung 2020) while remaining based in a strong foundation of disciplinary knowledge (English, 2016). Research on integrating across disciplinary boundaries, such as imparting public affairs values across such barriers, focuses on undergraduates (ex. Velez et al. 2022).

To engage participants we will share best practices in approaching threshold concepts across disciplines for graduate students and differences in approaching such concepts in comparison to how this may be approached in undergraduate education. This will include participant discussion about approaches to identifying and sharing threshold concepts. We will then lead participants through a series of short interactive activities to help identify threshold concepts in their own disciplines that are often not well understood by those without similar disciplinary training, to help unpack underlying assumptions to highlight and interrogate, and to help identify simple exercises for students outside the discipline to engage particular concepts depending on the related assumptions.

References

- Anderson, Lorin W.; Krathwohl, David R., eds. (2001). A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives. New York: Longman. ISBN 978-0-8013-1903-7.
- Betts, S. C. (2008). Teaching and assessing basic concepts to advanced applications: Using Bloom's taxonomy to inform graduate course design. *Academy of Educational Leadership Journal*, 12(3), 99. 3, 3.
- Cousin, G. (2006). An introduction to threshold concepts. *Planet*, 17(1), 4-5.
- English, L. (2016). STEM education: Perspectives on integration. *International Journal of STEM Education*
- Leung, A. (2020). Boundary crossing pedagogy in STEM education. *International Journal of STEM Education*, 7(1), 1-11.

- Perpignan, C., Baouch, Y., Robin, V., & Eynard, B. (2020). Engineering education perspective for sustainable development: A maturity assessment of cross-disciplinary and advanced technical skills in eco-design. *Procedia CIRP*, 90, 748-753.
- Velez, A. L., Hall, R. P., & Lewis, S. N. (2022). Designing transdisciplinarity: Exploring institutional drivers and barriers to collaborative transdisciplinary teaching. *Journal of Public Affairs Education*, 28(2), 138-155.
- Yeo, J. B., & Choy, B. H. (2023). Fostering disciplinary thinking through mathematical inquiry. *The Mathematician Educator*.

Improving Curriculum for Future Nutrition Professionals

Alisha Farris, Danielle Nunnery, Ayrton Walker, Manan Roy, Katie Wolsiefer, *Appalachian State University*

Abstract: Orthorexia and weight bias have been reported as high as 70% in nutrition students, potentially impacting future treatment of clients. It is unclear if nutrition students come into the discipline with ON and weight bias leanings, or if the curriculum fosters these tendencies. The purpose of this study was to explore correlations between orthorexia, adverse childhood experiences, and weight bias in college nutrition students and explore the impact of nutrition curriculum on body image and food perception.

Orthorexia (ON) and weight bias have been reported as high as 70% in nutrition students, potentially impacting future treatment of clients. Adverse Childhood Experiences (ACEs), have been linked with eating disorders, but there is little understanding of their relationship with ON and weight bias. It is unclear if nutrition students come into the discipline with ON and weight bias leanings, or if the curriculum fosters these tendencies. The purpose of this study was to explore correlations between ON, ACEs, and weight bias in college nutrition students and explore the impact of nutrition curriculum on body image and food perception.

Undergraduate and graduate students enrolled in a nutrition program in twelve mid-southeast states in the U.S. were recruited to participate in an anonymous online survey. The survey took approximately 15-20 minutes to complete and contained questions on ON tendencies, weight bias, ACEs, and open-ended questions on the nutrition curriculum. Survey data was analyzed using descriptive statistics, regression analysis, and raw correlation calculations via Stata software, with a significance level of $p < 0.05$. A qualitative inductive analysis approach was used to analyze the questions from open-ended responses on curriculum. Minor themes were grouped based on a major theme or broader issue.

Of the 164 students who completed the survey, 92% were female, 82% were white, and 54% were found to have a moderate/strong weight bias. Around 50% identified as being from a dysfunctional family, and more than 43% experienced emotional abuse. For the open-ended questions, participants believed a nutrition or health-related class and/or assignment had negatively impacted their perception of food (35%) and their body (29%). However, participants also believed a nutrition or health-related class and/or assignment had positively impacted their perception of food (91%), and body (48%). Emergent major themes on negative impacts were their emotional well-being, reinforcement or impact to philosophy, and harmful behavior change. Emergent major themes on positive perceptions were personal and knowledge impacts. Students reported negative perceptions of food (33.3%), and negative perceptions of their body (54.8%) associated with assignments requiring them to track and analyze their dietary habits over a period of time, or complete body composition measurement activities on oneself.

Weight bias and ON remain issues for the nutrition profession. Further research is needed to explore this relationship with diverse and larger populations. Changes in nutrition curriculum such as the inclusion of "Health at Every Size", and activities that dispel weight-based stereotypes are needed to bring awareness and prevent bias and ON among nutrition students and future professionals in the field.

Improving Generation-Zers Attendance in Large Classes: A New Classroom Approach

Guopeng Cheng, *Virginia Tech*

Chen Xu, *Independent Scholar*

Abstract: Many instructors have since experienced issues with their class attendance, especially in large classes. One potential cause of the low in-class attendance is that students are not motivated to go to class. How to improve Gen Zers' attendance in college classes becomes an important question that needs to be addressed now more than ever before. We used a new approach in a large class with 225 students. From the results, we found that students' attendance, average grades on quizzes and exams, and overall course grades were significantly higher in the class where this new approach was applied.

In recent years, many large public colleges have seen a substantial enrollment increase. Increasing class sizes is one of the solutions to adapt to such change, especially at the undergraduate level. Instructors teaching large classes face many challenges, such as limited time with students to monitor learning outcomes, enforce behavior, and provide one-on-one attention. Student attendance is one of the common problems of large college classes. College faculty members often experience dilemmas in how to maintain a high attendance in their classes.

The majority of college students today are members of Generation Z, also referred to as Gen Zers. Unlike Millennials (born between 1981 and 1996) and Generation X (born between 1965 and 1980), Generation Z (born between 1997 and 2010) is the most diverse generation in American history, and they have different learning styles. In addition, Generation Z students experienced course modality changes during the COVID-19 pandemic, transitioning from in-person classes to online classes. Since they were born into a world of technology and grew up in the fast-paced world of the internet, most quickly adapted to virtual learning. However, in late 2021, colleges started moving back to in-person classes. Some instructors have since experienced issues with their class attendance. One potential cause of the low in-class attendance is that students are not motivated to go to class. How to improve Gen Zers' attendance in college classes becomes an important question that needs to be addressed now more than ever before.

A number of researchers have agreed that class attendance has significant positive impacts on student learning outcomes and academic performance (Golding, 2011; Kwak et al., 2019; Tetteh, 2018). Still, mandatory attendance does not always yield a grade improvement in class. We used a new approach in a large class with 225 students: We gave extra credit for student attendance rather than mandating it. By comparing results from two same-size courses in two separate semesters, we found that students' attendance, average grades on quizzes and exams, and overall course grades were significantly higher in the class where this new approach was applied.

This study provides insight that can help colleges improve attendance in their large classes while benefitting students' overall grade improvement. The approach also better helps instructors with class management.

References

- Golding, J. M. (2011). The role of attendance in lecture classes: You can lead a horse to water *Teaching of Psychology*, 38(1), 40-42.
- Kwak, D. W., Sherwood, C., & Tang, K. K. (2019). Class attendance and learning outcome. *Empirical Economics*, 57, 177-203.
- Tetteh, G. A. (2018). Effects of classroom attendance and learning strategies on the learning outcome. *Journal of International Education in Business*, 11(2), 195-219.

Innovative Pedagogical Approaches and Programs Teaching College Students about Money

Oscar Solis, *West Texas A&M University*

Juan Gallardo, *Tarleton State University*

Meghan Williams, *West Texas A&M University*

Abstract: This poster highlights financial education programs at two Texas regional universities, Tarleton State University and West Texas A&M University, that aim to improve college students' financial literacy. Both universities have established money bootcamps to enhance students' learning about budgeting, building credit, overcoming financial obstacles, and savings. These financial education programs meet students where they are financially and help them develop financial skills they can use in college and beyond. The poster also highlights innovative learning activities and ways that the two programs have incorporated strategic partnerships, scholarship and cash awards, and games to increase financial literacy for college students.

This poster highlights financial education programs at two Texas regional universities, Tarleton State University and West Texas A&M University, that aim to improve college students' financial literacy. Both universities, which are under the Texas A&M University System, have established money management bootcamps to enhance students' learning about budgeting, building credit, overcoming financial obstacles, and savings. They also provide more advanced interactive presentations about investing, buying a home, and automobile and insurance tips. These financial education programs meet students where they are financially and help them develop financial skills they can use in college and beyond. The poster also highlights innovative learning activities and ways that the two programs have incorporated strategic partnerships, scholarship and cash awards, and games to increase financial literacy for college students.

Introductory Biology Sequence Transformation Scaffolds Learning and Improves Student Success

Maynard Schaus, Victor Townsend, Shane Boyd, Deirdre Gonsalves-Jackson, Eric Johnson, Marielle Postava-Davignon, Soraya Bartol, *Virginia Wesleyan College*

Abstract: The VWU Biology department modified its introductory course sequence to address high DFW rates in the first course. The revised sequence sought to better scaffold learning and allow adjustment to college course expectations. DFW rates in the revised first course decreased from 51.2% to 30.4%. DFW rates in the new third course averaged 41.9%, but students seemed better prepared for the material in their second year. Other courses' DFW rates, student retention rates, and MFAT scores showed no significant difference following the change. Targeted interventions aimed at bottleneck courses can improve student course success without negatively affecting long-term learning outcomes.

The Virginia Wesleyan University Biology department modified its introductory biology sequence in response to high DFW rates (>50% scoring a D, F, or withdrawing) in the first course. The revised course sequence moved content that students frequently failed to a new third course in the sequence. The revised curriculum was designed to better scaffold learning so that students face material that is more difficult after a year of adjustment to the expectations of college biology courses. DFW rates in the revised first course showed a significant decrease from 51.2% to 30.4% during the 4 years post-implementation, with similar DFW rates in other continuing courses pre- vs. post-revision. DFW rates in the new third course were still high (41.9%), but students seemed somewhat better prepared for the material in their second year. Fall to spring retention rates did not differ pre- vs. post-revision, suggesting other factors may be more important. Scores on the Major Field Assessment Test (MFAT) did not differ significantly between students that took the old introductory course, the new course, and those that transferred in. These results suggest that targeted interventions aimed at bottleneck courses can improve student course success without negatively affecting long-term learning outcomes. Departments should scaffold program content in a logical approach that supports students' transition to college level expectations.

References

- Freeman, S.; Eileen O'Connor, John W. Parks, Matthew Cunningham, David Hurley, David Haak, Clarissa Dirks, and Mary Pat Wenderoth. 2007. Prescribed Active Learning Increases Performance in Introductory Biology. *CBE-Life Sciences Education* 6: 132-139. <https://www.lifescied.org/doi/pdf/10.1187/cbe.06-09-0194>
- Freeman, S., Eddy, S., McDonough, M.; Smith, M., Okoroafor, N.; Jordt, H.; and Wenderoth, M.P. (2014). Active Learning increases Student Performance in Science Engineering and Mathematics. *Proceedings of the National Academy of Sciences (USA)* 111:8410-8415. doi/10.1073/pnas.1319030111
- Haak, D., HilleRisLambers, J., Pitre, E., and Freeman, S. (2011). Increased Structure and Active Learning Reduce the Achievement Gap in Introductory Biology. *Science* 332: 1213-1216. DOI: 10.1126/science.1204820
- Long, M., A. Cottrell-Yongye and T. Huynh. (2020). Backward redesign of a Nonmajors' Biology Course at a Two-Year Technical College. *Journal of College Science Teaching* 49(6):7-16.
- Norton, Paran, William Bridges, Karen High. (2018). Impact of Course Policy Changes on Calculus I DFW Rates. *Journal of STEM Education* 19(1): 41-47.
- Roberts, Jennifer A; Olcott, Alison N; McLean, Noah M; Baker, Gregory S; Möller, Andreas. (2018). Demonstrating the impact of classroom transformation on the inequality in DFW rates ("D" or "F" grade or withdraw) for first-time freshmen, females, and underrepresented minorities through a decadal study of introductory geology courses. *Journal of Geoscience Education* 66(4): 304-318. DOI:10.1080/10899995.2018.1510235
- Scott, Amy N.; Delores E. McNair, Jonathan C. Lucas, and Kirkwood M. Land. (2017). From Gatekeeper to Gateway: Improving Student Success in an Introductory Biology Course. *Journal of College Science Teaching* 46(4): 93-99.
- Vyas, V.S. and S.A. Reid. (2023). What Moves the Needle on DFW Rates and Student Success in General Chemistry? A Quarter-Century Perspective. *Journal of Chemical Education* 100:1547-1556.

Investigating the effects of Project-Based Learning in Online Teacher Education Program

Candido Mukuni, *Virginia Tech*
Jihyun Woo, *Eastern New Mexico University*
Jeeyoung Chun, *University of Kentucky*

Abstract: This poster aims to introduce the case of integrating PBL into an online teacher education program and discuss the effects of online PBL learning activities. According to students' feedback on online PBL courses, they learned course development in online PBL courses and gained course management skills through peer interactions. Students also hoped to use the online tools they learned for their future online PBL classes. To improve online PBL activities, more specific instructions were needed.

References

- Anderson, T., Briggs, A., Spaulding, S., Zamani-Gallaher, E., & López, D. (2021). Racial and ethnic equity gaps in postsecondary Career and Technical Education. Urban Institute. March 4, 2021.
- Bell, S. (2010). Project-based learning for the 21st century: Skills for the future. *The clearing house*, 83(2), 39-43.
- Goldberg, S. B. (2021). Education in a pandemic: the disparate impacts of COVID-19 on America's students. US Department of Education.
- Krajcik, J. S., & Blumenfeld, P. C. (2006). Project-based learning. In R. K. Sawyer (Ed.), *The Cambridge handbook of the learning sciences* (pp. 317-333). New York, NY: Cambridge University Press.
- Tamim, S. R., & Grant, M. M. (2013). Definitions and uses: A case study of teachers implementing Project-based Learning. *Interdisciplinary Journal of Problem-Based Learning*, 7(2).

Lessons in partnership: Piloting an inclusive pedagogy partnership program

Kylie Korsnack, Michael Norris, Thad Williamson, Gabriel Matthews, Gabriel Matthews, Lorena Campos-Castro,
University of Richmond

Abstract: How might we more intentionally bring student voices into campus conversations about inclusive teaching? This question sparked the formation of our university's Inclusive Pedagogy Partnership Program - a program co-created by students, faculty and staff in AY 22-23 and launched as a pilot in Fall 2023. This practice session aims to share our experiences implementing this program, offer our program as a model that other institutions might adapt to their own context, and engage participants in discussion about the opportunities and challenges of "students as partners" as a framework for thinking about teaching and learning in higher education more broadly.

How might we more intentionally bring student voices into campus conversations about inclusive teaching? This question sparked the formation of our university's Inclusive Pedagogy Partnership Program - a program co-designed by a cohort of students, faculty, and staff in AY 2022-2023 and launched as a pilot in Fall 2023. Our idea was to leverage a framework of "students as partners" to build a pilot program and bring student, staff, and faculty voices together in conversation about inclusive teaching practices. Our program, which pairs students and faculty together for a semester-long, classroom-focused partnership experience, draws on the literature that supports "'students as partners'" as an approach to position students as key voices in institutional efforts to enhance diversity, equity, and inclusion (See for example: Ameyaa et al., 2021; Cook-Sather et al., 2019; de Bie et al., 2021; Cook-Sather et al., 2021; Mercer-Mapstone & Abbot, 2021).

This practice session aims to share our experiences implementing this program, offer our program as a model that other institutions might adapt to their own context, and engage participants in a discussion of the opportunities and challenges of "students as partners" as a framework for thinking about teaching and learning in higher education more broadly.

Our session will exemplify the practice of partnership by being co-designed and co-facilitated by a team of students, faculty, and staff members. During the first part of our session, we will outline the structure, goals, and outcomes from the first semester of our pilot student-faculty partnership program. We will also invite the students and faculty involved in our program to reflect on and share about their experiences in partnership with one another. During the second part of the session, we will invite session participants to dive deeper into some of the practices, questions, and challenges presented by student-faculty partnership programs through a series of facilitated small group discussions and practice activities. Some of the topics explored by small groups might include: 1) What kind of student-faculty collaborations already exist within institutions? How are students and faculty compensated (or not) for this work?; 2) What are the benefits and challenges of observation-focused partnership experiences?; 3) How might you (or do you already) engage students in curriculum development?; 4) How should (or can) students navigate the classroom space of student-faculty partnerships?; 5) How might instructors partner with the students enrolled within their classes?

We will also invite participants to contribute their own questions to our discussions. We hope participants will leave our session with at least one new idea for how they might partner with students in their current or future classes.

References

- Ameyaa, R. A., Cook-Sather, A., Ramo, K., & Tohfa, H. M. (2021). Undergraduate students partnering with staff to develop trauma-informed, anti-racist pedagogical approaches: Intersecting experiences of three student partners. *The Journal of Educational Innovation, Partnership and Change*, 7(1).
- Cook-Sather, A., Addy, T. M., DeVault, A., & Litvitskiy, N. (2021). Where are the students in efforts for inclusive excellence? Two approaches to positioning students as critical partners for inclusive pedagogical practices. *To Improve the Academy: A Journal of Educational Development*, 40(1).
- Cook-Sather, A., Krishna Prasad, S., Marquis, E., & Ntem, A. (2019). Mobilizing a Culture Shift on Campus: Underrepresented Students as Educational Developers. *New Directions for Teaching and Learning*, 159, 21-30.
- De Bie, A., Marquis, E., Cook-Sather, A., & Luqueño, L. (2021). Promoting equity and justice through pedagogical partnership. *Stylus*.

Mercer-Mapstone, L., and Abbot, S. 2020. The power of partnership: Students, staff, and faculty revolutionizing higher education. Elon University Center for Engaged Learning.

Leveraging Selena Gomez for Pedagogy's Sake: Media Influences and Latiné/x

DIANA RIOS, *University of Connecticut*

Mary Helen Millham, *University of Hartford*

Abstract: We examine the multi-hyphenate Latina, who continues to be an influence for fellow Millennials and now Gen Z. From childhood star on the Disney Channel, she now hosts a cooking show "Selena + Chef" and co-leads Hulu's "Only Murders in the Building". Her process of life struggle, learning, and creative breakthroughs lend to components of learners' educational journeys. Select issues: learning curves; developing intellectual curiosity; brick walls/blank mind; privilege and access to equipment; unexpected consequences; time management; and organizing as "mise en place", are given attention in a current "Latinas and Media" course at a public university.

We examine the multi-hyphenate Latina, who continues to be an influence for fellow Millennials and now Gen Z. From childhood star on the Disney Channel, she now hosts a cooking show "Selena + Chef" and co-leads Hulu's "Only Murders in the Building". Her process of life struggle, learning, and creative breakthroughs lend to components of learners' educational journeys. Select issues: learning curves; developing intellectual curiosity; brick walls/blank mind; privilege and access to equipment; unexpected consequences; time management; and organizing as "mise en place", are given attention in a current "Latinas and Media" course at a public university.

Overview Points:

- Learning Curve--no one starts as a professional
- Intellectual curiosity--your mind looking for solutions and gaining depth and breadth in the process
- The brick wall/blank mind holding you back is not permanent
- Display of Privilege on Selena + Chef - equipment, access
- Unexpected consequences in "real time"
- Time management and planning hours for reading, writing
- Organizing notes, articles, books, focal points, as "mise en place"
- The typical social media "Get Ready with Me" video is a "Get Through a New Recipe with Me". What is the "recipe" of an assignment?
- EXAMPLE Selena + Chef : Working on a Term Paper
- Professor Millham breaks out the Dark Side Paper
- Professor Rios breaks out the Latinas & Media Term Paper
- A recipe is "laddered" just as we ladder an assignment.
- Time Management: Cooking and School Deadlines
- Mise en place, prepping is key

Math Assignments and Tests: Online or Paper?

Sara Lenhart, *Christopher Newport University*

Abstract: Since the pandemic, the math professor has moved from grading paper copies of assignments and tests to electronic versions. This poster will discuss why she decided to do that, how it works for the students, and the results from comparing mean grades for classes that did paper copies and those that did online submissions.

Since the pandemic, the math professor has moved from grading paper copies of assignments and tests to electronic versions. There are many reasons she decided to do this, including spread of germs. For class assignments, the professor either passes out the paper copies or lets students pick up their own copy. After completing the assignment, students take a picture of their work and upload to the Learning Management System. They keep their paper copy for reference. Tests are online, but usually include some sort of file submission question where students write out their work and take a picture of it to upload back to their test. The professor has now looked at some class averages from before the pandemic where the paper copies were graded and compared them to more recent class averages where online submissions were used.

Measuring Our Worth: Examining the Invisible Labors of Academia

Laura Waldrep, *North Carolina State University*

Abstract: The goal of this session is to invite a conversation among participants about best practices for managing the weight of invisible labor in academia. We serve many functions beyond teaching and research, and yet educators are consistently undervalued, making it important to examine the effect of this labor on our well-being. I will share my experiences with departmental service and ask attendees to consider ways we can protect ourselves while still fulfilling our extended duties. This session will allow participants to commiserate openly about some of our professional difficulties while also brainstorming ways to leverage our labor to our benefit.

In addition to teaching and research responsibilities, many faculty members in higher education face the often thankless task of departmental service. Depending on our unique roles at our colleges and universities, the demand for service may vary, but what remains consistent is the weight of our invisible labor. During any given semester, we might find ourselves in any number of service positions, including but not limited to: serving on hiring committees or advisory boards; mentoring colleagues or graduate students; acting as academic and/or club advisors to students; offering ad hoc counseling to students in distress; and even revising and restructuring programmatic by-laws. This practice session will examine the effect of service work on educators' well-being and invite a conversation among participants about how we can take meaningful steps towards making our invisible labor feel seen and valued.

Though this may be a slightly unconventional approach to a proposal, I would like to take a moment here to explain the origin of my idea for this practice session. I attended the 2023 Conference on Higher Education Pedagogy and while several of us were waiting for a new session to begin, someone mentioned that she would need to leave the session early because of her role on a hiring committee. The immediate response to her statement - groans of commiseration, questions and curiosity about her department's hiring practices, and an immediate sense of shared camaraderie - was incredible to me. During our brief conversation, I said that we should have a session during 2024's conference where we could all meet up and speak openly about issues surrounding invisible labor, and several people in the room encouraged my idea. What I realized in that moment is that not only is service work often invisible at the institutional level, but our service work is sometimes invisible (or perhaps even shrouded in mystery and obfuscation) at the interpersonal level as well. My goal for this session, then, is to continue the conversation that we started in February 2023 but in a more formal way that allows us to eventually move beyond sharing our experiences to consider how we can learn from one another to improve our well-being as educators.

In this practice session, I will share my experiences with service work, particularly focusing on my role as a professional track faculty member on a search committee for a new department head, and explain the requirements for service at different levels in my specific department. I will also provide a framework for service work guidelines and expectations based on research looking at various factors such as gender, race, and position before inviting participants to consider their approach to best practices for managing the weight of invisible labor in academia.

References

- Batson, M. (2022). Power despite precarity: Strategies for the contingent faculty movement in higher education. *Radical Teacher*, (124), 72-75. <https://doi.org/10.5195/rt.2022.1102>
- Górska, A. M., Kulicka, K., Staniszewska, Z., & Dobija, D. (2021). Deepening inequalities: What did COVID-19 reveal about the gendered nature of academic work? *Gender, Work & Organization*, 28(4), 1546-1561. <https://doi.org/10.1111/gwao.12696>
- Hamblin, L., Barker, D., & Arghode, V. (2020). A phenomenological approach to explore faculty perceptions about invisible labor. *Community College Journal of Research and Practice*, 44(10-12), 804-818. <https://doi.org/10.1080/10668926.2020.1716874>
- Social Sciences Feminist Network Research Interest Group. (2017). The burden of invisible work in academia: Social inequalities and time use in five university departments. *Humboldt Journal of Social Relations*, 39(39), 228-245.

Medical Education in Virginia: Practices, Trends and Innovations in Anatomy

Alexander In, John McNamara, Michael Nolan, *Virginia Tech Carilion School of Medicine*

Abstract: Anatomy as a basic science in medical education is foundational in understanding the human body. Regardless of the specialty one might choose, knowledge of human structure is important for understanding human function. It is crucial to investigate the current state and innovations that exist in anatomy education, and explore different pedagogical approaches and styles in order to continue training competent healthcare professionals. This survey study explores the anatomy curricula at the six (6) medical schools in the Commonwealth of Virginia. We provide a resource for medical schools, medical students, anatomy faculty and those in medical education in Virginia and beyond.

Faculty and staff who support the delivery of anatomy content are often curious as to what their peer institutions provide to students relative to pedagogical trends, third party resources, technology and faculty support. In Virginia, medical schools and post-secondary schools who use cadaveric materials formed an organization, the Virginia Association of Human Anatomical Sciences. This organization helps to provide some context to participating schools as to practices, trends and innovations at Virginia schools who are members of the organization. We suggest documenting anatomy education, in particular due to its unique role in medical education, at the six (6) Virginia medical schools. This can provide helpful information to the programs, the faculty and the general public-at-large. In light of some very disturbing news lately out of Harvard University, where cadaveric remains from anatomy laboratories were being illegally sold to the public, this study is of particular importance as it will highlight the professional conduct in the anatomical programs in Virginia. Although this study has recently completed its data collection, the results that follow are preliminary.

There are six medical schools in the Commonwealth of Virginia (Eastern Virginia Medical School, Liberty University College of Osteopathic Medicine, University of Virginia School of Medicine, Edward Via College of Osteopathic Medicine, Virginia Commonwealth University School of Medicine and Virginia Tech Carilion School of Medicine). Four schools are M.D. programs (Eastern Virginia Medical School, University of Virginia School of Medicine, Virginia Commonwealth University School of Medicine and Virginia Tech Carilion School of Medicine) and two are D.O. programs (Liberty University College of Osteopathic Medicine and Edward Via College of Osteopathic Medicine). All schools require considerable anatomy time in the curriculum. The anatomy director at each of the medical schools was contacted and asked to participate in a one-hour interview via Zoom where a 50-question survey was conducted verbally. The survey had a total of eight (8) sections including school demographics, anatomy curriculum, donors, resources, faculty, assessments, electives and additional comments.

This study surveyed the anatomy programs and curricula at Virginia medical schools. We found a substantial amount of overlap between the schools relative to pedagogical approaches and styles regardless of none of the anatomy directors communicating with each other. All schools appear to be active in professional organizations and conduct research contributing to not only anatomy education but also clinical advancement and applications. Each school has supported the continued use of donors in their anatomy curriculum and agreed on the value of learning how other programs are adapting especially during times of medical school curricular changes.

References

- Drake RL, McBride JM, Pawlina W. An update on the status of anatomical sciences education in United States medical schools. *Anat Sci Educ*. 2014;7(4):321-5.
- Shin, M., Prasad, A., Sabo, G. et al. Anatomy education in US Medical Schools: before, during, and beyond COVID-19. *BMC Med Educ* 22, 103 (2022). <https://doi.org/10.1186/s12909-022-03177-1>
- Sugand K, Abrahams P, Khurana A. The anatomy of anatomy: a review for its modernization. *Anat Sci Educ* 2010;3(2):83-93.
- Wickramasinghe N, Thompson B, Xiao J. The Opportunities and Challenges of Digital Anatomy for Medical Sciences: Narrative Review. *JMIR Med Educ* 2022;8(2):e34687
URL: <https://mededu.jmir.org/2022/2/e34687> DOI: 10.2196/34687

Novice versus Experienced Instructional Designer decision-making processes

Maurine Kwende, *Uniformed Services University*

Abstract: The purpose of this research study was to examine how novice instructional designers (IDs) made design decisions compared to experienced IDs. A literature review was conducted and the findings revealed that IDs in general novice or expert alike, relied on many decision-making factors. To investigate further, two pilot studies were conducted to compare novice to expert IDs decision-making processes. 19 experts and 14 novice participants completed the survey and interview. The data was analyzed the findings revealed experienced IDs relied the most on past experiences, intuition, and time constraints while novice IDs relied the most on intuition, ID models, and theories.

The purpose of the research study was to evaluate how novice IDs (IDs) made decisions compared to expert IDs. IDs make decisions every day when performing various tasks in their job. The daily tasks include; needs assessment, curriculum or content design, researching learning technologies to determine what to use to develop instructional content. Knowing that IDs perform these tasks daily, it is very important to examine how IDs make design decisions and the factors they rely on to guide them in the decision-making process to allow for the effectiveness and efficiency of learning solutions.

To carry out this research, an initial literature review was conducted to determine how IDs, in general, make design decisions, novices and experts alike with the following ten factors as findings: intuition, past experience, ID models, peer feedback, cognitive and social skills, media, budget, time constraints, ID Strategies, and employer demands. To validate the literature review findings, two pilot studies were conducted, the first investigated expert IDs (N=17) decision-making and the second pilot study, novice IDs (N=14) decision-making. Mixed methods were used with the same surveys and interview questions for both pilots to collect data. The second study survey had an additional question that defined a novice instructional designer. Participant did not meet the criteria, exited the survey. Data was transcribed, and coded, and themes were identified and analyzed using thematic analysis.

The findings of the first pilot study confirmed all of the factors from the literature review except three: cognitive and social skills, peer feedback, and media selection and also revealed the following additional factors: staffing (employees), a competency and proficiency model, SME needs, content, task analysis, job-specific roles, and desired learning objectives.

The findings of the second pilot study revealed the following factors that novice IDs relied on: time constraints, ID strategies, employer demands, past experiences, ID models, ID theories, intuition, SME input, class process, needs analysis and stakeholder demands. The factors identified confirmed some of the factors of the literature review and some of the factors of the first study including, intuition, ID models, past experiences, client feedback, and stakeholder demands. Both novice and expert IDs have the following factors in common: instructional design models, theories, and intuition.

The findings also revealed that expert IDs relied the most on past experiences, intuition, and time constraints while novice IDs relied the most on intuition, ID models and theories. To conclude, although novice and expert IDs have common factors, the factors novice IDs rely on the most are different from expert IDs.

One limitation of the study is the sample size. Having a larger sample size would have made both pilot studies more generalizable. The outcome of the research is intended to guide IDs when making decisions, novice and expert alike. The outcome is also intended to impact all those in the education and training space regarding decision-making. The outcome of this novice versus expert instructional designer study will hopefully add to the existing body of literature on instructional design decision-making.

References

- Bilica, K., & Flores, M. (2009). Inductive & seductive science thinking: A Model for lesson development. *Science Scope*, 32(6), 36-41.
- Boling, E., Alangari, H., Hajdu, I. M., Guo, M., Gyabak, K., Khlaif, Z., & Techawitthayachinda, R. I. (2017). Core judgments of instructional designers in practice. *Performance Improvement Quarterly*, 30(3), 199-219.

- Brinthaupt, T. M., Clayton, M. A., Calahan, P. T., & Draude, B. J. (2014). How should I offer this course? The course delivery decision model (CDDM). *Journal of Online Learning and Teaching*, 10(2), 326.
- Carliner, S. (1998). How designers make decisions: A descriptive model of instructional design for informal learning in museums. *Performance improvement quarterly*, 11(2), 72-92.
- Christensen, T. K., & Osguthorpe, R. T. (2004). How do instructional-design practitioners make instructional-strategy decisions? *Performance improvement quarterly*, 17(3), 45-65.
- Dicks, D., & Ives, C. (2009). Instructional designers at work: A study of how designers design. *Canadian Journal of Learning and Technology/La revue canadienne de l'apprentissage et de la technologie*, 34(2).
- Crouch, C. & Pearce, J. (2012). *Doing research in design*. London: Bloomsbury.
- Dabbagh, N., & Fake, H. (2017). Tech select decision aide: A mobile application to facilitate just-in-time decision support for instructional designers. *TechTrends*, 61(4), 393-403.
- Ertmer, P., York, C., & Gedik, N. (2009). Learning from the pros: How experienced designers translate instructional design models into practice. *Educational Technology*, 49(1), 19-27.
- Hoard, B., Stefaniak, J., Baaki, J., & Draper, D. (2019). The influence of multimedia development knowledge and workplace pressures on the design decisions of the instructional designer. *Educational Technology Research and Development*, 67(6), 1479-1505.
- Hsiao, M. (2018). Mobile service design thinking for consumer decision-making under multichannel environment. *International Journal of Online Marketing (IJOM)*, 8(2), 57-71. doi:10.4018/IJOM.2018040104
- Kenny, R., Zhang, Z., Schwier, R., & Campbell, K. (2005). A review of what instructional designers do: Questions answered and questions not asked. *Canadian Journal of Learning and Technology/La revue canadienne de l'apprentissage et de la technologie*, 31(1).
- Kwende, M; Clemons, C. (2019). Exploring UX design processes of the GMU App: An observational study.
- Kwende, M. (2020). An examination of instructional design decision strategies for workplace performance improvement.
- Mettler, T. (2010). Thinking in terms of design decisions when developing maturity models. *International Journal of Strategic Decision Sciences (IJSDS)*, 1(4), 76-87. doi:10.4018/jsds.2010100105
- Mintzberg, H., & Westley, F. (2001). It's not what you think. *MIT Sloan Management Review*, 42(3), 89-93.
- Paul, A. M. (2016). Microlearning 101. *HR Magazine*, 61(4), 36-42.
- Rabel, D. K. (2019). An examination of the decision-making process instructional designers use to complete projects with the constraints of limited time and tools (Doctoral dissertation, Old Dominion University).
- Stefaniak, J. E., & Tracey, M. W. (2014). An examination of the decision-making process used by designers in multiple disciplines. *TechTrends*, 58(5), 80-89.
- Stefaniak, J. (2021). Documenting instructional design decisions. *Design for Learning*.
- Tracey M.W., Boling E. (2014). Preparing instructional designers: Traditional and emerging perspectives. In: Spector J., Merrill M., Elen J., Bishop M. (eds) *Handbook of research on educational communications and technology*. Springer, New York, NY
- Yanchar, S. C., South, J. B., Williams, D. D., Allen, S., & Wilson, B. G. (2010). Struggling with theory? A qualitative investigation of conceptual tool use in instructional design. *Educational Technology Research and Development*, 58(1), 39-60.
- Wedman, J., & Tessmer, M. (1993). Instructional designers' decisions and priorities: A survey of design practice. *Performance improvement quarterly*, 6(2), 43-57.
- Yilmaz, T. K., & Cagiltay, K. (2016). Designing and developing game-like learning experience in virtual worlds: Challenges and design decisions of novice instructional designers. *Contemporary Educational Technology*, 7(3), 206-222.

Pedagogical Approaches and Behaviors That Elicit Student Appreciation

Shawn Bielicki, Alexandra Barnett, Liberty University

Abstract: This study qualitatively analyzed student responses to a teacher appreciation program to identify desirable teacher behaviors and pedagogical approaches. 2127 students expressed their appreciation to specific faculty members over 18 months using an online form. Center for Teaching Excellence printed the appreciation notes to look like an old-fashioned telegram and delivered them to faculty. Upon analysis of students' responses, the following themes of faculty pedagogical approaches and behaviors that elicited appreciation emerged: a) faculty personal characteristics, b) spiritual disciplines demonstrated by faculty, c) efficient course design, d) faith learning integration, and e) active learning.

Design: This descriptive study describes the implementation and usage of teacher appreciation programs as a means of expressing appreciation for faculty. The study used a convenience sample of students who voluntarily completed an online form expressing their gratitude for faculty. The posters and banners displaying QR codes to the online form were placed throughout the campus for a month each semester. Center for Teaching Excellence printed the appreciation notes on a template designed by marketing to look like old-fashioned telegrams and delivered them to teachers at department faculty meetings. This study analyzed the students' responses to identify themes of appreciation related to faculty pedagogical approaches and behaviors.

Literature Review: When college students are given an opportunity to express gratitude, their perception of instructional effectiveness increases, making them more satisfied with the courses they are taking (Biber et al. 2020). Recognition programs have also been shown to improve faculty motivation (Hollinger-Smith et al. 2021) and reduce turnover (Rombaut & Guerry, 2020).

Rationale: The study aimed to identify the specific aspects of faculty pedagogical approaches and behaviors that are appreciated by students.

Methodology: Appreciation notes submitted by students were recorded via a Microsoft Form. The notes were then downloaded as an Excel sheet. After reading each note at least twice, several phrases and word choices used by students began to stand out for frequent use. After reviewing the notes for synonyms of the frequently used phrases and word choices, a set of codes was developed to categorize the data. Upon categorizing the data into groups by number of mentions, the themes outlined in this study emerged.

Findings: Students appreciated faculty personal characteristics (559/2127) the most. This theme contained distinct subthemes of kindness (346), a good sense of humor (67), sharing personal stories (51), graciousness (49), and giving advice (46). Next, spiritual disciplines demonstrated by faculty (72/2127), efficient course design (46/2127), faith learning integration (31/2127), and active learning (31/2127) emerged as themes. In summary, caring, kind, and fun faculty who demonstrate Christian disciplines and are organized and knowledgeable in both subject matter and teaching, were appreciated by students.

References

- Biber, D. D., Melton, B., & Czech, D. R. (2020). The impact of covid-19 on college anxiety, optimism, gratitude, and course satisfaction. *Journal of American College Health*, 1-6. <https://doi.org/10.1080/07448481.2020.1842424>
- Hollinger-Smith, L. M., O'Lynn, C., & Groenwald, S. (2021). The importance of meaningful faculty recognition in creating a healthy academic work environment: A mixed-methods study. *Nursing Education Perspectives*, 42(5), 297-303. <https://doi.org/10.1097/01.nep.0000000000000776>
- Rombaut, E., & Guerry, M.-A. (2020). The effectiveness of employee retention through an uplift modeling approach. *International Journal of Manpower*, 41(8), 1199-1220. <https://doi.org/10.1108/ijm-04-2019-0184>

Peer Mentoring Skills Perceptions from Orion (science) LLC Program

Temperance Rowell, *Virginia Tech*

Abstract: Mentorship in undergraduate STEM experiences have been touted to help retention and student success but evidence is still needed. Our peer mentors take courses focused on developing their peer mentor skills concurrent with participating in the peer mentor program. Therefore, we sought to evaluate our peer mentor program through the adaptation of a Mentoring Competency Assessment and reflective questions from our peer mentors three times throughout the academic year. We found small changes in many of these mentoring skills from the beginning to the end of the academic year, though it varied between students from experience and self-confidence in mentoring.

In our Living-Learning Community (LLC) at Virginia Tech (Orion LLC), we provide a built-in experience toward what it means to be a scientist through residential and academic/professional support for first year students. Included in these activities is participation in a peer mentor program for ~170 first year science major/identity students in small groups paired with up to 35 second/third year peer mentors. Peer mentorship can be a powerful tool in orienting, guiding, and conveying university resources to first year college students transitioning into college from high school. Mentorship in undergraduate STEM experiences have been thought to help retention and student success but strong evidence over time has been lacking (Pfund, 2016). Our second- and third-year peer mentors take a one credit course in the fall and spring semesters for the LLC focused on developing their peer mentor skills concurrent with participating in the peer mentor program. Therefore, we sought to evaluate our peer mentor program through the adaptation of a Mentoring Competency Assessment (Hyun et al., 2022) and reflective questions from our peer mentors three times throughout the academic year (beginning of Fall semester, end of Fall semester, and end of Spring semester). We then compared a quantitative score across mentors for skills described in the adapted Mentoring Competency Assessment (e.g., Active Listening, Providing Constructive Feedback, Establishing a Relationship Based on Trust, etc.). We complemented these quantitative scores with themes from a qualitative assessment of these students' perceptions of their mentoring skills throughout the academic year. We found that there were small increases in many of these mentoring skills from the beginning to the end of the academic year, though it varied between students which likely contributed to self-efficacy and previous experiences. This variation can also be seen in our qualitative evaluation. Therefore, we plan to continue this assessment to future cohorts and expand the analyses to include perceptions of these mentoring skills for peer mentors by their assigned first year mentees. Peer mentoring in an LLC for STEM students overall seems to be beneficial for most students but the preparation and guidance that peer mentors receive to help their first year groups is equally important for positive first year mentoring experiences.

References

- National Academies of Sciences, Engineering, and Medicine (U.S.). Committee on Strengthening Research Experiences for Undergraduate STEM Students. (2017). Undergraduate research experiences for stem students : successes, challenges, and opportunities. (J. Gentile, K. A. Brenner, & A. Stephens, Eds.). National Academies Press. Retrieved September 30, 2023
- So, H. H., Jenna, G. R., Stephanie, C. H., Christine, A. S., & Christine, P. (2022). Revalidation of the mentoring competency assessment to evaluate skills of research mentors: the mca-21, 6. <https://doi.org/10.1017/cts.2022.381>

PEER Support Promoting education & emotional resilience

Kamla Al Amri, Kelli Fleming, Anthony S., Helen Ajao, *Virginia Tech*

Abstract: This is a practice session presentation presented by a team of four graduate students. We speak about our experience in forming a support group called PEER: Promoting Education & Emotional Resilience. We share experiences and tell stories to support our fellow graduate students during a program phase-out. Hopefully, this experience will help graduate students navigate their way to continue their education and achieve their goals during turmoils.

Abstract

Pursuing further formal education is a period when graduate students undergo and experience a myriad of intellectual challenges. For some, facing the challenge of completing a dissertation, there is the added stressor of the program itself being phased out or closed while you are a student. This session characterizes an accountability group which was created by four graduate students in their final semesters of dissertation work and on the heels of their own program being phased out.

This presentation emphasizes the need to formulate an informal peer support network that can promote education, enhance learning, and offer emotional support to graduate students by their peers during challenging times and hurdles. The presenters (a group of four Ph.D. students) will start by narrating how this informal graduate network initiative (accountability group) has been established, when it has been established, and where. Further, the presenters will propose a nuanced understanding of its purpose and role (why) in providing help and support to fellow graduate students.

This session underscores the significance of offering emotional resilience for graduate students during their academic pursuits, more generally and especially during a phase-out plan for a program. It is hoped by following this narrative frame, the presenters will share some of their stories and lived experiences with their graduate peers to help them continue their education/study, problem-solve, and reduce stress. Additionally, this session is a glimpse into the role an accountability group can play toward graduate student success during a program closure.

Key words:

Peer support, promote, emotional resilience & graduate education.

Peer Support: Impacting Pedagogy Through Best and Deep Practices

Michaux Dempster

Kim Zicafoose

Mark Meier

Abstract: This session will describe a Peer Support Faculty Learning Community (FLC) in the Department of Focused Inquiry at Virginia Commonwealth University that encourages reflective teacher process for both best practices and deep practices. Participants will learn about the success of this group in bolstering teacher morale and how it impacts pedagogy. The group will engage in activities that mirror the processes in the FLC that work towards mutual support and that lead towards success in the classroom and out.

In the face of deep impacts on students by the educational realities of the pandemic, the precarious state of higher education in general, and the specific dismantling of long-standing successful programs at our own university, we felt there was a significant correlation between low teacher morale and classroom success. We turned out to be right. In a 2020 study conducted by Alyssa Hayden, a professor of education at Michigan State University, she discovered that "teachers overwhelmingly reported that low morale impacted their view of their own pedagogy, contributing to a "vicious cycle" of low morale, disempowerment, and less effective pedagogy" (1). We felt that creating a small community of mutual support and pedagogical discussion (an FLC) could go some way towards addressing the situation with a brave and human face.

Hayden demonstrates that "what is most important is not the actual, "objective" level of the six dimensions of empowerment that teachers have (involvement, impact, status, autonomy, opportunities, and efficacy), but how much of those things they believe they have. Their perception is their reality" (34). Our FLC worked to change our perception. Since its inception, the original members, to a person, have seen quantifiable marked change in our circumstances both in the classroom and within the department.

The FLC also allowed us department-sanctioned time and space to engage in collaborative reflective practice. It provided us a small society in which we experienced the opportunity for a constructed version of Charles Cooley's "looking-glass self," where a group of supportive educators acted as our mirrors. This encouraged us to examine who we are as teachers and what our core values and beliefs are about our pedagogical practices. Chezare Warren, assistant professor at Vanderbilt University, argues that "participating in field experiences is perspective taking as an act of knowing, but the ongoing reflection on one's own beliefs, values, attitudes, knowledge, and skills before, during, and after participation represents perspective taking as a process of knowing" (177). This FLC became our process, one that allowed us to examine our own pedagogical practices, values and beliefs in the company of other practitioners doing the same.

Our FLC honored both best practices in teaching and what Paul Michalec and Katherine Newburgh of the University of Denver call ineffable practices. The goal of their research was to "draw attention to those elements of teaching that are less amenable to quantification and focus on the social-emotional, imaginative, spiritual, and unconscious foundations of education" (174). While acknowledging the deeply important, rigorously normalized pursuit of technical expertise for teachers, they posit that good teaching also requires attention to its "ineffable" qualities "synonymous with the deep practices (core values, emotions, social-emotional, soul, care and respect, and other inner factors) that inform teaching" (174). In our peer support FLC, we found a community that honored both the importance of "best" practices and "deep" practices. This environment of care and respect acknowledged that the soul must be fed for the teacher to nourish their students and proved to be both empowering and instructive.

Perdón, Mi scusi, Excusez-moi? Language Barriers in Public Speaking

Brandi Quesenberry, Veronica Giron, Kate Renz, Nahaly Khan, *Virginia Tech*

Abstract: Graduate Teaching Assistants need continued personal and professional development training. Some topics that new GTAs may want or need to address include how to successfully teach their discipline-specific content and help students who face language barriers in the classroom. In a 2020 analysis conducted by College Factual, over 3,000 that attend Virginia Tech are international students. Delivering your message across linguistic and cultural divides poses a number of difficulties that are uncommon when speaking to an audience who also speaks your native tongue. This poster will explore how Public Speaking GTAs help English language learners overcome their fears.

This poster will address specific topics, such as the importance of support and growth opportunities for students who speak English as a second language. A non-native English speaker contributes a wealth of culture, information, and variety to the classroom. However, language barriers exist when trying to communicate your knowledge in another language (Elbanna, 2023). Stage Fright or "public speaking anxiety" is a particular form of communication-based anxiety in which people exhibit arousal, self-talk that is unfavorable, or behavioral responses in anticipation of or in response to a presentation (Docan-Morgan & Schmidt, 2012). Although most individuals experience some kind of public speaking anxiety, it has been suggested that individuals studying English as a second language may experience it even more frequently (Alemi, Parisa, & Pashmforoosh, 2011). According to Awan et al. (2010), "speaking in front of others" is considered to be the biggest source of anxiety among non-native English speakers. One way in which non-native English speakers can combat this anxiety is by understanding that storytelling is ubiquitous in all cultures (National Geographic, 2023). The art of telling stories is widespread and as old as humanity, serving as a means of amusement, education, and propagation of cultural norms and values (National Geographic, 2023). Digital storytelling (DST) is one example that has been shown to be an effective teaching tool when communicating with a variety of students. DST is defined as telling stories with the use of digital technology, such as videos or short films. It has been shown that DST increases critical thinking and creativity among students with also a larger understanding of the concept being taught (Yang et al., 2020). Exploring teaching techniques to help non-native English speakers is vital for all educators. Public speaking, a required general education course at VT, is in a unique position to assist international students and non-native English speakers with combating speech anxiety and building skill and confidence. This poster will include resources and tips for supporting English language learners in the classroom. Due to the large population of international students at Virginia Tech, we hope to help instructors navigate presentation-based techniques to help their students present confidently and effectively.

References

- Yang, Y.-T. C., Chen, Y.-C., & Hung, H.-T. (2020). Digital Storytelling as an interdisciplinary project to improve students' English speaking and creative thinking. *Computer Assisted Language Learning*, 35(4), 840-862. <https://doi.org/10.1080/09588221.2020.1750431>
- Alemi, M., Daftarifard, P., & Pashmforoosh, R. (2011). The impact of language anxiety and language proficiency on WTC in EFL context. *Cross-Cultural Communication*, 7(3), 150-166.
- Awan, R., Azher, M., Anwar, M., & Naz, A. (2010). An investigation of foreign language classroom the challenges encountered by EFL postgraduate students and its relationship with students' achievement. *Journal of College Teaching & Learning*, 7(11), 33-30.

Permission Granted: Usage of ChatGPT for Classroom Assignments

Logan Layne, Donna Westall - Rudd, *Virginia Tech*

Abstract: Generative Artificial intelligence (AI) has become a new educational technology that faculty and universities need help implementing in courses for students to use ethically and efficiently. In Spring 2023, students in ALCE/AINS 2414 at Virginia Tech explored ChatGPT's potential, using it for essay outlines and idea development while relying on traditional resources. This innovative approach continued in Fall 2023, with interviews revealing evolving student perceptions and potential usage of generative AI integration for academic purposes.

Artificial intelligence has been a point of discussion in education for many years. However, the development of generative artificial intelligence has found its way into universities across the globe through ChatGPT. ChatGPT may be on the downward trend of being a fad among some sources, but this has allowed other generative AI technologies to enter educational institutions. Using generative AI in education offers many benefits, like providing students with personalized learning or modern intelligent tutoring systems.

Learning through students' experiences using ChatGPT for classroom assignments opens the potential to understand how to better educate students in using these technologies that have the potential to impact the future of learning in universities. Students enrolled in ALCE/AINS 2414 Identity and Inclusion in Agriculture and Life Sciences in Spring 2023 were introduced to ChatGPT as a part of meeting course objectives regarding synthesizing various resources for knowledge. This course allows students to engage in the Learning Core Outcomes for Discourse and Critical Analysis of Identity and Equality in the United States as a part of the Pathways to General Education in the context of agricultural and life sciences. The students could use ChatGPT to create an outline for their essay, think through or break down more significant concepts, or edit the students' words. Students were required to use resources such as journal articles, books, and news articles to inform their work and to cite those sources correctly.

Students were not required to participate in interviews, nor did it impact their grades in the class if they chose to use ChatGPT. Through interviews, after grades were submitted for the class, students were asked about their perceptions and usage of ChatGPT as a potential tool to assist in completing their assignments. Discovering possibilities for generative AI will allow for tailoring educational tools to be more productive for students and assessing ethical considerations to embed in honor code policies. This lesson was taught in two more sections of ALCE/AINS 2414 in Fall 2023. Preliminary data from Spring 2023 tells us that students became less interested in ChatGPT because they needed guidance on using it for academic purposes. They also wanted to consider making it normal for everyday tasks such as writing emails, creating resumes, and even creating meal plans for a week. Faculty have been actively implementing guidance on using ChatGPT on assignments in various classes but have yet to change anything about the delivery of course material and assignments. Moving forward, educators should seek ways to accurately explain to students the benefits and potential drawbacks of using generative AI in colleges and universities. More research should be done to learn faculty perceptions of tools like ChatGPT and how to utilize this tool best to benefit students and faculty in colleges and universities.

Preferred Practices for Mentoring Our Next Generation of Healthcare Leaders

Rebecca McIntyre, Sallie Beth Johnson, *Radford University*

Abstract: Mentoring is recognized as a valuable practice for fostering learners' professional development and identity. Future healthcare leaders benefit greatly from mentoring activities in gathering real-world experiences. An online Master of Healthcare Administration program met the needs of distance learners and enhanced its academic competency model through virtual and in-person mentorship opportunities. The preferred practices of both potential mentors and mentees were investigated. Based on findings, a virtual model was developed and piloted for online healthcare administration students.

Background: Mentoring is a valuable practice for fostering learners' professional development and identity across disciplines. As part of preparing for its Commission on Accreditation of Healthcare Management Education (CAHME) self-study, the Radford University Carilion (RUC) online Master of Healthcare Administration program enhanced its academic competency model with virtual and in-person mentorship opportunities. In preparing to offer mentoring as a curricular activity, the preferred practices of both potential mentors and mentees were investigated.

Methods: A pilot mixed methods quality improvement study was conducted during the 2022-2023 academic year to gain insight into the interests and preferences of potential mentors and mentees. Two online Qualtrics surveys were administered to: 1) RUC Healthcare Administration advisory board members, healthcare industry leadership partners, and program alumni, and 2) current RUC healthcare administration undergraduate and graduate majors. Survey variables included current licensure/certifications, areas of professional expertise, interest in mentoring, preferred type of mentoring activities, format, delivery, and frequency, along with academic student status (bachelor-BSHA, master-MHA, or doctoral-DHSc). Qualtrics' data and descriptive statistics analysis feature was used to report frequency counts and percentage distribution.

Results: A total of 53 surveys were completed by potential mentors (n=34) and mentees (n=19). Mentor respondents were 24% board members and 76% partners-alumni. Mentee respondents were 95% online MHA and 5% online BSHA. Interest in mentoring varied from 97% among mentors and 58% among mentees. Sixty-three percent of mentor respondents hold current certifications/licensures, including Project Management Professional (PMP), Certified Six Sigma Black Belt (CSSBB), Fellow in American College of Healthcare Executives (ACHE), Fellow in Healthcare Financial Management Association (HFMA), and Design Thinking. Highest reported areas of professional expertise for both mentors' and mentees' interest included operations and leadership. Lowest reported areas of expertise included long-term care and emerging technologies. Most preferred mentoring activities for mentors and mentees included career coaching, job shadowing, and coffee chat. Least preferred mentoring activities for both respondents included book-journal club and practicum. Most respondents reported no preference for either meeting one-on-one or group (mentors-72%; mentees-55%). For delivery, a majority reported no preference for either virtual or in-person (mentors-91%; mentees-64%). Eighteen percent of mentees preferred virtual only. For frequency, most respondents preferred monthly (mentors-33%; mentees-45%). For academic student status, 46% of mentor respondents prefer mentoring MHA students, 34% BSHA students, and 20% DHSc students.

Discussion/Conclusion: Survey results provided beneficial guidance on practices to include in the development of RUC Healthcare Administration's mentorship opportunities for online MHA students. Findings suggest mentoring the next generation of healthcare leaders may require expanding beyond the traditional practicum to a menu of practices that include in-person and virtual options to meet the growing needs of online and distance learners' preferences. Mentors and mentees were matched based on preferred practices. Future RUC activities include recruiting for gaps in areas of professional expertise and expanding mentoring to other online academic programs, such as Health Sciences and Public Health.

Promoting Engagement in an Online Residency Model

Jennifer Williams, Stacy Weiss, *East Carolina University*

Abstract: With many higher education institutions currently implementing residency models in education to effectively teach pedagogy and address teacher shortages, an emphasis needs to be placed on teacher preparedness to improve learning outcomes for students by reducing barriers, using a strength-based approach, and making learning relevant. This session will share ideas to promote engagement within a teacher residency program that highlights targeted course delivery in an online format that embeds Universal Design for Learning (UDL). In addition, the benefits of a flexible delivery option of shortened academic terms (block sessions) to increase engagement within a semester will be presented.

Legislators and districts are creative in recruitment of teachers for classrooms to address the special education teacher shortages with fast-track programs, but higher education institutions need to ensure that teachers are effective educators prepared to improve outcomes for students with disabilities and remain in the field. It is important to effectively teach pedagogy to teachers on non-traditional licensure pathways. Fast-track programs need to offer course delivery structure that allows the integration of targeted content and pedagogy resulting in prepared special educators who can increase student engagement and learning outcomes.

Teachers in residency models are teachers of record in the special education classroom setting and are participating in courses to learn evidence-based instructional approaches in reading, mathematics, and behavior, student assessment techniques, and how to make data-based instructional decisions. They need targeted courses that embed UDL to provide a strength-based approach to build on student assets to reduce barriers to learning and make learning relevant.

East Carolina University (ECU) offers an Educator Residency Model (ERM), a fast-track cohort model designed to assist residency candidates in meeting residency licensure requirements fully online to maximize accessibility. Residency candidates at ECU have a Bachelor's Degree and are currently employed as a teacher of record in an NC Classroom, Public school, or Public Charter school. Candidates complete all state Licensure Area Exams and must affiliate with an Educator Preparation Provider (EPP). Online, candidates complete 18 credit hours while provided with cohort support, a systematic course of study, and a formal academic advising model.

The online residency format presents challenges in engagement to ensure that courses are taught to meet learning outcomes. The ECU special education residency model incorporates a variety of supports to reach learning preferences including course orientations to present big ideas, MS Teams meetings to individually connect, bi-monthly webinars on topics of need, flexible student hours (evenings and weekends), Saturday licensure test support workshops, and matching of instructors to areas of expertise. In addition, Canvas H5P tools, Canvas Studio, assignment rubrics, assignment self-checklists, video observations with time-stamp feedback, examples/non-examples, and meaningful, authentic assignments are embedded throughout the courses.

One support has been block scheduling in the last semester where two consecutive 7 ½ week courses are taught instead of two concurrent courses during a 15-week semester. Given the challenge of juggling two courses at the same time and two different instructors while maintaining a full-time teaching residency, the block schedule reduces multiple points of contact and allows for residency candidates to focus on building and applying content and skills acquired with instructor feedback and authentic application.

Streamlining the blocked courses transition, instructors of each meet pre and post sessions to determine how to support teachers and provide instruction to meet learning outcomes. Shorter block terms tremendously help residency teachers with work and family responsibilities to stay enrolled and continue with the momentum to successfully complete licensure and remain in the classroom. Life events have less impact when a single course is offered at a time in terms of loss of credits and withdrawal.

References

Achieving the Dream (n.d.). Holistic Student Supports: Preparing for Shortened Academic Terms, <https://achievingthedream.org/preparing-for-shortened-academic-terms-guide-workbook-and-spotlights>

- Daniel, E.L. (2000). A review of time-shortened courses across disciplines. *College Student Journal*, 34 (2), 289-300.
- Feng, L., & Sass, T. R. (2013). What makes special-education teachers special? Teacher training and achievement of students with disabilities. *Economics of Education Review*, 36, 122-134.
- Fry, B. (2020). Understanding student engagement among online clinical students during academic residency experience. *Journal of Educators, Online*, 17(1).
- Rose, D.H., and Meyer, A. (2002). *Teaching every student in the digital age: Universal Design for Learning*. Alexandria, VA: Association for Supervision and Curriculum Development.

Radical Reimagining: Enacting A Student-Centered Model of Critical Pedagogy

Molly Ryan, *Virginia Tech*

Abstract: This study proposes an implementable model of critical pedagogy in practice, with tangible suggestions designed for the complicated contexts of instructorship in the modern institutional landscape. With theory-based scaffolding designed for praxis in the writing classroom and beyond, this work has implications of furthering of diverse, inclusive methods of pedagogy that interrogate power boundaries, honor student/instructor identities, and complicate institutional power structures for faculty and instructors in other interdisciplinary contexts.

While critical pedagogy, as introduced by Paulo Freire (1970), carries an extensive legacy of theoretical interpretation for praxis, this study argues that there is a lack of implementable models of practice, particularly for new instructors and graduate teaching assistants. In a scopic analysis of relevant scholarship on critical pedagogy, critiques of classroom application usually fall into two broad categories: critical pedagogy in practice is labeled as either difficult to implement due to its fluid definitional bounds (Breuing, 2011; O'Sullivan & Smaller, 2013; Tinning, 2002), or "dated" compared to other heuristics of practice (Mesta, 1998; Yoon, 2005). This study accounts for this complexity of definition in context of teaching writing at the college level, which comes with further complications, including interpreting the needs of students from all majors and backgrounds, and accounting for the alignment of the writing program with the greater university mission and goals. Add to this complicated role the emotional labor, the mental fatigue, and the stigma towards the profession, and the tasks of the role of the writing instructor only become more complex (Bishop, 1999; Bishop & Crossley, 1993; Micciche, 2002). The purpose of this study is to show implementable scaffolding for using a critical pedagogy model in the writing classroom and beyond, with the intention of enhancing institutional goals, building a meaningful and attainable framework for instructors, and creating positive experiences for students.

This study uses a three-part methodology. First, relevant scholarship is synthesized in four parts: critical pedagogy as theory, critical pedagogy as design for instructor accompliceship, critical pedagogy as method for students, and relevant critiques. Then, the project summarizes a gloss analysis of institutional climate, including a list of theory-informed, self-reflective instructor pre-work questions. Finally, the central model-building is conducted through a theory-informed coding of the Virginia Tech University Writing Program blueprint Literacy Narrative and Worknets projects.

The result of this approach is a proposed implementable model (Miller, 2014) of critical pedagogy in practice for English 1105 at Virginia Tech, with workable suggestions including invitational language, scaffolding exercises, and supportive assignments to affirm student agency, engage in instructor accompliceship, and create a climate of love and care in the writing classroom. This model is designed to transform critical pedagogy from unapproachable methodology to workable method that empowers and encourages instructors to try alternative approaches to the classroom. Implications of this work include furthering of diverse, inclusive methods of pedagogy that interrogate power boundaries, honor student/instructor identities, and complicate institutional power structures for faculty and instructors, in the writing classroom and in other interdisciplinary contexts.

References

- Bishop, W. (1999). Places to stand: The reflective writer-teacher-writer in composition. *College Composition and Communication*, 51(1), 9-31. <https://doi.org/10.2307/358957>
- Bishop, W., & Crossley, G. L. (1993). Doing the hokey pokey? Why writing program administrators' job conditions don't seem to be improving. *Composition Studies*, 21(2), 46-59. <http://www.jstor.org/stable/43501897>
- Breuing, M. (2011). Problematizing critical pedagogy. *International Journal of Critical Pedagogy*, 3(3), 2-23.
- Freire, P. (1970). *Pedagogy of the oppressed* (MB Ramos, Trans.). New York: Continuum, 2007.
- Mesta, G. (1998). Say you want a revolution...: Suggestions for the impossible future of critical pedagogy. *Educational theory*, 48(4), 499-510.
- Micciche, L. R. (2002). More than a feeling: Disappointment and WPA work. *College English*, 64(4), 432-458. <https://doi.org/10.2307/3250746>
- Miller, B. (2014) Mapping the methods of composition/rhetoric dissertations: A 'landscape plotted and pieced.' *College Composition and Communication*, 66(1), 145-176. <http://www.jstor.org/stable/43490905>.

- O'Sullivan, M. W. and Smaller, H. (2013) Challenging problematic dichotomies: Bridging the gap between critical pedagogy and liberal academic approaches to global education. *Canadian and International Education / Education Canadienne et Internationale*, 42(1), 1-17.
- Tinning, R. (2002). Toward a "modest pedagogy": Reflections on the problematics of critical pedagogy. *Quest*, 54(3), 224-240.
- Yoon, K. H. (2005). Affecting the transformative intellectual: Questioning "noble" sentiments in critical pedagogy and composition. *JAC*, 25(4), 717-759. <http://www.jstor.org/stable/20866713>

Reimagining Teaching after Lockdown: Switching the Cake, Ditching the Candles

Gabi Martorell, *Virginia Wesleyan College*

Abstract: During the COVID lockdown of 2020-2021, faculty pivoted to to online teaching or used altered classroom spaces. This necessitated the implementation of new course policies and assignments. Some of these changes were stopgap measures dropped once courses met FTF again. In the same way some traditions - like blowing out candles on a birthday cake - may disappear in our new world, some of the innovations instituted - like having individual cupcakes instead of a cake to be blown on - represent an improvement and should be maintained. In this poster, helpful classroom strategies and assignments developed during COVID are discussed.

A common tradition in many parts of the world is blowing out birthday candles. However, in 2020, COVID-19 made this charming tradition a vector for the transmission of disease. In response many people shifted to the use of individual cupcakes. In this way, birthday celebrants could still enjoy being sung to, making a wish, and blowing out birthday candles, but avoid infecting others.

Similarly, many people had to modify their behaviors and goals at leisure, work, play and in their relationships. Among these changes were a rapid pivot to online education for most institutions of higher learning. Many of the traditions and norms of teaching were, in this new world, no longer appropriate.

In this poster, I will outline modifications and extensions to course policies and assignments I made to address issues of COVID - focusing on the changes I have retained despite the end of lockdown. These changes are broadly focused on flexibility, self-referential work, and compassion.

Research has shown among the top actions students report would help them succeed include being more flexible about guidelines (57 percent) and being more flexible about attendance or participation (44 percent) (Flaherty, 2023). In my classrooms, I used ""Flex Points"" to make up for missed attendance, ensuring no student felt compelled to come to class while feeling ill out of a fear of losing course credit. I also used a menu of options for completing course work, allowing students to select which particular assignments they wanted to complete to earn full course credit. I have kept the same structure despite lockdown ending because of its benefits.

With respect to self-referential work, research also shows autobiographical information is richly encoded and more likely to be remembered (Klein & Loftus, 1988). Additionally, the inclusion of self-referential materials in coursework enhances performance (Liu et al., 2023). Because engagement was difficult to nurture while remote teaching, I incorporated self-referential assignments in order to boost engagement with students. I found students more likely to engage with these assignments, and the personalized nature of them also made them more pleasant to grade. Thus, I have continued to use self-referential assignments.

Last, although most cohorts showed some distress, adolescents and young adults showed the greatest increases in anxiety and depression during the pandemic (Feliciano et al., 2022). Moreover, 39 percent of students report having difficulty meeting academic goals because of mental health struggles (Flaherty, 2023). The use of compassionate and flexible course policies and interactions is beneficial in this context (Gelles et al., 2020).

As the world has opened up, many people have opted to re-think birthday cakes in favor of birthday cupcakes, a safer alternative that carries with it additional disease-prevention benefits over and above COVID. It's a good innovation. In the same way, the rapid shift to online teaching and classroom modifications necessitated by the lockdowns led to experimentation and innovation as faculty experimented with ways to maintain academic quality in the face of the changing world. And, the good innovations should be kept.

References

Feliciano, L., Johanson, K. A., Okun, M. L., & Walden, A. (2022). Impacts of the coronavirus pandemic on the emotional and physical health of older adults compared with younger cohorts. *Clinical Gerontologist*, 45(1), 45-57.

- Flaherty, C. (2023). Survey: Students cite barriers to success, seek flexibility. [Report]. Inside Higher Ed. <https://www.insidehighered.com/news/student-success/academic-life/2023/02/13/survey-top-five-barriers-student-success>
- Gelles, L. A., Lord, S. M., Hoople, G. D., Chen, D. A., & Mejia, J. A. (2020). Compassionate flexibility and self-discipline: Student adaptation to emergency remote teaching in an integrated engineering energy course during COVID-19. *Education Sciences*, 10(11), 304.
- Klein, S. B., & Loftus, J. (1988). The nature of self-referent encoding: The contributions of elaborative and organizational processes. *Journal of Personality and Social Psychology*, 55, 5-11. <https://doi-org.vwu.idm.oclc.org/10.1037/0022-3514.55.1.5>
- Liu, Z., Wen, J., Liu, Y., & Hu, C. P. (2023). The effectiveness of self: A meta-analysis of using self-referential encoding techniques in education. *British Journal of Educational Psychology*.

Scaffolding Research into the Curriculum: The Impact on Student Retention

Abigail Green, Joe Wirgau, *Radford University*

Abstract: It is well-known that Undergraduate Research Experiences (UREs) where students get to work hands on with a faculty mentor can increase student success, and to make these experiences scalable and equitable there has been a movement to implement Course-Based Undergraduate Research Experiences (CUREs) into the curriculum. In this study, we report on the impact of CUREs on retention rates at a mid-sized public university. While research is often thought of as a capstone experience, we are assessing how CUREs influence student retention rates when taken during their first year of university.

Higher education is at a unique point in its history where many communities are questioning the value of a college degree. With the rising cost of education, it has never been more important for universities to meet their students where they are at, retain them, and provide skills that prepare students for the workforce (Mitchell et al., 2019; Barbera et al., 2020). Retention is often connected to having an experience of meaning or high level of engagement during their school experience (Tight, 2020). It is well-known that Undergraduate Research Experiences (UREs) where students get to work hands on with a faculty mentor can be an experience of meaning that increases student success (Baron et al., 2020; Mekolichick, 2023), but to make these experiences scalable and equitable there has been a movement to integrate UREs into the curriculum (Hensel, 2023). Therefore, Course-Based Undergraduate Research Experiences (CUREs) are potentially a pedagogy that can retain students, provide workplace readiness skills, and give meaning to a student's university experience. In this study we report on the impact of CUREs on retention rates at a mid-sized public university. While research is often thought of as a capstone experience, we are assessing how CUREs influence student retention rates when taken during their first year of university.

Results for the study were developed using a dataset of all students enrolled in a CURE between the 2015 and 2023 academic years. The dataset also included the term they entered the university, whether they were retained to the following fall semester, gender, Pell eligibility, first generation college student, and ethnicity. These data represents a chance to observe the impact over an extended period of time that includes the pandemic and the investment of our university in expanding undergraduate research opportunities. Over this time period the number of students being supported yearly to present their research on campus more than quadrupled. To process the data and compare it to reported data we first filtered to remove all graduate, non-degree seeking students, and students first enrolling at our university during the spring semester. Next, we created three different cohorts of students for each academic year: students who took a CURE during their very first semester, students who took a CURE during the spring semester of their first year, and those who did not have a CURE their first year at our university. We then determined the retention rates for each cohort and compared them to the retention rates for the university as a whole and further disaggregated our data to explore where equity gaps exist within the cohorts. The results on retention of our universities investment in scaffolding research and creative inquiry into the curriculum will be presented.

References

- Barbera, S. A., Berkshire, S. D., Boronat, C. B., & Kennedy, M. H. (2020). Review of undergraduate student retention and graduation since 2010: Patterns, predictions, and recommendations for 2020. *Journal of College Student Retention: Research, Theory & Practice*, 22(2), 227-250.
- Baron, S. I., Brown, P., Cumming, T., & Mengeling, M. (2020). The impact of undergraduate research and student characteristics on student success metrics at an urban, minority serving, commuter, public institution. *Journal of the Scholarship of Teaching and Learning*, 20(1), 85-104. https://academicworks.cuny.edu/cgi/viewcontent.cgi?article=1614&context=ny_pubs
- Hensel, N. H. (Ed.). (2023). *Course-based undergraduate research: Educational equity and high-impact practice*. Taylor & Francis.
- Mekolichick, J. (2023). A position paper: Recognizing undergraduate research, scholarship, & creative inquiry as a career-readiness tool. *CUR.org*. file:///C:/Users/abbig/Downloads/JM_PositionStatement-32023.pdf
- Mitchell, M., Leachman, M., & Saenz, M. (2019). State higher education funding cuts have pushed costs to students, worsened inequality. *Center on Budget and Policy Priorities*, 24, 9-15. https://tacc.org/sites/default/files/documents/2019-11/state_he_funding_cuts.pdf

Tight, M. (2020). Student retention and engagement in higher education. *Journal of further and Higher Education*, 44(5), 689-704.

Science Hub: Bridging Faculty, Students, and Staff for STEM Success

Michal Coffey, Mariah Maxwell, *Virginia Commonwealth University*

Abstract: Join us to learn an innovative approach to removing barriers for STEM students. A new way of office hours has created cohesion in the STEM community between students, faculty and staff. A STEM career exploration course is building community between alumni, industry, and research. We will share low, and no cost ways to build these connections on any campus. Presenters will also share assessment data that demonstrates the impact of these practices on students and faculty with a focus on historically underserved student groups. Participants will leave with a plan of action and assessment tools.

Through a multi-pronged approach, Virginia Commonwealth University (VCU), a large, urban, public, research university with a high underserved (UR) student population developed a centrally housed Science Hub, within an existing learning center. New programs have been implemented with a high degree of success. Efficacy of programming and structure is measured through surveys reflecting student engagement with faculty, participant data (specifically underserved students), and academic success. Services offered through the Science Hub include a large-scale Students Hours program, a STEM career exploration course and support for study groups.

The Science Hub serves as a home for STEM students and faculty to connect and work together. These students historically have lower academic success and sense of belonging, through inclusive programming the Hub works to break down those barriers. This work has been initially funded through a HHMI-Inclusive Excellence grant and is now institutionalized. The largest program offered is the Student Hours program, a new and innovative approach to traditional office hours. Faculty instead join together in a collaborative space in the Hub, with other faculty members and students. Removing the barriers to approaching faculty have resulted in increased overall usage but specifically increased usage by high underserved groups. Specific data will be shared to show how pell eligible, first generation, and students of color have benefited from this change.

The Science Hub also hosts a STEM career exploration course that gives students the opportunity to explore the alignment of their values, interests, and skills with potential STEM career pathways. Through this course, students have the opportunity to interact with diverse STEM professionals in several STEM sectors, building connections with alumni and local professionals in industry and research.

The presentation will highlight two of the most utilized services, the above mentioned course and Student Hours. The presenters will offer detailed information on how these programs were developed, with time for attendees to brainstorm ways to develop similar programs at their home institutions. The programs being shared have been designed to be low or no-cost, stand on their own or together, depending on the needs of a particular campus. Presenters will offer lessons learned on gaining faculty participation and advocacy, sharing both pitfalls and success. Results of program assessment for Science Hub programming will be discussed, including impacts on sense of belonging and STEM confidence. Outcomes for students and faculty participants will be included.

To conclude the presentation, participants will be provided with time to brainstorm and structure small ways they can implement programming on their campus. Time for discussion will be provided.

Scoring the Story: A Dialogue of Feelings in Narrative Writing

Anthony Kwame Harrison, *Virginia Tech*

Abstract: This in-class exercise aims to facilitate discussions of how a piece of narrative-writing feels. It involves students pairing specific passages from the assigned reading with selected pieces of music, and presenting them to the class. Students focus on how, as readers, they envision, imagine, and audialize scenes in the reading. Music introduces a layer of subjective interpretation that lays the groundwork for the class to discuss the intensions and motivations of characters. The exercise allows students to be active creators in meaning-making by sharing how and why a text feels a certain way to them.

This in-class exercise aims to facilitate discussions and deeper understandings of the way narrative-writing (for example, a short story, a chapters in a novel, or a narrative account) feels. It involves scoring a piece of writing—that is, pairing a specific passage from the assigned reading with a selected piece of music. Students are asked to focus on how, as readers, they envision, imagine, and audialize scenes presented on the pages. The exercise consists of four basic steps. First, each student, on their own, chooses a specific passage from the reading—typically these range from one-hundred to three-hundred words (no more than a page). The passage should be primarily narrative, although it can involve some explanation or reflection. The most important quality is that it should place the reader in a situation, setting, and/or scene that they can visualize. Second, students select a piece of music to pair with the passage. An instrumental piece may be better but it is fine to select a song with vocals. The third, class presentation component of the assignment is inspired by Clover et al.'s (2005) critical karaoke model. The class progressively goes through the reading (from beginning to end) with each student presenting their scene—including possibly reading sections from it—and their music while the musical score plays in the background. This requires adequate audio-technological provisions and some rehearsal. The presentation is essentially a performance. There is no issue with students scoring the same passage. In fact, such overlap should enhance the subsequent discussion. Finally, following the presentations, the class engages in a discussion of how the music and the written piece work together. Opening questions might include:

- o Did a particular musical selection enhance your feelings about and or understandings of the passage? Would you have scored it the same way?
- o Does the music (alone) call to mind particular experiences for you? How are they similar and how are they different from the passage in the reading?

Music introduces a layer of subjective interpretation that lays the groundwork for students to discuss the intensions, motivations, and concerns of characters in the reading. We are all music listeners and most of us like sharing our music with friends and classmates. This exercise allows students to enjoy sharing music they like and/or find particularly meaningful, while also discussing the impact of a selected passage from the assigned reading. It allows students to be active creators in meaning making by sharing how and why a text feels a certain way to them. As such, there is no specialized knowledge needed for this assignment. However, because of the presentational nature, it works better in small classes. It would be a challenge for more than ten students to present, and to discuss, in a single class period. A version of this exercise, although one more geared towards ethnographic writing, appears in the forthcoming Routledge volume *The Creative Ethnographer's Notebook: Exercises for Writing, Visualizing, Sounding and Performing Data* (edited by Kristina Jacobsen and Melisa Cahnmann-Taylor).

References

- Clover, Joshua, Ange Mlinko, Greil Marcus, Ann Powers, and Daphne A. Brooks. "Critical karaoke." *Popular Music* 24, no. 3 (2005): 423-427.
- Jacobsen, Kristina, and Melisa Cahnmann-Taylor (Eds.). *The Creative Ethnographer's Notebook: Exercises for Writing, Visualizing, Sounding and Performing Data*. New York: Routledge (forthcoming).

SPICE: Employing Instructional Design Concepts for Teaching Project Management

Rob Branch, *University of Georgia*
Jennifer Johnston, *University of Ibadan*

Abstract: This session is about a successful pedagogical practice for teaching a higher education course that employs interdisciplinary instructional strategies. The premise is that the efficient management of a project is an essential part of instructional design. Founded on the concepts associated with the systematic design of instruction, the paradigm being presented has evolved during the past two decades, and successfully used to teach a college-level introductory project management course for non-business majors. The project management paradigm being presented is based on five phases: Start, Plan, Implement, Close, and End (SPICE). Audience input will be solicited.

We propose to present a successful pedagogical practice for teaching a higher education course that employs interdisciplinary instructional strategies. Founded on the concepts associated with the systematic design of instruction, the paradigm being presented has evolved during the past two decades, and successfully used to teach a college-level introductory project management course for non-business majors. The project management paradigm is based on five phases: Start, Plan, Implement, Close, and End (SPICE).

Project management is often associated with being more of a practice than a field of study. The Project Management Institute (PMI) defines four conceptual project phases: initiation, planning, execution, and closure. Practically every project goes through these four phases. Some management models deconstruct projects into more micro phases, stages, activities, tasks, and steps. The project management process in general, is very iterative with overlapping phases similar to the waterfall concept of instructional design (Figure 1).

Figure 1. Waterfall concept of instructional design applied to project management.

The four PMI project phases of initiation, planning, execution, and closeout represent a sufficient conceptual framework for managing a project; however, students new to the systematic approach to developing a project often need more concrete information about actually knowing when to stop work on a project. Therefore, the closeout phase was expanded to include both the concepts of close and end.

Thus, continuing to think conceptually about the now five phases of project management, Start replaced initiation; Plan became the action verb instead of planning; and Implement was adopted to use current language associated with product development processes forming start, plan, implement, close, and end (SPICE) (Branch, 2009). The conceptual framework for the SPICE paradigm of project management is summarized in Figure 2. The SPICE concept of project management is being introduced here as a concept for teaching project management.

Figure 2. Conceptual framework of SPICE paradigm of project management.

The systematic design of instruction is the underlying concept. Instructional design stresses interdependence so as to respond to the inextricably connected relationships among pair wise, and otherwise multi-faceted entities relevant to any project. Instructional design is synergistic because it presents the sum of the parts as being greater than the whole, thereby, increasing the function of each entity beyond its individual value, thus, exponentially increasing the probability of achieving the desired outcomes. Instructional design is dynamic in order to respond to the changing variables within a designated performance space. Instructional design is cybernetic because it governs, guides, automates, replicates, and prevents failure of the entire process. Instructional design is systematic because it establishes rules and procedures; as well as the protocol for establishing the rules and procedures, and helps to constitute responsible approaches to creating products and services. Instructional design is systemic because all components of the process respond to any stimulus: or at least have the opportunity to respond to any stimulus. SPICE is an acronym that refers to a paradigm based on instructional design rather than a fully elaborated model in its own right (Figure 3).

Figure 3. The SPICE paradigm

References

Branch, R. (2009). SPICE: A competitive project management paradigm. *Competition Forum*, 27(1), 181-187.

Studying Away: A Dream Is a Wish Your Heart Makes

Kristin Redfield, Torry Reynolds, Glory Ordonez Carboni, *Forsyth Technical Community College*

Abstract: Join us in exploring one college's groundbreaking approach to equitable, domestic Study Away experiences. This session delves into the innovative fusion of Continuing Education and curriculum courses in the community college setting, focusing on a Leadership Development Study Away trip to Walt Disney World. Learn about the strategic choice of Disney, the integration of course-relevant assignments, and the transformative impact on students. Gain valuable insights into breaking financial barriers, navigating administrative challenges, and fostering inclusive, cost-effective Study Away initiatives.

Walt Disney World, renowned as the "Happiest Place on Earth," became the backdrop for this transformative, student-focused, domestic Study Away experience. Beyond its allure, Disney offered unparalleled programming, seamlessly merging entertainment and education. Its distance provided a meaningful escape from routine while ensuring accessibility. Cost-effectiveness made dreams attainable for students from various backgrounds. The session will explore how Disney's prestige created an unmatched learning environment and discuss the delicate balance of infusing educational assignments without compromising the Disney magic.

The choice of Disney was strategic. Beyond its allure, Disney offers unparalleled programming, bridging entertainment and education seamlessly. Its distance from the college ensured a meaningful disconnect from routine while maintaining accessibility. Cost-effectiveness was pivotal, making the program attainable for diverse student backgrounds. Disney's prestige provided an unmatched learning environment through half-day workshops provided by their Disney Imagination Campus.

Attendees will explore the challenges faced in pioneering a domestic Study Away experience at their college, from administrative hurdles to creative pedagogical solutions, providing valuable insights for institutions aiming to create similar inclusive Study Away experiences. Preserving the magic of Disney while integrating course-relevant and program-specific on-site assignments will be addressed.

This initiative has not only provided students with a unique Study Away experience but also paved the way for future equitable initiatives. Through interactive discussions and multimedia presentations, the session will showcase student experiences, emphasizing the transformative impact of this blended approach, including its impact on student engagement, retention, and overall educational experiences. Participants will gain practical strategies to implement similar programs, fostering equitable opportunities for all students. The session aims to inspire attendees to enhance their colleges' academic offerings by breaking barriers and fostering transformative, inclusive Study Away experiences.

Teaching Culturally Competent Research Ethics: An Indigenous-University Collaboration

Jamila Kareem, *University of Central Florida*

Abstract: This practice session will share and discuss the process of collaborating, researching, and developing college composition community engagement curriculum guides with the Seminole Tribe of Florida. I will demonstrate to participants how I worked with the Tribe's Ah-Tah-Thi-Ki Museum education staff to identify critical knowledge for first-year composition student researchers to learn about community-based research with Indigenous communities.

This practice session will share and discuss the process of collaborating, researching, and developing college composition community engagement curriculum guides with the Seminole Tribe of Florida. In a joint effort to establish relational networks of knowledge systems between University of Central Florida and the Seminole Tribe, the Department of Writing and Rhetoric and the Seminole Tribe collaborated to create a grant-funded community research project. I will show participants how I worked with the Tribe's Ah-Tah-Thi-Ki Museum education staff to identify critical knowledge for first-year composition student researchers to learn about community-based research with Indigenous communities. The culturally sustaining/revitalizing pedagogies that this method draws from is rooted in the concept of educational sovereignty as it "attends directly to asymmetrical power relations in the goal of transforming legacies of colonization" and "recognizes the need for community-based accountability" (Lee and McCarty 62). I will share samples of the curriculum guides and lessons developed out of these collaborations and demonstrate a lesson. Relationship-building practices will be included in the discussion, and a lesson design activity will conclude the session. Participants might want to bring a lesson or unit related to teaching research procedures or writing for the planned activity.

References

- Chilisa, Bagele and Gaelele N. Tsheko. "Mixed Methods in Indigenous Research: Building Relationships for Sustainable Intervention Outcomes." *Journal of Mixed Methods Research*, vol. 8, no. 3, 2014, 222-233.
- Lee, Tiffany S. and Teresa L. McCarty. "Upholding Indigenous Education Sovereignty Through Critical Culturally Sustaining/Revitalizing Pedagogy." *Culturally Sustaining Pedagogies; Teaching and Learning for Justice in a Changing World*, edited by Django Paris and H. Samy Alim. Teachers College Press, 2017, pp. 61-82

Teaching Synthesis Methods by Purpose and Principle: Refining Scope

C. Cozette Comer, Jackson Hoch, Kiri DeBose, *Virginia Tech*

Abstract: In this 50-minute practice session, the ESS team will begin by explaining the role of, and opportunity for principle-based instruction and self-explanation assessment when teaching a research methodology. We will then walk participants through one scope refining session that begins with a reflection, followed by instruction, a hands-on activity, and concludes with a reflective discussion. Participants should expect to leave this session with a new approach for teaching complex, methods-related topics, and feel more confident about refining the scope for their next research review or synthesis.

Evidence synthesis (ES) methods such as systematic reviews and meta-analyses, abundant in health and medical sciences, are proliferating across other disciplines at an exponential pace. Given the nature of this work - finding and synthesizing existing information - support services at Universities are often housed within libraries, as they are at Virginia Tech (VT). At the core of VT's Evidence Synthesis Services (ESS) is the mission to lower the barrier of entry to novice reviewers and increase the quality of reviews institution-wide, across all disciplines.

A core aspect of our services is to teach ES methods to students, faculty, and staff. These reviews require far more transparency, rigor, and attention to detail, spanning over much longer periods of time than the typical literature review. Reviewers must therefore manage a large number of decisions in a manner that is justifiable, transparent, and methodologically sound according to both the review method and their specific topic of study. When teaching or learning about complex concepts, we run the risk of missing the forest for the trees, getting lost in and even overwhelmed by the details. However, the many nuanced and unique decisions a review team must make are important. These decisions have a direct impact on the rigor, transparency, and as a consequence, the quality of a review - and many published ES reviews are considered low quality [1,2].

Although scaffolding is a common approach to instruction in general and for teaching ES methods by extension, less attention is given to the power of self-explanation in ES. Self-explanation, or asking students to reflect on why rather than how, is useful for teaching complex topics in fields such as mathematics, physics, and engineering [3,4]. We have found this approach to be helpful in teaching ES methods, given the complex and varied nature of the decision-making process. To complement the self-explanation approach, we integrate the underpinning principles and logics of ES methods within ESS instruction, activities, consultations, and partnerships. Ultimately, we aim to empower reviewers to feel more confident about making methodologically sound decisions in the future, rather than simply teaching the steps required for a team to produce what can technically be called a systematic review.

In this 50-minute practice session, the ESS team will begin by explaining the role of, and opportunity for principle-based instruction and self-explanation assessment when teaching a research methodology. We will then walk participants through one scope refining session that begins with a reflection, followed by instruction, a hands-on activity, and concluding with a reflective discussion. We focus on scope development in this session as it is foundational to ES reviews and often taken for granted, and can lead to confusion and reduced rigor if not thoroughly prepared at the start of a review. Participants should expect to leave this session with a new approach for teaching complex, methods-related topics, and feel more confident about refining the scope for their next research review or synthesis.

References

- [1] Campbell, J. M. (2017). Quality of systematic reviews is poor, our fault, our responsibility. *JBIS Database of Systematic Reviews and Implementation Reports*, 15(8), 1977-1978. <https://doi.org/10.11124/JBISRIR-2017-003552>
- [2] Uttley, L., Quintana, D. S., Montgomery, P., Carroll, C., Page, M. J., Falzon, L., Sutton, A., & Moher, D. (2023). The problems with systematic reviews: A living systematic review. *Journal of Clinical Epidemiology*, 156, 30-41. <https://doi.org/10.1016/j.jclinepi.2023.01.011>
- [3] Rittle-Johnson, B., Loehr, A. M., & Durkin, K. (2017). Promoting self-explanation to improve mathematics learning: A meta-analysis and instructional design principles. *ZDM*, 49(4), 599-611. <https://doi.org/10.1007/s11858-017-0834-z>

[4] Weerasinghe, A., & Mitrovic, A. (2002). Enhancing learning through self-explanation. *International Conference on Computers in Education, 2002. Proceedings.*, 1, 244-248. <https://doi.org/10.1109/CIE.2002.1185914>

Team Teaching: The Good, the Bad and the Collab

Cathy Felmlee Shanholt, Crystal Barchacky, Autumn Servera, Callie Victor, *Shenandoah University*

Abstract: Team teaching has demonstrated numerous benefits to faculty and students in the hybrid OT program at Shenandoah University. Advantages will be discussed as well as the application of the knowledge gained from both student and faculty perspectives. Creating a well rounded, robust educational experience for students is essential in today's classroom, and this session will discuss the benefits to utilizing this teaching method. Learning outcomes, student engagement, critical thinking skills, and a holistic learning approach are a few of the robust evidence that supports the effectiveness of team teaching.

Though health professionals work on interdisciplinary teams in practice settings to provide services to clients, the modeling of co-treatment is limited in educational programs. Therefore, it is important that students have multiple perspectives on topic areas and treatment approaches embedded into their courses. Instructors often collaborate on course development and research, but not always on the co-instruction of courses. Co-instruction expectations and dynamics can impact the collaborative nature of co-instructor relationships as well as student rapport, satisfaction and learning.

As the demands in healthcare seek to provide evidence-based and cost-effective care while meeting the demands of today's society, students in health professions must be encouraged to think critically and reason clinically while collaborating with various stakeholders. Frequent and early practice of these skills must be required not only in clinical education, but during didactic education as well. Such practice will ensure entry-level students are prepared to manage these competing demands in practice, demonstrate professional artistry, and emulate a professional identity (Ikugu & Rosso, 2003).

In order to meet these needs, implementation of team teaching was incorporated into two foundational courses within an entry level occupational therapy hybrid program. Within this model of teaching, educators shared their insights, engaged in professional discourse, and challenged students to evaluate various teaching approaches presented. Implementation of such an approach led to the creation of interactive assignments that promoted core professional values, cultural awareness, and beliefs, while demanding students manage emotional intelligence and procedural skills in a professional program

This presentation will include a discussion of how multiple instructors from different practice settings and cultural backgrounds can benefit the learning environment, how the development of diverse learning styles promotes student learning, how faculty workload can be managed and how team teaching can promote and enhance collaboration with faculty and students. Time for reflection, peer interaction and sharing will be included.

The application of learning with participants will include:

a discussion of how multiple instructors from different practice settings and cultural backgrounds can benefit the learning environment

A discussion of how the development of diverse learning styles promotes student learning

How workload management can occur for faculty

How team teaching promotes collaboration with faculty

References

- Atkinson & J. Hobson (Eds.), *Teaching and Learning Forum: The Reflective Practitioner* (pp. 1-10). Australia: Murdoch University.
- Lock, J., Clancy, T., Lisella, R., Rosenau, P., Ferreira, C., Rainsbury, J. (2016). *The Lived Experiences of Instructors Co-teaching in Higher Education*. *Brock Education Journal*, 26 (1)
- Seymour, M., Seymour, D. (2014). *Are Two Professors Better than One? Student and Faculty Perceptions of Co-teaching*. *The International Journal of Learning: Annual Review*. Volume 20
- Yanamandram, V. K. & Noble, G. I. (2005). *Team teaching: student reflections of its strengths and weaknesses*. In R.

The Brain: An Owner's Manual for College Success

Jennifer Rainville, Rachel Diana, *Virginia Tech*

Timothy Lipuma, *Indiana State University*

Abstract: Much of the research on COVID-19 and education focuses on coping with and adapting to distance learning, but to our knowledge, little research has been done on the transition back to in-person learning, or the long-term effects of this period of remote learning on student perceptions of success. We posit that there is an untapped approach to bolstering student attainment. Although many interventions point to psychological and neurobiological outcomes related to improved learning outcomes, to our knowledge, there are no interventions that equip students with both evidence-based tools to studying, along with neurobiological and psychological mechanisms by which these work.

The COVID-19 pandemic forced students and instructors into distance education. Some students began their college instruction during the midst of the pandemic, and had not had in-person instruction for over a year. Much of the research on COVID-19 and education focuses on coping with and adapting to distance learning, but to our knowledge, little research has been done on the transition back to in-person learning, or the long-term effects of this period of remote learning on student perceptions of success.

We posit that there is an untapped approach to bolstering student attainment. Although many interventions point to psychological and neurobiological outcomes related to improved learning outcomes, e.g., neuroplasticity and the growth mindset, to our knowledge, there are no interventions that equip students with both evidence-based tools to studying, along with the neurobiological and psychological mechanisms by which these tools are efficacious.

Our seminar-style intervention for neuroscience and psychology students, who take a variety of STEM and general education courses, included a short survey to assess students' existing study strategies, knowledge of learning concepts, and confidence prior to attending the seminar. Across Fall 2022 and Spring 2023, we have collected 335 responses to that survey (all from undergraduate students at Virginia Tech). The pre-seminar survey indicated that approximately 50% of students think their studying is effective, but approximately 54% indicated that they feel somewhat unprepared for exams. 54% of students also described themselves as procrastinators. Of the students who completed the survey in the fall, there was more endorsement of procrastination among first-generation students than others. Among the study strategies we asked about in the pre-survey, 49% of students said that they re-write their class notes word-for-word more than occasionally, which is known to be an ineffective study strategy. The highly effective strategy of re-writing previous quiz or test questions to use for practice, is only used regularly by 42% of the respondents. Our preliminary confirmatory factor analysis of the pre-seminar survey data indicated two reliable factors on the survey: preparation self-efficacy and practice test-taking behaviors. These results indicate that many students could benefit from implementing new study strategies to increase their confidence in learning material for classes. A follow-up survey is in development and will be used to evaluate changes in student study habits and perceptions of learning post-seminar.

The Curriculum Fellows Program a Post Doctoral Fellowship for Teaching

Aimee Hollander, *Harvard University*

Abstract: The curriculum fellows program was established in 2007 at Harvard Medical School and is a distinct post doctoral training program that provides pedagogical training to the participant and serves the Harvard medical school graduate education program in curriculum revision and development. Of the 49 alumni, 45% of our fellows go on to become faculty at undergraduate and graduate level institutions, 35% move into higher education leadership positions, 10% go into faculty development positions and the rest move into research or industry leadership positions.

The Curriculum Fellows Program (CFP) is a group of education-focused STEM post doctoral fellows pursuing teaching and learning excellence. The CFP began in 2007 and was used to serve as an engine of innovation for graduate education at Harvard Medical School (HMS). The dual goals in hiring these fellows were (a) to provide a unique training opportunity for life science PhDs to turn their professional development in the direction of science pedagogy and educational administration and research and (b) to enhance the existing strengths of the HMS graduate programs and curriculum in order to provide exceptional quality in PhD training and support the many NIH T32s that finance most of our graduate students. From 2008 to 2014 the CFP grew from this phase I pilot generously supported by the HMS Preclinical Department Chairs and Dean's office to a stable phase II project and then the mature phase III program currently supported by the office of the Dean for Graduate Education and the many training programs that sponsor each Curriculum Fellow.

Over that time, the CFP evolved to become the central educational implementation group for the HMS Program in Graduate Education. The CFP developed and fostered many collaborative projects, launching new courses and course formats and adding many new features to HMS graduate education, including a novel curriculum on the theory and best practice of pedagogy. Since 2014, the CFP has continued to grow, gradually expanding the fellow positions and the scope of programmatic areas beyond the basic science departments. Key features of the CFP are that (1) CFs are PhD-trained scientists drawn from different backgrounds through competitive international job searches, (2) CFs spend 100% effort on education and educational research, (3) each CF appointment is term-limited and includes explicit training and scholarship to build expertise in pedagogy, (4) although each CF has a specific service niche, CFs also work collaboratively to form an education laboratory to mount novel curricula and collect data on educational outcomes, and (5) the CF team works closely with faculty mentors and PhD program directors, as well as the graduate school, to shape the evolution of PhD programming at HMS.

This poster will show the life cycle of a fellow, the types of work our fellows do and what kinds of positions of fellows are in today.

References

Gutlerner, J. L., & Van Vactor, D. (2013). Catalyzing curriculum evolution in graduate science education. *Cell*, 153(4), 731-736.

The Impact of High School Characteristics on College Grades

Eric Lovik, *Radford University*

Abstract: Undergraduate faculty, admissions recruiters, and student retention professionals understand that the factors impacting academic success in higher education is complicated. Depending on a student's personal background and academic preparedness, one student may be more successful in college than others with different pre-college experiences. Meanwhile, the high school environment itself could also play a role. In light of structural characteristics and environments in secondary education, it is valuable to understand the potential impacts they might have on academic outcomes in college. This study examines first-year grades among students from various sizes and types of high schools across Virginia.

Educators and researchers in higher education have long studied pre-college factors that seem to make a difference on students' academic outcomes. While personal experiences and characteristics certainly affect college success, it is possible that the high school environment and its organizational characteristics also make an impact. It is often assumed that larger high schools, especially those in wealthy metropolitan areas, have more resources, and therefore can better prepare students for postsecondary education. This study examines first-year academic outcomes, particularly grade point average, for students from a variety of high school sizes and characteristics. The focus institution is a state university located in the southeast. Its basic Carnegie Classification is a public doctoral university. A high percentage (nine out of 10) of the undergrads are from within the state. One-third of the undergraduates are first generation, and about the same proportion are from underrepresented ethnic backgrounds. The gender distribution is three-fifths women to two-fifths men. Among the organizational characteristics of high schools are total enrollment, student/teacher ratio, locale, socioeconomic status, and magnet school status. The preliminary results of this case study point to mixed differences in college gpa by the location, size, and characteristics of the high school. Next steps in this study include expanding the number of variables of interest and examining multivariate interactions to gain deeper insights.

The New 80-20 Rule: Trading Late Work for Higher Grades

Les Stanaland, *University of North Texas*

Abstract: This research analyzes final average differentials and student satisfaction scores regarding the implementation of an innovative pedagogical technique in which 20% of the final average would be reserved for whichever assignment type each individual student scored the highest. In return for this aid, students would not be allowed to turn in late work.

One of the more vexing syllabus policies is whether or not to accept late work. Will it be accepted at all? Will there be a penalty? Is acceptance criterion based? If so, which criteria? Furthermore, policies seem to vary greatly based not on any particular scholarly finding, but rather simple preference. This work analyzes a novel effort to counteract the negative effects of late work: offering a doubling of the best-performing assignment type in return for a ban on late work. Specifically, each class assessment is organized into one of four assignment types: exams, quizzes, case studies, and reading comprehension tasks. When calculating final course grades, each category has the same weight (20%) while the final 20% is reserved for whichever category the student has the highest average. This student-centered approach leverages strict deadlines to compel time management, a skill frequently in short supply. The approach likewise leverages the idea that students will vary in which assessment type they perform best, so that a final grade calculated according to this approach would be a better reflection of their abilities than more traditional methods.

This research offers a first glimpse into the quantitative and qualitative results of this policy shift. It will compare final average results calculated under this policy to several popular alternative grading schema, including one in which exams are weighted heavier than other assignments. Qualitative data on student satisfaction is used to gauge this policy from the student perspective.

Trading Cards to Introduce Breadth and Diversity of a Field

Aparna Shah, *Virginia Tech*

Abstract: Arguably one of the most compelling hooks to a field is learning about fascinating discoveries within the field, people behind the scenes, and unique approaches and model systems that enabled these discoveries. To engage students using this strategy, I designed a group activity to achieve this goal quickly while requiring limited prior skills. While the activity was designed for specific learning goals, students' feedback regarding their perspectives on this activity will be shared. Implementation strategies and adaptations for instructors in other STEM and non-STEM fields will be provided. Suggestions for using this activity for outreach will also be shared.

Arguably one of the most compelling hooks to a scientific field is learning about fascinating research discoveries within the field, the people behind the scenes, and the unique approaches and model systems that enabled these discoveries. In order to engage students using this strategy in a large enrollment introductory course, I designed and implemented a group activity that would achieve this goal quickly while requiring limited prior skills related to reading primary scientific literature.

Students enrolled in my Introduction to Neuroscience course were assigned a 'Model Organisms Trading Cards' group activity wherein each student group was assigned one of several experimental model organisms, ranging from hydrozoans to humans, to conduct their literature search on. They were also provided with a trading card template that contained several categories requiring factual information about the assigned organism, such as scientific name, approximate number of neurons, coding genes, etc. Additionally, students were instructed to provide strengths and weaknesses of the model organism for research, an example research study, and to name a scientist whose lab conducted research using the model organism.

This activity introduced students to the breadth and diversity of research questions, topics, and model organisms that are used in neuroscience research while also providing an opportunity to hone important skills. It required students to conduct a literature search to find specific information, evaluate the validity of their sources, and cite these sources. While the activity required effective teamwork and collaboration, it allowed group members to work asynchronously once they have agreed upon the assignment of specific sections and tasks to each group member.

While the activity was designed with specific learning goals in mind, the results from students' feedback regarding their perspectives on this activity and the impact it had on them will be shared. Additionally, implementation strategies for semester-long assignments that build upon this initial activity, as well as adaptations that can be made by instructors in other STEM fields, including but not limited to biology, chemistry, geology, and botany, and non-STEM fields such as history and english will be provided. Lastly, suggestions for using this activity to develop resources for outreach will also be shared.

Translanguaging Practices Switching Anxiety & Fear to Motivation & Empowerment

Saadia Ali, *Virginia Tech*

Abstract: In this Poster presentation I am interested in sharing my recent research on a culturally responsive qualitative research study on translanguaging and its effects on immigrant adult students in learning English as a Second Language. The emphasis was given on reinforcing effective strategies to utilize multilingual teaching approach. I used translanguaging practices in teaching English as a Second Language to switch anxiety and fear to motivation and empowerment. The results of the study were inspiring and the adult immigrant English language learners were able to reach their potentials in the assigned tasks throughout the study.

In this qualitative research proposal, I aimed to focus on an important multilingual phenomenon, namely Translanguaging. Translanguaging is the use of native language by English Language Learners (ELLs) in learning English as a Second Language (ESL). A brief introduction of translanguaging practices was presented based on the existing literature and its effect on bilinguals in the development of literacy skills. There was keen attention on learner's native language context in second language learning to ensure a sense of belonging and connection with one's roots throughout the research process. Besides, attempted to investigate the amount of foreign language anxiety and fear that learners face while learning English as a Second Language (ESL). There was reinforcement on the possible ways in which subject matter experts (SMEs) can incorporate methodological practices under the lens of translanguaging and culturally responsive teaching strategies in their instruction in ESL classrooms. Similarly, incorporation of translanguaging practices improving motivation and empowerment in the acquisition of second language during class activities and the meaning English Language Learners (ELLs) create from discussions to meet language and content objectives was highlighted. Salient questions were answered during the research phase via lesson plans with follow up written and spoken assignments and relevant series of interviews based on translanguaging. Moreover, procedures, results and finally conclusion of the study were presented along with the appendices and participants samples. The research guided question

1. How does incorporation of translanguaging practices improve English Language Learners (ELLs) experience in the acquisition of English as a Second Language (ESL)?
2. Why English Language Learners (ELLs) face anxiety and fear while learning English as a Second Language?
3. How does incorporation of translanguaging practices improve motivation and empowerment among English Language Learners (ELLs) while learning English as a Second Language (ESL)?

Keywords: Translanguaging, anxiety, fear, motivation, empowerment, English as a Second Language (ESL)

References

- Ackermann, E., Gauntlett, D., & Weckstrom, C. (2009). *Defining systematic creativity*. Lego Learning Institute.
- Baker, C. (2001). *Foundations of bilingual education and bilingualism* (3rd ed.). Tonawanda, NY: Multilingual Matters.
- Byrne, J.R., Girvan, C., & Clayson, J. (2021). Constructionism moving forward. *British Journal of Educational Technology*, 52(3), 965-968. <https://doi-org.unco.idm.oclc.org/10.1111/bjet.13094>
- Canagarajah, S. (2011). Codemeshing in academic writing: Identifying teachable strategies of translanguaging. *Modern Language Journal*, 95, 401-417.
- Conteh, J. (2018). Translanguaging. *ELT Journal*, 72(4), 445-447. <https://doi.org/10.1093/elt/ccy034>
- Creese, A. (2017). In B. Paulsrud, J. Rosen, B. Straszer, & A. Wedin (Ed.). *New perspectives on translanguaging and education*. Blue Ridge Summit, PA: Multilingual Matters.
- Creswell, J. W. (2007). *Qualitative inquiry & research design: Choosing among five approaches*. Thousand Oaks, CA: Sage.
- Crotty, M. 1998. *The foundations of social research: Meaning and perspective in the research process*. London: Sage.
- García, O. (2009). *Bilingual education in the 21st century: A global perspective*. West Sussex, UK: Wiley-Blackwell.
- Garcia, O., & Wei, L. (2014). *Translanguaging: Language, bilingualism and education*. UK: Palgrave Macmillan.
- Kramsch, C. & Huffmaster, M. (2015). Multilingual practices in foreign language study. In J.

- Cenoz., & D. Gorter. (Eds.). *Multilingual education: Between language learning and translanguaging*. Cambridge, UK: Cambridge University Press.
- Li, W. (2016). New Chinglish and the post-multilingualism challenge: Translanguaging ELF in China. *Journal of English as a Lingua Franca* 5, 1-25. <http://doi.org/10.1093>.
- Merriam, S.B. (1998). *Qualitative research and case study applications in Education*. (3 - 25). San Francisco, CA: Jossey-Bass.
- Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.
- Mazak, C. M., & Carroll, K. S. (Eds.). (2017). *Translanguaging in higher education: Beyond monolingual ideologies*. Blue Ridge Summit, PA: Multilingual Matters.
- Mohammadi, E.G., Biria, R., Koosha, M., & Shahsavari, A. (2013). The Relationship between Foreign Language Anxiety and Language Learning Strategies among University Students. *Theory and Practice in Language Studies*, 3(4), 637-646. <http://doi.org/10.4304/tpls.3.4.637-646>
- Park, M. S. (2013). Code-switching and translanguaging: Potential functions in multilingual classrooms. *TESOL & Applied Linguistics*, 13. Retrieved from <https://tesol.columbia.edu/article/code-switching-translanguaging/>
- Paulsrud, B., Rosen, J., Straszer, B., & Wedin, A. (Eds.). (2017). *New perspectives on translanguaging and education*. Blue Ridge Summit, PA: Multilingual Matters.
- Quadir, M. (2021). Teaching factors that affect students' learning motivation: Bangladeshi EFL students' perceptions. *TEFLIN Journal*, 32(2), 295-315. <http://doi.org/10.15639/teflinjournal.v32i2/295-315>
- Reyes, I. (2004). Functions of code switching in schoolchildren's conversations. *Bilingual Research Journal*, 28(1), 77-98. doi:10.1080/15235882.2004.10162613. Thomas, D. F. (2004). *Toward an understanding of organization place building in communities*. Unpublished doctoral dissertation, Colorado State University, Fort Collins, CO.
- Torpsten, A-C. (2017). Preschool, multilingualism and translanguaging: Linguistic diversity, language strategies and participation. *US-China Foreign Language*, 15(2), 81-90. <http://doi.org/10.17265/1539-8080/2017.02.003>.
- Tuan, Y. (1977). *Space and place: The perspective of experience*. Minneapolis: University of Minnesota Press.
- Yin, R. K. (2013). *Case study research: Design and methods*. Sage publications. https://en.wikipedia.org/wiki/Grounded_theory

Undergraduate and Graduate Students' Perspectives on AI across the Curriculum

Sevinj Iskandarova, Camryn Rucker, Mackenzie Cauthorn, *Bridgewater College*

Abstract: In today's job market, students must possess the knowledge and skills required to thrive in a world heavily influenced by AI. This quantitative study examines undergraduate and graduate students' perspectives on AI technologies, including their familiarity with it, willingness to engage with it, and the potential benefits and challenges it presents. Moreover, the study highlights students' concerns about addressing ethical, political, privacy, and accuracy when incorporating AI into their future occupations. Drawing Biggs' 3P model (Presage-Process-Product), the study presents students' needs and concerns regarding AI, enabling effective learning outcomes and enhancing higher education's teaching and learning experiences.

There has been a growing recognition of the critical importance of integrative learning, which centers around the ability of students to connect, apply, and synthesize information in a manner conducive to their development and success beyond college as students enter a rapidly evolving global knowledge economy (Barber, 2012; Crawford & Fink, 2020). As students work towards their future careers, the importance of integrative learning cannot be overstated. Students must possess the necessary skills to thrive in an AI-influenced job market (Ng et al., 2021; Southworth et al., 2023). Even though it is remarkable, students adapt to AI more quickly than their instructors. Students with a background in AI must understand the ethical practices in implementing AI in their future work. To ensure that we, as educators are building a more equitable and just future for all, educators must establish a system for students to report any biases they encounter when using AI tools (Southworth et al., 2023).

To this end, a quantitative study explored university students' perspectives on AI technologies, including their familiarity with it, their willingness to engage with it, and the potential benefits and challenges it presents. Drawing John Biggs' 3P Modal (Presage-Process-Product), the study presents results regarding empowering effective learning environments (such as curriculum content, teaching methods, assessment methods, learning resources, learning context, and student support services) and outcomes.

The research questions for this study were: 1. How familiar are university students with AI technologies? 2. What are the potential benefits and challenges reported with using AI in teaching and learning, as perceived by undergraduate and graduate students? 3. How can AI be effectively integrated into higher education to enhance teaching and learning outcomes? The study collected data from undergraduate and graduate students in the USA's Middle Atlantic region. By answering these questions, we can ensure that we prepare students for the rapidly evolving global knowledge economy.

References

- Barber, D. (2012). *Bayesian reasoning and machine learning*. Cambridge University Press.
- Chan, C.K.Y., & Hu, W. Students' voices on generative AI: perceptions, benefits, and challenges in higher education. *Int J Educ Technol High Educ* 20, 43 (2023). <https://doi.org/10.1186/s41239-023-00411-8>
- Crawford, P., & Fink, W. (2020). *From academia to the workforce: Critical growth areas for students today*. Washington, DC: APLU.
- Ng, D. T. K., Leung, J. K. L., Chu, S. K. W., & Qiao, M. S. (2021). Conceptualizing AI literacy: An exploratory review. *Computers and Education: Artificial Intelligence*, 2, 100041. <https://doi.org/10.1016/j.caeai.2021.100041>
- Southworth, J., Migliaccio, K., Glover, J., Reed, D., McCarty, C., Brendemuhl, J., & Thomas, A. (2023). Developing a model for AI Across the curriculum: Transforming the higher education landscape via innovation in AI literacy. *Computers and Education: Artificial Intelligence*, 4, 100127.

Unpacking the Complexities of International Learning: Reflections from East Africa

Austin Council, Josh Thompson, Grant Hamming, Zuleka Woods, Robert Emmett, Eric Bendfeldt, Tom Hammett,
Virginia Tech

Abstract: What do we know about East Africa and its people? How may U.S.-based educators build and expand curricula to accurately convey the rich history and complexities of East Africa? What role can educators play to address the deficit in the knowledge and awareness U.S. students often have of the continent? To tackle these questions, a group of Virginia Tech educators will be sharing valuable lessons learned and opportunities for future collaborations with people and institutions in Tanzania and Kenya based on a month-long professional learning experience in the summer of 2023.

Introduction

International education is complex and fraught with nuances, especially in the context of Africa, a continent that has been historically exploited and continues to be absent from many western curricula. Therefore, it is important to critically attend to the dynamics facing communities we interact with abroad. In June 2023, a group of Virginia Tech instructors, professors, graduate students, and administrative/professional faculty and Virginia public school teachers embarked on a cross-cultural, professional learning experience to Tanzania and Kenya as part of the Virginia Tech East Africa Summer Institute for Educators. The authors will share reflections and insights for higher education professionals who are interested in engaging in similar international work.

Background, Purpose and Objectives

The East Africa Summer Institute, funded by a Fulbright-Hays grant, aimed to internationalize secondary and post-secondary curricula in Virginia with a more nuanced and specific understanding of the rich history and culture of East Africa. Participating educators were immersed in learning language, cultures, histories, and sustainability practices of Tanzania and Kenya. With the United Nations Sustainable Development Goals as a framework, participants engaged in 20 hours of Kiswahili language classes and visited numerous universities, cultural, conservation and training NGOs, and historical locations.

Participants met with faculty, staff, and graduate students from each institution and engaged in semi-structured focus groups centered around common scholarship and interest areas. Additionally, there were opportunities to learn from the leadership of each NGO and cultural/historical site that was visited. Each participant was tasked with developing a globalized curriculum project to be used in their home context. In this process, participants were also encouraged to build mutually beneficial relationships with their East African colleagues that could translate into future collaborations.

Presentation Overview and Practitioner Reflections

Several participants from the Virginia Tech East Africa Institute for Educators—who are affiliated with Virginia Tech—will lead the practice session including Zuleka Woods, Ph.D. candidate in Planning, Governance, and Globalization; Josh Thompson, Ph.D. student in English Education; Dr. Grant Hamming, Collegiate Assistant Professor and Director of the Rhizome Living-Learning Community; Dr. Tom Hammett, Professor of Sustainable Biomaterials; Dr. Eric Bendfeldt, Extension Specialist in Community Viability; Dr. Rob Emmett, Associate Director for International Programs in the Cranwell International Center; and Dr. Austin Council, Instructor in Agricultural, Leadership, and Community Education.

The presentation will feature a brief overview of the program including details about the application process, the pre-departure meetings, establishing curriculum related partnerships, details associated with the Fulbright Hays Grant, and the general itinerary. The presentation will unpack the varying degrees of complexity involved with international learning in an effort to guide attendees' thinking around facilitating a similar program with their home institution. Topics will include experiential learning, building cross-cultural partnerships, and the benefits, challenges, and opportunities associated with U.S.-based educators working in East Africa in ways that are sustainable and mutually

beneficial. Outcomes include establishing study abroad courses, course components, and case studies based on East Africa.

Utilizing Online Resources to Understand Mental Health Across the Globe

Keaton Unroe, *Virginia Tech*

Abstract: In courses related to mental health, teaching tends to focus on how this is treated, diagnosed, and valued in the context of the United States. Since we live in a diverse world, students should understand how location impacts treatment. This project allowed students to investigate online resources from communities outside of the US to identify if there is stigma related to mental health; a support of resources available for the treatment; and how healthcare systems encourage treatment. Observations from students on how this assignment investigating online resources allows them to think of mental health in a global context.

In neuroscience, psychology, and public health courses, our teaching of mental health tends to have a focus on how mental health is treated, diagnosed, and valued in the context of the United States. However, given that we live in a diverse world, it is important for students to understand the limitations that some communities have when seeking mental health resources. Therefore, there is a need to have assignments to allow students to investigate mental health resources in communities outside of the United States. The goal of the current project for undergraduate students in a general education level neuroscience course is to have students investigate online resources from communities outside of the United States to identify if there is stigma (or not) related to mental health in some communities (as well as why there may be a stigma); a lack (or support) of resources available for the treatment of mental health disorders in some communities; and how healthcare systems in different communities impact the treatment of mental health.

In a preliminary screening of this assignment, students investigated online resources on the perception, awareness, and how routine care practices for individuals experiencing a mental health crisis through the lens of a community or culture outside of the United States. Special attention was focused on the healthcare system in that space; how governmental assistance or resources are provided (or not); and how the current community/cultural climate may hinder or encourage seeking mental health resources. When possible, alternative treatment strategies outside of routine United States cares were explored. The culminating project was a presentation where students shared their findings to their peers.

In this poster presentation, I will share preliminary observations from students as well as their thoughts on how this type of assignment allows them to think of mental health in a global context. Preliminary results show that there is interest in having a whole course on the global perceptions of mental health would be beneficial to students who are interested in foreign affairs as well as students who want to work with individuals from different communities or cultures in a clinical setting.

Future development of this type of course could lead toward a better understanding of how we teach our students on mental health. In turn, this could influence how our students can implement these cultural competencies in their future careers, such as in a clinical, psychiatric, or public health settings.

Vital Signs: Balancing Well-being for Campus Success and Classroom Impact

Karen Stylianides, Andrea Randolph, *Pennsylvania State University*

Abstract: Members of our campus communities often put their own well being second to all the demands of work and family. Our presentation will consist of measuring vital signs, explaining the science related to the information obtained from these measurements, and elucidating how to carry this over into your classroom. Vital signs are measurements of our body's most basic function that can reflect the state of your health. The monitoring of vital signs can help you to uncover underlying issue(s) you may be experiencing.

Our presentation will deliver updated information on the state of our health through the use of vital signs. The vital signs that we will be focusing on will consist of blood pressures, heart rate, oxygen saturation, and skeletal muscle mass percentage. In a post covid era, hypokinetic diseases and stress levels increased (Hester et al., 2021). Introducing vital signs to our audience will help individuals identify underlying conditions, how to identify personal health issues, identifying possible health issues with students in their classes, and monitoring stress levels.

Research indicates the importance of the value of monitoring vitals signs as studies have reported that changes in vital signs occur several hours prior to a serious adverse event. Understanding personal vital signs will help individuals identify changes in their health. Changes in vital signs prior to clinical deterioration are well documented and early detection of preventable outcomes is key to timely intervention (Brekke et al., 2019).

The monitoring of your vital signs can be the push an individual needs to establish a healthier quality of life. Campus communities can be also introduced to measurement of the vital signs via advances in technology. Recognizing changes in these and other variables can help individuals understand that they may be in distress, may be pre-hypertensive or they may be prediabetic. Non-invasive, simple, and low cost technology such as bioelectrical impedance analysis (BIA) can detect approximate skeletal muscle mass percentage that can estimate metabolic rates and a person's ability to prevent falls, injuries and other illnesses. A higher level of muscle mass can also protect against developing hypokinetic diseases.

Through monitoring vital signs our campus communities can see their position regarding their health and may be motivated to use physical activity to improve these variables. As it has been recorded that 48.3% of college students are not getting adequate physical activity (Lin et al., 2022). The research with the primary care population showed that 18.1% reported being consistently inactive, 48.3% inconsistently active, and 33.7% consistently active, based on US national physical activity aerobic guidelines (Bowen et al., 2019; Lin et al., 2022). Instructors and students who are not taking quality care of themselves may face decreased performance in and out of the classroom or set-backs in their quality of life.

Presentation will include an introduction to Exercise is Medicine on Campus campaign (Bowen et. al., 2019).

We offer a wide range of Kinesiology courses that incorporate vital sign measures for identification and prevention of health. A greater understanding of what vital signs are and how to interpret the information is just one learning objective that we focus on within our classrooms.

The technology that we will be introducing will be estimating anthropometric measurements. A variety of phone applications will be included. We will also have on site bioelectrical impedance analysis, oximeter, and sphygmomanometer. Within our presentation we will also be using the app Poll Everywhere to get instant feedback on the needs of the audience.

References

Bowen, P.G., Mankowski, R.T., Harper, S.A., & Buford, T.W. (2019). Exercise is Medicine as a Vital Sign: Challenges and Opportunities. *Translational Journal of American College Sports Medicine*, 4(1), 1-7. <https://pubmed.ncbi.nlm.nih.gov/30828640/>

- Brekke, I.J., Puntervoll, L.H., Pedersen, P.B., Kellett, J. & Brabrand, M. (2019). The value of vital sign trends in predicting and monitoring clinical deterioration: A systematic review. *Plos One*, 14(1). doi: 10.1371/journal.pone.0210875
- Hester, L., Reed, B., Bohannon, W., Box, M., Wells, M., & O'Neil, B. (2021). Using an educational mobile application to teach students to take vital signs. *Science Direct*, 107. <https://doi.org/10.1016/j.nedt.2021.105154>
- Lin, C.Y., Gentile, N.L., Bale, L., Rice, M., Lee, E.S., Ray, L.S., & Ciol, M.A. (2022). Implementation of a Physical Activity Vital Sign in Primary Care: Associations Between Physical Activity, Demographic Characteristics, and Chronic Disease Burden. *Preview of Chronic Diseases*, 19. <http://dx.doi.org/10.5888/pcd19.210457>

We are all Kenough: Using pop culture to build connection

Dorothy Conner, Katie Thomas, Brandi Quesenberry, Laura Purcell, Kacy McAllister, Chess Parchman, Martin Cassady, *Virginia Tech*

Abstract: This poster will share research-based strategies for faculty to integrate low-stakes, pop-culture-centered activities to help students develop their identities as well as build community and increase engagement in the classroom

Are you President Barbie, Doctor Barbie, or Stereotypical Barbie? Maybe just Ken? Or perhaps you're a Swiftie, in the Beyhive, or ask Who Dat or Who Dey. By integrating pop culture examples and activities into class, instructors can provide ways to present accessible examples of theories, help connect students to opaque topics, and allow students to express themselves and connect to others. Specifically, pop culture can be a low-stakes way to find common ground and understanding, and help strengthen student-teacher relationships, one of the most reliable indicators of student success. As explained by Tisdell & Thompson (2007), because pop culture is fun, it can be a way for students to build knowledge about themselves and others in unexpected ways. It can also be a way to help students develop analytical skills by using material that is deeply engaging and familiar (Tisdell & Thompson, 2007). Culture is so embedded in our lived experiences, that we often don't recognize how influential it is as part of our self-concept. Media and toys play a role in what we see of the world during the early stages of development and can influence our identity development (Renner, 2019; Wason-Ellam, 1997). As college students enter a new stage of life, some experience a level of culture shock. Using pop culture allows instructors and students to analyze cultural references and better understand ourselves and others. This poster presentation aims to provide specific strategies for implementing pop culture into the classroom in a relevant and meaningful way. We will share examples of assignments, activities, and discussion prompts that allow students to connect with class material using familiar pop culture references.

References

- Tisdell, E. J., & Thompson, P. M. (2007). 'Seeing from a different angle': The role of pop culture in teaching for diversity and critical media literacy in adult education. *International Journal of Lifelong Education*, 26(6), 651-673.
- Renner, R. (2019, August 9). How social media shapes our identity. *The New Yorker*.
<https://web.ics.purdue.edu/~drkelly/NYerRennerHowSocialMediaShapesIdentity2019.pdf>
- Wason-Ellam, L. (1997). If only I was like Barbie. *Language Arts*, 74(6), 430-437.
<https://www.jstor.org/stable/41482895>

CONCURRENT SESSION 6

**Friday, February 9, 2024
9:00 AM - 9:45 AM**

Engaging Students and Enhancing Learning with Educational Technology

Shelia Sargent-Martin, Terene Stiltner, Darrell Thompson, *Bluefield State University*

Abstract: If you want to explore educational technology this session is for you! This practice session offers an overview of free, easy-to-use technological tools utilized in a teacher preparation program to engage students with additional modalities. Participants are encouraged to connect with the technological tools using their handheld devices, tablets, or laptops while presenters provide guidance and assistance. Attendees will explore a presentation site, educational games, and assistive technology tools that can help create a more inclusive and engaging learning environment. Participants will be invited to ask questions, share ideas, and discuss possibilities.

There is a plethora of technological tools that can be used in the classroom which are beneficial to both the instructor and the student. These tools can create a more engaging environment and increase student learning while creating more accessibility for all students (Lea & Todd, 2019). The technological tools covered within this presentation will be centered towards exploring gamification and assistive educational technology.

Using audience input, presenters will explore an array of technological tools including a presentation tool, games, and assistive technology. To engage participants in the general presentation of information presenters will utilize Nearpod, a platform that allows instructors to use interactive slides, videos, games, and activities to engage students in learning (Rogowski, 2021).

Assistive technology can provide benefits and increase educational opportunities for students. The session will offer attendees an opportunity to engage with an assistive technology, VEED.IO: a free video caption generator. Discussion will also include artificial intelligence, AI, and how it could be used within educational settings. Participants will engage with Perplexity, a free artificial intelligence chatbot app and website that allows you to ask questions, provides results with links to sources, verifies information, and cite them in your work (Pocock et al.,).

Gamification, adding games to education, can increase student motivation, engagement, and accessibility (Carstens et al.). The session will include gamification tools like Quizizz, a learning platform that is fun, interactive, and engaging for students (Rogowski, 2022). The presenters will also share how Flip, a free web and mobile app that allows students to create short videos, audio messages, and texts is being used in courses (Powers, 2023).

To conclude the session, participants will be asked to think about how they can use these tools in their courses and will have an opportunity to create a Flip video using the app or website. Attendees are encouraged to bring digital devices such as smart phones, laptops, and tablets, to be active participants throughout the session.

Emergence of Knowledge: Exploring Arts-Based Inquiry in Higher Education

Katherine Biddle, Christina Rosen, *Appalachian State University*

Abstract: The arts are often used in higher education to help learners reflect on intellectual content. Rarely are they considered as processes of inquiry from which new forms of knowledge emerge. As a pedagogical practice, arts-based inquiry engages the senses, activates students' creativity, and shapes knowledge through transformational learning. This presentation will explain how arts-based inquiry moves students from understanding to creating knowledge. The presenters will share methods and case examples of arts-based inquiry within a graduate level counselor education program. Outcomes will be discussed as having an end result that follows into the create level of Bloom's Taxonomy.

Arts-based methods have shown usefulness in connecting learners with content in a personally resonant manner. These methods are growing in use as pedagogical practices within educational programs based on their value in reflecting on, representing, or responding to intellectual knowledge. Rarely have the arts been discussed within higher education as vehicles for generating multilevel, transformational knowledge, such as within the create domain of Bloom's Taxonomy (Bloom, 1956).

The power of utilizing the arts in the classroom lies in their unique quality of engaging the senses. Arts-based processes require learners to be improvisational and present moment-oriented. Indeed, beyond mere cognitive understanding, using the arts as processes of inquiry generates holistic, embodied, and relational learning (Blades & Bester, 2013).

Arts-based inquiry methods within the classroom are distinct from using the arts as an avenue to reflect, represent, or respond to existing content. The use of arts-based inquiry is a pedagogical process that activates students' senses, creativity, and shapes knowledge through the interaction of experience with the process and product of transformational learning.

This presentation will disseminate understanding and explain how arts-based inquiry moves students on Bloom's Taxonomy from an experience of understanding to creating. The presenters will share pedagogical methods of arts-based inquiry that create conditions through which new shapes of knowledge emerge (e.g., Leavy, 2023). Case examples of arts-based inquiry within a graduate level counselor education program will be provided as well as student voices to illustrate applications and transformational learning. Our outcomes with arts-based inquiry, which include an environment of relational and creative capacity building, knowledge generation and embodiment, will be discussed as having an end result that follows into the highest domain level of Bloom's Taxonomy.

References

- Blades, G., & Bester, L. (2013). Relationships within the shattered rainbow: A search for a pedagogy of attunement. *Australian Journal of Outdoor Education*, 17(1), 4-16. <https://doi.org/10.1007/bf03400952>
- Bloom, B. S. (1956). Taxonomy of educational objectives, handbook I: The cognitive domain. David McKay Co Inc.
- Leavy, P. (2023). Bridging arts and science in expressive arts therapy. In C. A. Malchiodi (Ed.), *Handbook of expressive arts therapy* (pp. 62-77). The Guilford Press.

Personalized Learning: Connecting Students to Content through Choice and Autonomy

Lisa Pennington, Christopher Dignam, *Governors State University*

Abstract: When students are connected to content, they develop a deeper understanding of course outcomes and take ownership of the learning. Creating a classroom environment that provides students with choice is essential to connecting students via inquiry-based instructional design approaches. This session focuses on instructional strategies that provide students choice and autonomy within assignments in the college classroom, creating more personal connections and student ownership of learning. Student connections facilitate an understanding of the relevance of the content and an increase in motivation. These strategies allow for more student-directed and -centered learning, with the instructor acting as facilitator to guide learning.

This session will focus on instructional strategies that provide students choice and autonomy within assignments in the college classroom. Providing students autonomy creates more personal connections and ownership of the learning. It also aids in establishing a rapport with the instructor and a welcoming classroom environment. These connections facilitate an understanding of the relevance of the content and an increase in student motivation. These strategies allow for more student-directed and -centered learning, with the instructor acting as facilitator to stir natural curiosities of attaining content knowledge.

The strategies we would share seek to create meaningful and authentic tasks through active learning that are choice based and student led. We would begin the session by demonstrating a menu of options that ask participants to define personalized learning, providing them hands-on experience with selecting a task in order to demonstrate content knowledge. We will define and explain why personalized learning is useful in higher education, and then provide exemplars that may be adapted for various content areas that participants may implement into their own courses.

We will then transition into the various instructional strategies that participants can employ with their own students. Strategies include creating "soundtracks" to document course topics, menus with a variety of tasks to choose from to work with content, digital exemplars, and inquiry-based instruction that allows students to explore a topic and argue a particular point.

Strategies such as these also allow for interdisciplinary connections and connections to current events, which demonstrate the relevance and applicability of course content outside of the classroom. Participants will walk away with ready to use classroom strategies that will increase inquiry lesson design and student ownership of learning.

Transform the lecture class by using the MUSIC Model

Ming Li, Shanghai University of Engineering Science

Brett Jones, Virginia Tech

Abstract: The Chinese Ministry of Education has been calling for student-centered teaching in higher education. However, it is a tough job for the college professors to conduct the experimental research to explore the student-centered class due to their lack of instructional reform strategies and students' motivation and engagement theories. This research tries to borrow some strategies from Brett D. Jones and to examine the changes of students' course perceptions in several weeks within one semester. The results show the significance of the MUSIC model and the possibility of the use of the MUSIC model among Chinese college professors.

Exiting literature: Because traditional university English classes in China are basically lectured by college professors, students have to passively accept knowledge, listen to professors and then complete their homework after class. Additionally, the final paper test accounts for fifty or sixty percent of the total score of the course (Li, & Jones, 2019). In order to transform this teacher-centered English classes, the researchers in this paper are trying to borrow some teaching strategies provided by the MUSIC model (Jones, 2018). This research focuses on the use of strategies on how to empower students, make the courses more interesting and provide more cares for students. This research expects to improve students' motivation and engagement in the student-centered class incorporating the motivational strategies from the MUSIC model of academic motivation.

The study methodology: There are two groups in this research. Group one and group two shared the same instructors and same text book and same test papers. Group one is equipped with the student-centered teaching style. Group two is faced with two teaching styles, the student-centered style, and the traditional lecture style, and an innovation activity (gallery activity). The researchers used a self-report survey comprised of seven subscale to collect information on students' course perceptions and their engagement in the college English class. Independent samples t-tests, regression, and correlation were used to answer the following two research questions:

1. Is there a difference in students' motivation and engagement between the two groups?
2. To what extent do students' MUSIC model perceptions relate to their engagement?

Data analysis: In the first survey, the two groups, G1 and G2, have the same teaching contents (unit 1 and unit 2), the same instructional design and the same classroom activities (student-centered English learning classroom). In the second period survey, G1 is a student-centered classroom with students' presentation. G2 is a teacher-centered, lecture-type classroom in which the instructor explains and discusses strategies for coping with translation in CET 4. Overall, G1 has a higher overall learning experience than those in G2. The third survey, G1 is still the student-centered class, while G2 adopts a different pattern of classroom design, mainly gallery activity. In all nine dimensions of comparison, G2 felt more motivation than G1, especially in the three dimensions of usefulness, interestingness, and effort, which were significantly different from G1. The fourth survey indicated that there is no significant difference in each dimension between the two groups.

Conclusions: Although there is no significant difference in each dimension, it is clear that G1 has a stronger learning experience in all dimensions than G2. It is clear that the motivation and engagement of G2 overall semester learning is not as strong as G1, which may be affected by the interrupted teacher-centered classroom, or it may be because the G2 group has experienced more changes in the classroom mode in a single semester, which may feel a little complicated, and the overall motivation and engagement is not as high as the G1 group that has always maintained the presentation mode.

References

- Jones, B. D., Khajavy, G. H., Li, M., Mohamed, H. E., & Reilly, P. (2023). Examining the Cross-Cultural Validity of the MUSIC Model of Academic Motivation Inventory in English Language Courses. *SAGE Open*, 13(1). <https://doi.org/10.1177/21582440231156583>

- Li M, Jones BD, Williams TO and Guo Y (2022) Chinese Students' Perceptions of the Motivational Climate in College English Courses: Relationships Between Course Perceptions, Engagement, and Achievement. *Front. Psychol.* 13:853221. doi: 10.3389/fpsyg.2022.853221
- Li, M., Pan, Z., Ma, D., Cao, G., & Wang, Z.(2020) "The effects of the Tencent Virtual Community on college students' motivation and engagement in online language classes," *Proc. SPIE 11720, Twelfth International Conference on Graphics and Image Processing (ICGIP 2020)*, 117202I (27 January 2021); <https://doi.org/10.1117/12.2589462>
- Li, M. , Jones, B. D. , Cao, G. , & Wang, D. . (2020). The effects of edutainment strategies on student motivation and engagement in college EFL classes. Z. Pan et al. (Eds): *Transactions on Edutainment XVI, LNCS 11782*, pp. 3-12, 2020.
- Li, M. , & Jones, B. D. (2019). Transforming traditional teaching: a professional development program for the college EFL teachers. (12).*Theory & Practice in Language Studies*, 9(12), 1494-1500.
- Jones, B. D., Li, M., & Cruz, J. M. (2017). A cross-cultural validation of the MUSIC® Model of Academic Motivation Inventory: Evidence from Chinese- and Spanish-speaking university students. *International Journal of Educational Psychology*, 6(1), 366-385. doi:10.17583/ijep.2017.2357

Breaking Boundaries in Design Education: Cultivating Innovation and Empowering Students

Kimberly Mitchell, Cary Staples, *University of Tennessee*

Abstract: We devised a novel second-year experience in design to combat students' grade fixation, which stifled their creativity within the traditional project-intensive studio course. We introduced low-stakes exercises focused solely on experimentation, cultivating problem-solving skills and encouraging innovation. While students explored uncharted territory, teaching evaluations often failed to mirror their progress. Recognizing the need to better align exercises with forthcoming projects for enhanced results, our presentation will spotlight project and exercise outcomes. It will also facilitate open-ended dialogues on effectively engaging with today's students in the ever-evolving educational landscape.

The College of Architecture and Design boasts an impressive 20,000 square-foot Fab Lab, featuring cutting-edge resources such as laser cutting, CNC routing machines, and 3D printers. In previous semesters leading up to the last spring, we guided our second-year design students on Fab Lab tours and facilitated their training on the equipment. We strongly encouraged them to leverage these facilities for their projects. However, it just wasn't happening.

Today's students differ significantly from those we taught a decade ago, displaying a pronounced emphasis on grades. They anticipate accessing project rubrics early, which can sometimes stifle their creative potential by fixating on conforming to rubric criteria. Students become paralyzed from the fear of making mistakes and "not doing things right" in high-scoring assignments, which also diminishes their exploratory efforts.

To foster greater experimentation, we added fast-paced, low-stakes (points) exercises into our classrooms. These exercises emulate the rapid pace of real-world industry. This approach encourages students to navigate multiple assignments concurrently. And because the exercises tend to carry fewer points, students were more inclined to explore innovative approaches. Consequently, we strategically crafted exercises to prompt students to explore novel approaches, including equipment, technology, and manual techniques. Emphasizing the importance of such experimentation, we conveyed that the second-year experience aimed to equip them with problem-solving tools for their third and fourth years, where they would translate designs into reality. Because the exercises were graded on experimentation alone (there was no failure, unless they just didn't do the work), we found they were more likely to experiment with the facilities the FabLab offered.

Although many students ventured into uncharted territories during these exercises, our teaching evaluations did not consistently reflect their progress. Our students didn't see the connection between what was completed during an exercise and learning. Reflecting on this, we recognize the need for exercises to directly align with upcoming projects, demonstrating the skill-building connection for improved and unexpected outcomes. Our presentation will showcase the project and exercise outcomes - as well as allow for an interactive, open-ended discussion with participants about how we can connect more with the students of today.

CONCURRENT SESSION 7

**Friday, February 9, 2024
10:00 AM - 10:45 AM**

Integrating Large Language Models like ChatGPT into STEM Education Pedagogy

David Reeping, Aarohi Shah, *University of Cincinnati*

Abstract: This interactive session draws upon a systematic literature review of pedagogical and assessment practices related to large language models (LLMs) like ChatGPT in STEM Education. Focus will be placed on instructors sharing their current implementation of LLMs in small groups and identifying tangible actions to take in their current or future courses related to these tools. The discussion will cover AI-use syllabi statements, examples of assignments with explicit AI use, and general prompting strategies.

Since November 2022, artificial intelligence tools like ChatGPT undergirded by large language models (LLMs) have become household names. As much as there is exuberance about the potential for this new technology, concerns temper expectations with deeper evaluations unveiling glaring gaps in the tools' applicability. The amount of literature released across preprint services can be dizzying, and the quality of these early empirical studies on the effectiveness of LLM-based interventions or prompting strategies can be suspect. Thus, instructors are placed in a precarious position where it may be unclear where to even begin with respect to integrating LLMs into their pedagogy.

Early systematic reviews such as Montenegro et al. (2023) suggest that LLMs have been explored for developing critical thinking and implementing personalized learning (Lo, 2023) as a private digital tutor (e.g., Limo et al., 2023), especially as a writing assistant (Imran & Almusharraf, 2023), but the adoption of these tools is so new that few rigorous studies have been conducted to tease the nuance of the positive narratives - leaving applications for readers at general use-cases (e.g., Karthikeyan, 2023). The negatives are well discussed, including the propensity of LLMs to "hallucinate," which is an anthropomorphic term referring to the generation of seemingly coherent but false or misleading statements - leading them to be called stochastic parrots (Bender et al., 2021). Moreover, like any technology, training is necessary to ensure students are exposed to effective and ethical uses of LLMs (Montenegro et al., 2023).

We offer this practice session to jettison unproductive advice about LLMs like ChatGPT and provide concrete strategies for instructors looking to integrate LLMs into their classes. The goals of this session are to (1) develop a shared understanding on appropriate use of LLMs in educational practice, (2) describe applications of LLMs to supplement instruction that are accessible to STEM instructors, and (3) for each participant to create a plan to implement LLMs in their classroom. This session will be designed for STEM instructors who teach at any level in higher education.

The practice session will begin with small group discussions among participants about how they currently employ these tools in their classroom (~10 minutes). Next, we will share results from a recent systematic literature review we conducted about how LLMs have been integrated in STEM education contexts across a variety of themes, including prompting strategies for instructors and students, AI-use syllabus statements, and assessments allowing the explicit use of AI tools (~15 minutes). As a specific example, we will share an assignment where first-year engineering student teams were tasked with brainstorming using traditional structured techniques, then collaboratively with ChatGPT, and finally synthesizing their ideas. The teams were also required to submit a reflection video. The remaining portion of the session (~15 minutes) will be dedicated to instructors discussing in pairs to develop an action plan for integrating at least one of the strategies from the systematic literature review in their classroom during the semester or future course, concluding with sharing action plans (~5 minutes).

Choose your Own Adventure: Using Student Choice to Increase Motivation

Hannah Shinault Deuyour, Virginia Tech

Abstract: Do you want to give your students more choices in your class but are unsure of how, when, or even WHY to do it? This practice session is for you! Incorporating student choice into your classes allows YOU to choose your own adventure, too! In this session, we'll discuss options for incorporating student choice, when student choice is most (and least) effective, and how choice is related to motivation and engagement. Participants will also have the opportunity to brainstorm and share ideas for student engagement with fellow participants.

Allowing students to make choices in terms of how they complete course assignments/outcomes can be a scary proposition. However, research shows that students who are able to make some choices related to their learning typically experience more engagement and motivation (Evans, 2015; Robinson, n.d.).

Robinson (n.d.) cautions that too much choice can be overwhelming for students and lead to decreased motivation and satisfaction, which means that faculty need to carefully consider a number of variables when deciding to incorporate student choice into their courses. Factors such as course level, class size, timing of the choice, and class culture are all things that can influence the effectiveness of student choice as well as satisfaction for both the students and faculty.

At the end of this session, participants will be able to:

1. Identify components of student choice
2. Describe benefits of student choice
3. Describe conditions under which student choice is most effective
4. Apply student choice to their own course designs

References

- Evans, M., & Boucher, A.R. (2015). Optimizing the power of choice: Supporting student autonomy to foster motivation and engagement in learning. *Mind, Brain, and Education*, 9(2), 87-91.
- Robinson, C. (n.d.) Does offering students a choice in assignments lead to greater engagement? *Digital Promise*.

Needing a Cat Nap- Sleep Health in Professional Education

Michael Nappier, *Virginia Tech*

Abstract: Good sleep health is a critical and integral component of good personal health and wellness. However, many Americans self-report sleeping less than the recommended amount of sleep. Veterinary students are no exception. In this session we will look at recent research in veterinary medical education, its implications, and strategies to encourage better student sleep health.

It is well known that students' sleep health is generally poor and that good sleep health is important to student learning. However, despite being a known problem it is often overlooked as a reason for lack of student success. During this session we will look at what is known about student sleep health through the lens of recent research in veterinary medicine . We will also examine what instructional strategies can be used to improve student sleep health.

References

Nappier MT, Bartl-Wilson L, Shoop T, Borowski S. Sleep quality and sleepiness among veterinary medical students over an academic year. *Frontiers in Veterinary Science*. 2019 Apr 17;6:119.

PERSONAL LEARNING NETWORKS: STUDENTS SUPPORTING EACH OTHERS' LEARNING AT UNIVERSITY

Steve Rutherford, *Cardiff University*

Abstract: Personal Learning Networks (PLNs) are networks of individuals, groups, resources and technologies that support learning and development. PLNs are adaptable and co-constructed between individuals. This qualitative study, following UK undergraduate students through the course of their degrees, aims to identify the drivers of PLN construction and revision, during transition to, and through, university. Findings highlight factors influencing remodelling of PLNs, and suggest that PLNs are highly malleable and adaptable. The major influencers of PLNs are social peers (rather than the academic peers and teachers) who interact with the learner. Models for PLN formation, and implications for educators, will be discussed.

In the development of independent learning and self-regulatory skills, peer-interactions are highly beneficial Lee et al. (2014). All individuals, and especially learners, have a 'Personal Learning Network' (PLN; Richardson & Mancabelli, 2011) with which they draw support. A PLN is the totality of support resources that an individual has to draw on for finding our information and guiding development and understanding. A PLN will typically include: People with whom the learner has contact; social groups the individual is part of; technologies (e.g. hardcopy and online resources); actions in which the individual is involved; and activities that are part of their everyday life.

The fundamental aspect of a PLN is the shared nature of the network. PLNs are co-constructed, and often reciprocal between individuals. An individual who receives support from another individual, will usually provide support of a different kind in return (Richardson & Mancabelli, 2011).

PLNs are self-organising and self-developing, so when the individual changes their environment, or focus for learning (e.g. going to University), the PLN will be revised to match the new environment. A key factor, therefore, is what guides the formation and reconstruction of a student's PLN as they transition into, and through, University. What are the social interactions around the learner that help or hinder development of their PLN? To what extent do learners rely on others, learn from them, and/or include them in this development. Similarly, to what extent does the support of others facilitate reinforcement of understanding, and the development of learning strategies in the learner?

This qualitative study followed 39 Chemistry, English Literature, History and Medical students through the first year of their degrees, and 21 of these over the remainder of their course. The research spanned the period from 2016-2023. Each participant was interviewed three times in year 1, and then with either 1 or 2 follow-up interviews per year subsequently. Interviews were analysed using Constructivist Grounded Theory (Charmaz, 2014) and Situational Analysis (Clarke, 2005).

The findings reveal that PLNs are complex and malleable frameworks, which interconnect between peers, and are mutually-supportive. PLNs are shaped by a combination of prior experiences of collaboration at high school, attitudes towards collaboration, personality, academic motivations, interpersonal interactions, opportunities for collaboration within the degree course, and technology use. The balance of these factors shifted over the period of the Covid-19 pandemic, and the restrictions to social interaction during that time. The findings also reveal that peers (especially room-mates) are the primary source of support within a PLN, with course-mates also being important, but only on degree courses where pair, three or team-working was emphasised. Academic staff had little impact on the PLN and students' development of self-regulated learning skills. A model for the formation of PLNs is proposed, and the implications for educators of students' development, and re-aligning of PLNs during the transition to, and through, university will be discussed.

References

- Charmaz, K. (2014). *Constructing Grounded Theory* (2nd ed.). Los Angeles: Sage.
- Clarke, A. E. (2005). *Situational Analysis: Grounded Theory after the Postmodern turn*. Thousand Oaks, CA: Sage.
- Lee, K., Tsai, P.-S., Chai, C. S., & Koh, J. H. L. (2014). Students' perceptions of self-directed learning and collaborative learning with and without technology. *Journal of Computer Assisted Learning*, 30(5), 425-437.

Richardson, W., & Mancabelli, R. (2011). *Personal Learning Networks: Using the power of connections to transform education*. Bloomington, IN: Solution Tree Press.

Empowering non-native English-speaking students: Nurturing self-efficacy for writing

Lindsay Crawford, *University of California, Merced*

Abstract: The mixed methods study explores the effects of an upper-level undergraduate writing-intensive Health Communication course on students' self-efficacy for writing. The purpose of this study was to identify strategies for improving self-efficacy for writing, particularly among underrepresented groups, as the study population was majority female, Latino/Hispanic, non-native English speakers, and first-generation college students. Implications of low self-efficacy on writing performance and strategies for enhancing self-efficacy for writing are discussed and should be considered for implementation by educators.

ABSTRACT: The mixed methods study explores the effects of an upper-level undergraduate writing-intensive Health Communication course on students' self-efficacy for writing. The purpose of this study was to identify strategies for improving self-efficacy for writing, particularly among underrepresented groups, as the study population was majority female, Latino/Hispanic, non-native English speakers, and first-generation college students. Student's self-efficacy for writing was measured using the Self-Efficacy for Writing Scale (SEWS) which was administered twice; once at the beginning of the semester and once at the end. Results showed statistically significant differences in students' pre- and post- self-regulation and writing convention scores (15% and 10% increase, respectively). These scores suggest major improvement in students' self-reported abilities for writing mechanics and the regulation of their writing process. Subsequently, focus groups were conducted to gain insight into how students' self-efficacy for writing was affected by the class content, assignments, instructor feedback, and classroom environment. Implications of low self-efficacy on writing performance and strategies for enhancing self-efficacy for writing are discussed and should be considered for implementation by educators.

CONCURRENT SESSION 8

**Friday, February 9, 2024
11:00 AM - 11:45 AM**

AI-Higher Education's Turning Point: Choosing Disruptive Innovation

Michelle M. Beavers, Ph.D., *University of Virginia*

Leslie L. Kapuchuck, Ed.D., *Averett University*

Abstract: Engage in generative AI practices that inform instructional design and learning outcomes (Dobrin, 2023). What are the tools and practices professors can use to build an interactive and engaging class that prepares students for experiences beyond higher education. Participate in an interactive session in which you can explore the theory and practice behind AI from developing syllabi and resources to designing student-centered learning activities that capitalize on expanded technology yet capture critical thinking, problem-solving, and traditional expectations of university programs.

Developing or enhancing an existing syllabus can be a daunting task, but when asked to disrupt innovation by using tools you're unfamiliar with, we are all left asking ourselves, where do we start? This session invites you into the journey of two educators who have allowed AI to shift their practice and transformed student learning from transactional (Freire, 1968) to transformational (Mezirow, 2000). You'll leave having been introduced to a wide-range of resources and ideas, while also testing new tools.

The theory behind AI and education will first be presented, creating an overview of the pedagogical theories that support AI integration into instructional design. Using Fink's Significant Learning Theory (2003), we espouse: If students learn how to apply the content, can see how it connects with other knowledge, understand the human implications... and come to care about the subject and about learning how to keep on learning, it seems... they will both retain what they have learned and continue to enlarge their knowledge. If we take a long-term view of student learning, attending to significant kinds of learning seems like the right choice to make. (p. 57). Next, we'll highlight why disruptive innovation is important as professors take ownership of this shift in practice (Mollick, 2023) and prepare students for what AI knowledge is expected of them upon graduation. After setting the tone, the facilitators will model uses of AI through hands-on practice with AI tools to build an engaging classroom experience. Finally, ensuring student learning demonstrates critical thinking, problem-solving, and the human element while capturing AI technologies will be discussed through sample assignments, grading techniques, and practices for use in in-person and online classrooms.

The incorporation of these AI tools serves not just to illustrate the potential of artificial intelligence in higher education, but also to give participants actionable ways to bring innovation into their own classrooms and universities.

Session Objectives:

- Understand the capabilities of AI in shaping instructional design. (Yee, et al, 2023)
Example Tool: OpenAI's GPT-3.5 or 4 and Bard for generating course outlines, lecture content, and even grading assignments. Course syllabus, learning outcomes, sample activities rationale, rubrics.
- Explore tools and methodologies for creating interactive and engaging class environments.
Example Tool: Avatars for simulations, Role-play, Snazzy Interactive Discussion posts, and familiar tools like Padlet with an AI slant.
- Design student-centered learning activities that combine technological advances with traditional academic goals. Example Tool: Mid-journey, Storyboard, Data analysis, Writing and research, Eleven labs and Chirp to engage in AI and assess student learning.

This session serves as an invitation to reimagine the status quo and to explore how AI can profoundly influence our teaching methodologies and student outcomes. The call for disruptive innovation is backed by research and pedagogical underpinnings that can transform education. We hope those who leave our session will be fueled with an excitement and passion for the possibilities and a renewed sense of direction. The resources and tools are intended to be shared widely as we collaboratively work toward innovative change.

References

- Fink, L. D. (2003). *Creating significant learning experiences: An integrated approach to designing college courses*. Jossey-Bass.
- Freire, P. (1968). *Pedagogy of the oppressed* (2nd ed.). Penguin Books.
- Mezirow, J. (2000). Learning to think like an adult. Core concepts of transformation theory. In J. Mezirow, & Associates (Eds.), *Learning as transformation. Critical perspectives on a theory in progress*. Jossey-Bass.
- Mollick, E. (2023, January 27). All my classes suddenly became AI classes. We can't beat AI, but it doesn't need to beat us (or our students). <https://www.oneusefulthing.org/p/all-my-classes-suddenly-became-ai>
- Dobrin, Sydney (2023). *Talking about generative AI: A guide for educators*. Broadview Press.
- Yee, K., Whittington, K., Doggette, E., and Uttich, L. (2023). *ChatGPT Assignments to use in your classrooms today*. FCTL Press.

Applying the Extended Mind Perspective to Course Redesign

David Moore, Christi Camper Moore, *Ohio University*

Abstract: The concept of the extended mind, proposed by philosopher David Chalmers and collaborator Andy Clark, challenges traditional notions of cognition. It posits that cognitive processes and mental states aren't confined solely to an individual's brain and body. Instead, they can encompass external objects and tools when seamlessly integrated into one's cognitive system. This discussion explores the extended mind theory's relevance to higher education pedagogy. When considering the extended mind perspective, we must examine its potential impacts on the design of educational experiences across academic courses. This practice session will provide worked examples and an opportunity for participants to explore.

The theory of the Extended Mind supposes that cognition is an activity that occurs both inside a brain and outside in the body and environment. Physicist, Richard Feynman is reported to have said that his notes were not documentation of his ideas but the ideas themselves; those ideas were generated in a continuous loop between his pen and paper and his mind. In other words, the ideas would not have been possible without an interplay between the inner and outer. Philosopher Andy Clark states, "The importance of this new perspective is profound. If our minds themselves can include aspects of our social and physical environments, then the kinds of social and physical environments we create can reconfigure our minds and our capacity for thought and reason."

This presentation explores the theory of extended mind on pedagogy. If the extended mind paradigm is entertained, what are the implications for the design of learning experiences? Are their changes in expectations of learner behavior, the condition under which learning, and performance occur, and the criteria that we require to be achieved. We will explore how embracing the extended conceptualization of mind may change decisions on what to teach and how to teach it. For example, a world in which speech to text translation and AI assistance is always merely an arms-length away and can be accessed at speeds that compete with cognition itself how are curriculum and instructional decisions modified.

We will use examples from our disciplines of instructional design, arts administration, and dance to illustrate how designing learning experiences that embrace our supercharged connection to the environment might work. Once the general idea of the Extended Mind has been demonstrated in a concrete situation, we will lead participants in a brief interactive design process to examine if their own teaching can be improved by the Extended Mind approach.

This practice session is informed by the philosophical work of Andy Clark, David Chalmers, and John Dewey. The session will include an overview of the extended mind philosophy and will review courses that have been redesigned in the framework. Participants will then be provided templates to work through their own courses and explore how the method may be applied to their own curriculum and instructional practices.

References

- Clark, Andy. 2010. *Supersizing the Mind: Embodiment, Action, and Cognitive Extension*. Oxford: Oxford University Press.
- Dewey, John. 1916. *Essays in Experimental Logic*. University of Chicago Press: Chicago, IL.
- Hickman, Larry. 1990. *John Dewey's Pragmatic Technology* (Indiana Series in the Philosophy of Technology). Bloomington, IN: Indiana University Press.

Barbie, the Real World?, That's Impossible: A Rhetorical Mapping

Kim Zicafoose, Michaux Dempster, Virginia Commonwealth University

Abstract: In this highly interactive session, participants will connect with their inner childhood as they explore the rhetorical ecology of toys. Facilitators share the philosophies of various scholars in the field of composition and rhetoric as they describe their successful mapping activity. Groups will create rhetorical ecology maps and discuss the complicated relationship between discourse, values and ethics. Some time will be devoted to creating rhetorical ecology mapping assignments for the participants' own classrooms.

Students used toys at the outset of the semester to experience and discuss the concept of learning as an intrinsically motivated activity, rather than an extrinsic one. We emphasized that learning is not limited to a classroom setting, but instead happens all the time and for reasons that have nothing to do with formal education. The concept of play was interrogated to help students understand the process of learning - that it happens over stages, and with repeated attempts and practice. We planted the seed of understanding that learning happens from birth throughout a lifetime. We introduced the idea simultaneously that individuals act as rhetors and audience in every interaction encountered in the sociocultural matrix in which we exist.

Students then moved to the second unit and discussed the concept of play and whether play and toys are neutral activities. The recent popular culture text, *Barbie*, was used to introduce the idea that all activities exist in a sociocultural matrix that warrants ethical examination. Sharon Crowley, University of Arizona, suggests that pure rhetoric's "recursively spiraling logic produces a sense of seamless coherence that underwrites intimate connections among the positions it dictates on a wide range of issues" (Borrowman 318). Our interests were in having students understand the ways in which they participate in that concatenation of understanding. These rhetorical matrices are part of a phenomenon of the public. Michael Warner, Professor of English Literature and American Studies at Yale, argues that "'since a public is understood to be an ongoing space of encounter for discourse. It is not texts themselves that create publics but the concatenation of texts through time...'"(62).

Armed with our definition of text as any object that can be "read," we had students select toys to use for a rhetorical ecology mapping activity. Based in Jenny Edbauer's conception of a rhetorical ecology, the rhetorical maps explored the rhetorical context in which the toys exist, one which changes based on the audience of the communication. Rather than the more linear and elemental conception of exigence, events, texts and audience, Edbauer suggests a more complex interaction between rhetor exigence and audience, in which, the rhetor's perceived audience impacts even their exigence. She argues that, "a given rhetoric is not contained by the elements that comprise its rhetorical situation (exigence, rhetor, audience, constraints). Rather, a rhetoric emerges already infected by the viral intensities that are circulating in the social field" (14).

Through the rhetorical ecology map, students explored the ideas of what a text is, how discourse exists in a sociocultural context, and finally the ethical implications of found objects (toys in this instance). Our project sought to have students understand the connections between the research and philosophical understandings that we were exploring in our classroom and the world in which we live. Toys provided a fun space of connection for students while helping them to understand the conversation of mankind that begins in childhood and impacts every interaction they encounter, even something as seemingly innocuous as play.

References

- Borrowman, Shane, et al. *Renewing Rhetoric's Relation to Composition: Essays in Honor of Theresa Jarnagin Enos*. 1st ed., Routledge, 2009, <https://doi.org/10.4324/9780203869222>.
- Edbauer, Jenny. *Unframing Models of Public Distribution: From Rhetorical Situation to Rhetorical Ecologies*. *Rhetoric Society Quarterly*, vol. 35, no. 4, 2005, pp. 5-24, <https://doi.org/10.1080/02773940509391320>.
- Warner, Michael. *Publics and Counterpublics*. *Public Culture* 14:1, 2002, 49-71.

Making meaningful connections: Infusing utility value interventions into your classroom

Eric Magrum, *James Madison University*

Abstract: This session was developed to help educators understand what a utility value intervention is, why it may be important, and how to harness its' power in the classroom. Within the session pertinent literature will be covered, strategies will be outlined and time will be dedicated toward creating strategies to enhance the student experience. Participants will then be asked to share how they intend to utilize utility value interventions with their peers.

Student motivation is an omnipresent barrier for effective instruction. As such, educators must help students navigate this barrier and encourage them to think critically and make meaningful connections. I've developed pedagogical strategies that may simultaneously accomplish each of the aforementioned that I would like to share with other passionate educators.

Introduction

The session will start by providing an overview of how I stumbled into this line of work and why it has been impactful for my instruction and for my students. This will include qualitative data from my own teaching evaluations to highlight the concepts.

Utility Value Interventions in my classroom

I will share the two primary strategies that I utilize to infuse utility value interventions into my classroom. First, I will highlight an assignment that I devised to take advantage of this concept. Then, I will focus on more subtle ways to infuse these interventions into the classroom.

Grounding the material in research

After sharing my strategies, I will highlight the theoretical underpinnings of why they may be effective. Specifically, expectancy value theory and utility value interventions will be covered briefly.

Expectancy value theory

o Students' motivation to engage in a particular behavior is based on two factors: 1) their expectancy for success and 2) their value for the outcome. (Eccles & Wigfield, 2003)

Think-Pair-Share

Building on the previous sections, participants will be asked to pair themselves into groups of no more than three. Then participants will be prompted to think how they might infuse utility value interventions into their teaching on an individual level. After ample time has been provided, each group member will be asked to share their thoughts with their small group. I will facilitate these discussions as I walk around the room. After each group has been able to discuss, we will then move to discuss these ideas as a larger group. The goal is to engage the audience in a brainstorming session illuminating the various ways in which participants may use or modify this strategy for their own classroom/discipline.

Summary & Conclusion

To conclude the section, I will provide a brief overview of the covered material, engage the audience in a thumb indicator activity and leave time for questions/general discussion.

References

- Canning, E.A., Harackiewicz, J.M., Priniski, S.J., Hecht, C.A., Tibbetts, Y., Hyde, J.S. (2018). Improving Performance and Retention in Introductory Biology with a Utility-Value Intervention. *Journal of Educational Psychology*, 110(6):834-849. doi: 10.1037/edu0000244
- Eccles, J. S., & Wigfield, A. (2002). Motivational beliefs, values, and goals. *Annual Review of Psychology*, 53, 109-132. <http://dx.doi.org/10.1146/annurev.psych.53.100901.135153>
- Rosenzweig, E.Q., Wigfield, A., & Eccles, J.S. (2022). Beyond utility value interventions: The why, when,

- and how for next steps in expectancy-value intervention research. *Educational Psychologist* 57(1), 11-30.
- Wang, Y., Rocabado, G.A., Lewis, J.E., & Lewis, S.E. (2021). Prompts to promote success: Evaluating utility value and growth mindset interventions on general chemistry student's attitude and academic performance. *Journal of Chemistry Education* 98, 1476-1488

Theorizing the Pivot: Supporting Doctoral Dissertation Research during Crisis

Ane Johnson, Monica Kerrigan, *Rowan University*

Abstract: In this study, we explored the situation of the doctoral candidate in the social and behavioral sciences as they were confronted by crisis and forced to make changes to their dissertation research plans. Using situational analysis, we conducted interviews and collected extant artifacts to understand the student "pivot." Doctoral candidates experienced grief, struggled with institutional impediments, and employed technological assets to manage the impact of crisis on fieldwork. We build on the literature that addresses the challenges graduate learners face with support during their journey and make recommendations for advising doctoral candidates during crisis.

Graduate student attrition is significant, referred to as the "hidden crisis" in higher education (Lovitts & Nelson, 2000). Residential doctoral programs experience up to 50% student attrition and online programs up to 70% (Rigler et al., 2017). The organizational environment (i.e., program and advising structures), program flexibility, and negligible social support contribute to attrition (Smith et al., 2006). The role of the advisor, the advising relationship, and characteristics that contribute to relationship quality (Casey et al., 2018; Jaeger et al., 2011; Knox et al., 2011) and departmental financial support (Zhou & Okahana, 2019) are the most frequently cited as essential to student success. Adding to this, students in the social sciences often struggle to apply research methods, may not receive support in their research endeavors, and may feel isolated or misunderstood - all situations that have significant implications for their persistence and completion (Borrego et al., 2014). Research also tends to focus almost exclusively on doctoral students' characteristics and challenges, not the influence of an external crisis.

Using situational analysis (Clarke, 2005), a form of postmodern grounded theory, we conducted interviews and collected extant artifacts to understand the situations of the candidate engaged in the pivot during crisis. Our analysis produced a situational map and a grounded theorizing. We also bound the analysis by a specific time: the COVID-19 pandemic in the USA. We conceptualized the notion of pivot and pivoting as an unexpected shift in trajectory that draws upon the participants' social worlds; in this, we were guided by two research questions:

RQ1. How do doctoral candidates experience their dissertation process during a crisis?

RQ2. What aspects of doctoral candidates' situations intersect to produce a pivot during the dissertation?

We sought social and behavioral science doctoral candidates preparing their dissertation proposal, in the field collecting data, or who had recently left the field. We engaged 18 participants from doctoral programs across the US, representing a broad range of topics, demographics, geographies, modalities, and research designs. During the analysis process, we employed grounded theory's constant comparative analysis (CCA) and began to construct our situational map, which compiled the elements assembled around the phenomenon of interest, the pivot, providing visual representations of both the human and non-human actants.

The situational map produced from our analysis shows a macro view of the situation of the doctoral during crisis. First, the pivot, internally, was reflected as a grieving on the part of the doctoral candidate. Second, the pivot, externally, was impacted by institutional resources that facilitated and/ or troubled the pivot process (i.e., funding, support, and policy). Each exerted pressure on candidates' research during the pivot. Using technology to undertake fieldwork, methodological assets and epistemological shifts mediated internal and external situations to produce the pivot. Finally, we situate our map in the literature on the challenges graduate learners face with support and its implications for persistence. We also offer concrete recommendations, founded in participant perspectives, for professionals advising and supporting doctoral students on their dissertation journey.

References

Borrego, M., Boden, D., Pietrocola, D., Stoel, C., Boone, R. & Ramasubramanian, M. (2014). Institutionalizing interdisciplinary graduate education. In M. O'Rourke, S. Crowley, S. D. Eigenbrode, & J. D. Wulfhorst (Eds), *Enhancing communication and collaboration in interdisciplinary research* (pp. 335-355), SAGE.

- Casey, E. G., Saclarides, E. S., & Lubienski, S. T. (2018). A difference in priorities? *Studies in Graduate and Postdoctoral Education*, 9(1), 38-57, doi: 10.1108/SGPE-D-17-00040.
- Clarke, A. (2005). *Situational analysis: Grounded theory after the postmodern turn*. SAGE.
- Jaeger, A. J., Sandmann, L. R., & Kim, J. (2011). Advising graduate students doing community engaged dissertation research: The advisor-advisee relationship. *Journal of Higher Education Outreach and Engagement*, 15(4), 5-25.
- Lovitts, B. E., & Nelson, C. (2000). The hidden crisis in graduate education: Attrition from PhD programs. *Academe*, 86(6). doi: 10.2307/40251951.
- Knox, S., Burkard, A. W., Janecek, J., Pruitt, N. T., Fuller, S. L., & Hill, C. E. (2011). Positive and problematic dissertation experiences: The faculty perspective. *Counselling Psychology Quarterly*, 24(1), 55-69. doi: 10.1080/09515070.2011.559796.
- Rigler, K. L., Bowlin, L. K., Sweat, K., Watts, S., & Throne, R. (2017). Agency, socialization and support: A critical review of doctoral student attrition. 3rd International Conference on Doctoral Education. <https://files.eric.ed.gov/fulltext/ED580853.pdf>
- Smith, R. L., Maroney, K., Nelson, K. W., Abel, A. L., & Abel, H. S. (2006). Doctoral programs: changing high rates of attrition. *The Journal of Humanistic Counseling, Education and Development*, 45(1), 17-31. <http://10.0.3.234/j.2161-1939.2006.tb00002.x>.
- Zhou, E. and Okahana, H. (2019). The role of department supports on doctoral completion and time-to-degree. *Journal of College Student Retention: Research, Theory and Practice*, 20(4), 511-529, doi: 10.1177/1521025116682036.

Assessing Student Perceptions of Bias

Danielle DeRise, *James Madison University*

Abstract: Although bias is a familiar concept to many college students, a lack of cross-disciplinary consensus on strategies for identifying or categorizing types of biases can contribute to student confusion and even to an excessive focus on personal bias as the sole indicator of a source's low credibility. This research study, co-authored by instructors in Psychology and Writing, examines student perceptions of bias when they read course material. The researchers plan to use results to develop streamlined teaching materials that can be used across the disciplines for classroom discussions of information literacy.

Concerns about political polarization in the US, the viral spread of misinformation and disinformation, and the recent development of large language models now being used to compose academic work are three converging issues that indicate an urgent need for educators to prioritize information literacy in the classroom. Although bias is a familiar concept to many college students, a lack of cross-disciplinary consensus on strategies for identifying or categorizing types of biases can contribute to student confusion and even to an excessive focus on personal bias as the sole indicator of a source's low credibility. The following research study, co-authored by instructors in Psychology and Writing, examines student perceptions of bias when they read course material. Participants included James Madison University students (46 freshman, 20 sophomores, 7 juniors, 1 senior) that were enrolled in either a Psychology Research Methods class or a First-Year Writing class. The participants were randomly assigned to one of two conditions: (1) reading a brief researcher-created "bias checklist," followed by reading a course content article, and finally completing a questionnaire; or (2) reading the course content article first, then completing the questionnaire, and receiving the "bias checklist" last. The researcher-designed questionnaire asked participants to use a Likert Scale to rate the degree of bias shown in the content article on four constructs: personal (author) bias, use of inflammatory language, inclusion of biased evidence, and source bias. Early results indicate that participants exposed to the bias checklist before the content article endorsed fewer statements of personal bias and inflammatory language, and about the same number of statements related to biased evidence and source bias, as the group who received the bias checklist last. The researchers are now in the process of collecting more data to determine if these early results will be replicated. Their eventual goal is to use results to develop streamlined teaching materials that any instructor in any discipline can adopt for developing a nuanced discussion of bias in their classrooms.

CONCURRENT SESSION 9

**Friday, February 9, 2024
1:45 PM - 2:30 PM**

A Collaborative Approach to Teaching and Researching with AI

Kristen Gregory, Ken Luterbach, Xi Lin, Sarah Sconyers, *East Carolina University*

Abstract: Have you considered using AI in your classroom but don't know where to start? Do you or your students have a problem of practice that AI may help resolve? Are you interested in conducting AI research in your classroom but don't consider yourself an AI expert? Join us for this interactive session where we will share how we developed an interdisciplinary research team to investigate various aspects of AI usage in our classrooms. After identifying a problem of practice you have experienced in your classroom, you will design a plan to incorporate AI into your teaching and research.

As educators and administrators in the College of Education at our institution, each of us regularly identify problems of practice in our own teaching. Additionally, we work with our pre-service and in-service teachers to identify problems of practice in their own teaching. Then we seek to take steps toward resolving those problems of practice and model for our students how to do the same. With the growing use (and perhaps misuse) of AI, there are ripe opportunities for educators and researchers to continue to identify and resolve problems of practice.

The presenters, a group of four faculty and administrators, came together to form a cross-disciplinary team of educators and researchers interested in AI. While we have our own areas of expertise (i.e., educational technology, higher education, assessment), we share a common focus on professional development for both pre-service and in-service educators. We identified problems of practice with AI in our focus area and then worked together to design a research plan. For each study, we integrated AI into our instruction and student assignments and then investigated the impact on our problem of practice.

For example, in our graduate elementary education program, students (mostly practicing teachers) learned to integrate advanced teaching and assessment strategies into their instruction. Typically, the course involved students developing their own lessons and assessments. However, this created a problem of practice as educators have various tools at their fingertips that provide or generate lessons and assessments. We collaboratively designed a study where students developed their own lessons and then used ChatGPT to generate the accompanying assessments. Then they analyzed those assessments for alignment, reliability, and validity. They reflected on this process and determined if ChatGPT would be an effective tool to use in their practice as teachers. Attacking a problem of practice in this way provided our students/educators with the tools needed to learn how to use AI and also how to critically analyze AI's products. Further, it enabled students to determine their own interests and abilities regarding their use of AI.

The main purpose of this session is to provide a space where participants can identify and analyze their own problems of practice and then consider how AI could play a role in instruction, practice, and/or research. In this interactive session, we will begin by briefly sharing our problems of practice and considerations for using AI (~10 minutes). Then we will outline how we developed our cross-disciplinary team and mapped out how to address our problems of practice in the classroom while also conducting research (~10 minutes). Finally, participants will work in small groups as they go through the process of identifying and analyzing their own problems of practice, considering possible colleagues with whom to collaborate, brainstorming ways to incorporate AI into their instruction, and designing possible research studies to conduct in their classroom. Participants will leave with a plan and list of next steps to take back to their institution.

Students to Solutions: Wicked Problems and Beyond in Interdisciplinary Classrooms

Heather Keith, Meg Konkel, Paige Tan, Radford University

Abstract: In this session, participants will be introduced to multidisciplinary wicked problems pedagogy, including core principles of wicked problems teaching, such as active learning, team-based projects, and scaffolded signature assessments, along with unique characteristics of our disciplinary approaches. We will trace those approaches to wicked problems learning outcomes, including enhanced confidence, collaboration and communication skills, problem-framing, and tolerance of ambiguity. Presenters will also share in-class activities and examples of student project work, along with the many ground-up wicked problems initiatives launched by faculty and students at Radford University as a window into the creative directions "wicked" teaching can take you.

Teaching with wicked problems means asking students to confront complex, multifaceted, and ambiguous challenges that resist straightforward solutions (Handstedt, 2018; Rittel and Webber, 1973). This pedagogy emphasizes interdisciplinary and collaborative thinking, critical analysis, systems thinking, and creativity through real-world scenarios that challenge students to imagine possible solutions. Key to the wicked problems approach is the authority gained by students in proposing solutions to the problems under examination (Handstedt, 2018); getting students to viable solutions is also key to the obstacles that faculty who embrace wicked problems teaching face.

In this interactive practice session, participants will be introduced to three discipline-informed approaches to wicked problems pedagogy from faculty in political science, philosophy, and design. We will share multidisciplinary core principles of wicked problems teaching, including active learning, team-based projects, and scaffolding complex work processes, along with unique characteristics of our disciplinary approaches as we prepare students not only to understand, but to solve wicked problems with an emphasis on strategy, teamwork, and active hope. We will trace those approaches to key learning outcomes of the wicked problems pedagogy, including enhanced confidence, collaboration and communication skills, problem framing, understanding failure as part of the path to success, and tolerance of ambiguity. Presenters will also share key in-class activities and examples of student project work, along with the many ground-up wicked problems initiatives launched by faculty and students at Radford University as a window into the creative directions "wicked" teaching can take you. Participants will have the opportunity to experience exemplar pedagogical techniques in teaching wicked problems.

Finally, participants will be able to envision and develop their ideas related to incorporating wicked problems approaches in interdisciplinary curricular and co-curricular settings. Discussion and collaboration will focus on the opportunities and obstacles to integrating wicked problems in course design, cross-disciplinary scholarly opportunities, and curricular initiatives.

References

- Gannon, K. (2020) *Radical Hope: A Teaching Manifesto*. Morgantown: West Virginia University Press.
- Hanstedt, P. (2018). *Creating wicked students: designing courses for a complex world*. Routledge.
- Rittel, H. W., & Webber, M. M. (1973). "Dilemmas in a General Theory of Planning." *Policy sciences*, 4(2), 155-169.
- Velda McCune, Rebekah Tauritz, Sharon Boyd, Andrew Cross, Peter Higgins & Jenny Scoles (2023) Teaching wicked problems in higher education: ways of thinking and practising, *Teaching in Higher Education*, 28:7.

Book Clubs: Novel Way to Improve Student Engagement and Learning

Laura Vernon, *Radford University*

Abstract: This informative and interactive session will focus on book clubs as a student engagement technique. Research shows that book clubs reinforce course concepts, improve student learning by putting students in control of their own learning in an environment that stimulates discussions and higher-level thinking, builds community, and gets them involved in a course in a novel way. During the session, the presenter will share how to design a book club and offer ways to modify it to meet diverse needs. Attendees will work in small groups to discuss possible book selections and student learning outcomes for their respective courses.

Incorporating a book club assignment into a course is a student engagement technique (Barkley, 2010) that reinforces concepts and engages students in content (Sylvan, 2018; Wyant & Bowen, 2018; Randall & Marangell, 2020; Turk, 2023;), contributes to significant learning (Wyant & Bowen, 2018; Cooper, 2019; Turk, 2023), builds community (Petrich, n.d.; Rowell, 2015; Bachman, 2017), put students in control of their own learning (Petrich, n.d.; Rowell, 2015; Wyant & Bowen, 2018; Wahl, 2021), requires active participation through their own efforts (Randall & Marangell, 2020; Turk, 2023), and offers students the flexibility to take more time to wrestle with challenging topics (Rowell, 2015; Wyant & Bowen, 2018; Turk, 2023).

Although there are a variety of ways to form a book club, a typical book club (also known as a literature circle) consists of three to four students in a course selecting a book to read (generally a nonfiction book written for popular audiences) and meeting three or four times during the semester to discuss it. In addition to requiring students to meet regularly, the book club assignment asks students to write a summary of what they read and formulate discussion questions in advance. The instructor also asks students to pay attention to and discuss certain concepts during their sessions. After each meeting, students produce a document that summarizes what they discussed. These discussion summaries can then be used to prepare a presentation at the end of the semester. To be sure, a book club assignment can be adapted to fit a variety of courses across different types of institutions.

Indeed, a book club assignment engages students with the course content in a novel way. It moves beyond typical passive lecturing and large-group discussions where students may not feel comfortable making comments. During a book club session, students are active learners in a space where they can build relationships with their peers and become more comfortable sharing their thoughts and ideas. Because of this setting, students often feel more accountable and take more ownership of their learning. In preparation for the session, they read the book in more detail and, therefore, experience more significant learning and can contribute in more meaningful ways to the discussion. In addition, a book club can help them think about the course content in different ways as each group member shares new and diverse perspectives.

Several instructors who have published their research about book clubs indicate that students enjoy the discussions, find reading books for popular audiences more satisfying than reading textbooks, consider book clubs “fun,” and have a positive experience overall (Sylvan, 2018; Wyant & Bowen, 2018; Cooper, 2019; Wahl, 2021).

This presentation will be highly informative and interactive. In addition to explaining why a book club is an effective student engagement technique, the presenter will share how to design a book club and offer ways to modify it to meet diverse teaching and learning needs. Attendees will work in small groups to discuss possible book selections and student learning outcomes for their respective courses.

References

- Barkley, E. F. (2010). *Student engagement techniques: A handbook for college faculty*. John Wiley & Sons.
- Bachman, S. (2017, August 11). The benefits of attending a book club. *Continuing Education Training at Idaho State University*. <https://blog.cetrain.isu.edu/blog/the-benefits-of-attending-a-book-club>
- Cooper, C. A. (2019). Not just for Oprah anymore: Incorporating book clubs into political science classes. *Journal of Political Science Education*, 15(3), 365-376. <https://doi.org/10.1080/15512169.2018.1473783>

- Petrich, N. R. (n.d.). Book clubs: Conversations inspiring community. *i.e.: inquiry in education*, 7(1), 1-13. <http://digitalcommons.nl.edu/ie/vol7/iss1/4>
- Randall, R. E., & Marangell, J. P. (2020). One story creates another: Using book clubs to promote inquiry in the content areas. *i.e.: inquiry in education*, 12(2), 1-10. <https://digitalcommons.nl.edu/ie/vol12/iss2/4>
- Rowell, P. (2015, February 9). Using book clubs to foster student engagement. *Teaching Academic: A CTLL Blog*. <https://blog.ung.edu/ctl/using-book-clubs-to-foster-student-engagement/>
- Sylvan, L. J. (2018). Bringing book club to class: Engaging college students in reading content-specific books written for popular audiences. *College Teaching*, 66(4), 225-234. <https://doi.org/10.1080/87567555.2018.1518892>
- Turk, J. K. (2023). Literature circles promote accountability and student engagement with assigned reading in a soil science class. *Natural Sciences Education*, 52, 1-13. <https://doi.org/10.1002/nse2.20103>
- Wahl, C. (2021, November 9). Engaging readers with book clubs. *ELA Matters*. <https://elamatters.com/2021/11/09/engaging-readers-with-book-clubs/>
- Wyant, A., & Bowen, S. (2018). Incorporating online and in-person book clubs into sociology courses. *Teaching Sociology*, 46(3), 262-273.

Designing and Implementing Active Learning with Data

Nathaniel Porter, *Virginia Tech*

Abstract: Data literacy is increasingly critical for everyone, but integrating data into already-packed courses can seem overwhelming. Learn strategies and develop or revise your own plan for active classroom learning with data to support outcomes ranging from critical engagement with theory to full-scale research projects. This practice session explores common goals for data-integrated learning in undergraduate courses, with a focus on smart scoping to target critical outcomes and support learners with less frustration for both instructors and learners.

This practice session is designed to help equip college faculty and graduate instructors to plan successful integrations of data into undergraduate courses to support critical data literacy, technical skills, and theory and interpretation skills. The presentation draws on experience teaching in a variety of settings, including social science courses, professional development workshops, and pedagogy training to help learners integrate data activities more productively in courses and head off common challenges - such as assumptions about existing knowledge. Special emphasis will be placed on how to optimize instruction to focus on key learning objectives while reducing or eliminating extraneous cognitive load connected to data or software that do not support objectives. Learners will participate in sample data literacy activities and have time to outline lesson plans then pitch and receive structured feedback on their proposals. The session is adapted from a module of a graduate teaching workshop taught each semester at my institution, but customized to a more diverse group of instructors (not just graduate students) and to include more interactive elements.

Actionable teaching strategies for engaging students in the middle years

Nicole Pitterson, Jenni Case, *Virginia Tech*

Abstract: Improving students experience in STEM has emphasized the first and final years, while the "middle years" have received less attention. This session will share findings from a project focused on the tough middle years in engineering programs, where students face some of the most challenging theoretical courses and where student engagement often falls off. The team comprises engineering education researchers working in conjunction with faculty who have been recognized for exemplary and impactful teaching. The project has identified actionable teaching practices in these disciplinary programs that engage students in learning and the session will share these practices.

This practice session will be run by a team of faculty from five Departments in the College of Engineering who teach courses in the middle years of their programs and have been recognized for excellent teaching. The team is collaborating with researchers from the Department of Engineering Education on an NSF IUSE grant, to identify effective student-centered teaching strategies that "work" in the context of engineering courses. It is anticipated that this session will also have value for those who work more broadly in the context of STEM.

There is already considerable literature on the value of student-centered teaching in engineering education, but still limited uptake. Prince (2004) defines active learning as "any instructional method that engages students in the learning process" (p. 223). While this could include traditional activities like lectures, it tends to refer to new activities intentionally developed and explicitly introduced into the classroom, that change the typical one-way dynamic of information flow in a typical class. However, Streveler and Menekse (2017) argue that the question of whether active learning pedagogies "work" has already sufficiently been answered, and what is now urgently needed is for researchers to move beyond generic prescriptions and collective evidence on which kind of activities work best in which kind of courses and in which disciplines. Hence, our work moves beyond reinforcing the importance of these approaches, to trying to unpack and contextualize how they could be implemented more effectively depending on the engineering context.

The project, designed with a participatory action research approach, has involved classroom observations, course document analysis and focus groups to identify key teaching strategies that are being used effectively in these courses. In this session, instructors will do real-life demos of how this works, engaging conference participants as if they were the students. These will include:

- o Activities to engage students at the beginning and set the stage for the rest of the class - also setting up a personal connection immediately
- o A range of strategies to maintain engagement through the class including scaffolded whole class problem solving and intentional question and answer session with non-verbal responses such as thumbs up or raised hands
- o Building in individualized student support through checking in with smaller groups
- o Interactive and collective note-taking
- o Connecting course content to research and real-world examples

References

- Prince, M. (2004). Does active learning work? A review of the research. *Journal of Engineering Education*, 93(3), 223-231.
- Streveler, R. A., & Menekse, M. (2017). Taking a closer look at active learning. In *Journal of Engineering Education* (Vol. 106, Issue 2, pp. 186-190). Wiley Online Library.

A Journey to Student Success: Barrier-Free Design for 100% Completion

Kristin Redfield, Katina Barksdale, *Forsyth Technical Community College*

Abstract: Explore Forsyth Technical Community College's transformative journey to improve student success and persistence rates, particularly for underprepared and underrepresented students. This session unveils a multi-faceted approach, including a career-focused composition class, tailored workplace writing projects, and a unique intensive course format. Learn how these innovations achieved remarkable 100% completion rates for technical program students enrolled in an ultra-condensed version of ENG 110 (Freshman Composition).

Introduction: Institutions of higher education today grapple with the challenge of improving student persistence, especially among underprepared and underrepresented students. Forsyth Technical Community College recognized this issue, leading to a comprehensive transformation of their approach to a requisite writing course. This practice session will detail the college's journey towards enhancing student success and overcoming the barriers to graduation, including going from A-C completion rates below 50% to 100% each time the course has been offered in that format.

Content: In response to alarming rates of noncompletions among underprepared and underrepresented students, Forsyth Technical Community College embarked on an initiative that sought to redefine the way students engaged with non-trades courses, specifically English (ENG), by integrating a career-focused composition class. The approach centered on tailored assignments and a modified emporium style setting, leading to a significant improvement in student completion rates.

Collaboration between English and Career and Technical Education (CTE) faculty played a pivotal role. The faculty jointly designed the content in a composition class that aligned the curriculum with the students' future workplace needs, tailored to the writing demands of students' future workplaces as identified by industry representatives.

Additionally, students in previous versions of the class were failing or being withdrawn from the course due to not submitting their work. When they turned the work in, they passed; when they didn't, they didn't. Recognizing the challenge students faced in understanding LMS-delivered assignment guidelines, the lead instructor created a comprehensive and printable workbook, allowing students easy non-technology-driven access to all assignment details. This practical tool improved assignment completion rates, helping students better understand and engage with course materials. Despite these efforts, challenges persisted until a breakthrough occurred with the introduction of an intensive two-week course.

In Spring 2022, an ultra-condensed version of the composition class was introduced. This intensive course, conducted Monday through Thursday for two weeks, featured six contact hours per day in a modified emporium-style setting. All assignments were completed in class, eliminating the need for homework. Instructors provided real-time guidance, ensuring students stayed on track. The outcomes were remarkable-100% completion rates were achieved in both the May 2022 and May 2023 sessions, with most of these successes observed among minority students. For instance, the Hispanic/Latino pass rate went from 62.5% to 100% in Spring 2022 and 50% to 100% in Spring 2023.

The session will conclude with a discussion of the lessons learned from Forsyth Tech's journey to enhance student success. Attendees will explore the challenges faced, the impact of innovative strategies, and the significance of addressing students' needs. This session is an opportunity for educators to gain insights into replicable practices that can positively influence student persistence and success in higher education.

References

The following practices from literature are related to this presentation:

- o Emporium-style classroom, adaptive learning, multi-modal resources, workplace-relevant assignments, smaller class size, instructor immediacy, condensed course length

**CONCURRENT
SESSION 10**

**Friday, February 9, 2024
2:45 PM - 3:30 PM**

In Theory/In Reality: Reality tv as a pedagogical tool

Adriane Stoner, *DePaul University*

Lynn Cockett, *Juniata College*

Abstract: Over the past three decades reality tv has become a cornerstone of the entertainment industry, and although the genre has proven to be both commercially successful and popular across demographics, its consumption is regularly stigmatized and often labeled a "guilty pleasure." Inarguably reality tv is fraught with problematic messages and representations, but when approached with a critical lens, reality tv can offer valuable insight into complex notions of reality and identity and help increase awareness of how our social systems and structures (dys)function. In this session we will examine reality tv as an interdisciplinary vehicle for critical analysis.

Overview:

In this session, participants will be introduced to the use of reality television as a tool for teaching social theory. Participants in the humanities and social sciences, broadly defined, will leave the session with a nuanced understanding of the value of the genre and its usefulness in pedagogical contexts. The session will include a discussion of the genre and introduction to the critical conversations that the presenters initiate and pursue in our courses. The session will include descriptions and examples of assignments, attendee participation in class activities, and attendee participation in construction of learning objectives and activities for their own application. Attendees will leave with:

- (1) an ability to argue for the value of using "low" culture to teach social theory, and
- (2) concrete strategies for using reality tv content to help students unpack complex social structures.

In addition to presentation of information and including participants in sample activities, we plan to provide links to materials stored on conference virtual sites or our own google drive, with syllabi, assignments, and reading lists.

Session Outline:

(I) Intro

- (a) Presenter welcome and background
- (b) Attendee introductions (institution/ discipline)
- (c) Virtual Poll for attendees: What brings you to the session?
- (d) Virtual Poll (word cloud): Reality TV Word association
- (e) Poll debrief and preview of session

(II) On Reality TV

- (a) Tracing the roots of reality tv in US pop culture history
- (b) What distinguished it from other shows at the time? Modern reality tv
- (c) What *is* considered reality tv?/ What *is not* and why?
- (d) What comes along with the "reality" label?
- (e) The reality tv hierarchy
- (f) Who is watching? What are people watching?

(III) Why the bad wrap?:

- (a) In small groups: Breaking down the label "guilty pleasure"
- (b) Reality tv: Popular *and* Stigmatized
- (c) What does this say about us?

(IV) Reality tv as a pedagogical tool

(a) Participant discussion: A brief conversation during which participants share out their answers to: ""What are some of the more complex theoretical concepts that you teach to students?""

(b) Presenters Share: In this brief lecture, the presenters will share one brief example from each of the following concepts that we can unpack/critically analyze through their portrayal/representation on reality tv:

-Critical Race Theory

-Intersectionality

-Game Theory

-Gender Constructs

-Feminism

-Heteronormativity

-Neoliberalism

-Media ethics

(c) Participant Pair and Share: Make application to something they teach

(V) Presentation of sample content

(a) Sample syllabi/course units

(b) Attendee participation in one in-class lesson

(c) Group projects

(VI) Additional reading/materials and concluding thoughts

References

- Church, S.H., Robinson, T., Callahan, C., Barboza, K.K., & Montez, D.J. (2020). Savvy viewers and (simulated) reality TV: An analysis of The Bachelor's appeal to viewers. *Journal of Popular Television*, 8(1), 23-43.
- Coyne, S. M., Robinson, S. L., & Nelson, D. A. (2010). Does reality backbite? Physical, verbal, and relational aggression in reality television programs. *Journal of Broadcasting & Electronic Media*, 54(2), 282-298.
- Deller, R. A. (2019). *Reality television: The television phenomenon that changed the world*. Emerald Publishing Limited.
- Kaufman, A. (2019). *Bachelor Nation: Inside the World of America's Favorite Guilty Pleasure*. Dutton.
- Kultgen, C, & Pace, L. (2022). *How to Win The Bachelor: The Secret to Finding Love and Fame on America's Favorite Reality Show*. New York, Simon and Schuster.
- Lee, K. & Garza, C.(2020, Nov 19). Heteronormativity of The Bachelor Franchise [Blog post]. Retrieved from: <https://rtfgenderandmediaculture.wordpress.com/2020/11/19/heteronormativity-of-the-bachelor-franchise/>
- Lindemann, D. J. (2022). True Story: What Reality TV Says about Us. Farrar, Straus and Giroux.
- Mast, J. (2016). The dark side of"" reality TV: Professional ethics and the treatment of reality tv participants. *International Journal of Communication*, 10, 22, 2179-2200.
- Pozner, J. L. (2010). *Reality bites back: The troubling truth about guilty pleasure TV*. Seal Press.

Teaching Inclusive Teaching Strategies: A Game-Inspired Approach

Mike Reese, *Johns Hopkins University*

Abstract: This presentation will model an approach for teaching research-based, inclusive-pedagogical strategies in all modalities (virtual, hybrid, and in-person). This approach is based on a card deck inspired by game design. The presenter will describe the approach and then model the workshop for participants so they can incorporate the approach in their academic departments and faculty development programs. The modeling includes participants using the card deck to identify inclusive teaching for their own teaching or training. The presenters will also leave time for Q/A.

This mini-workshop session will present an approach for teaching research-based, inclusive-pedagogical strategies in all settings (virtual, hybrid, and in-person). This approach is based on a card deck inspired by game design. The presenter will model the workshop for participants so they can incorporate the approach in their academic departments and faculty development programs.

Designing instruction to be more inclusive and equitable is important. Some stress the importance of addressing inequities from a social justice perspective (Carlisle, Jackson, & George, 2006). Others focus on the value of helping students learn by leveraging the diversity of knowledge and experiences of all participants in the classroom (Freeman, Anderman, & Jensen, 2007). Regardless, teachers are critical in facilitating an inclusive classroom climate to ensure all students learn (Pascarella and Terenzini, 1991). The card deck describes inclusive teaching strategies like Universal Design for Learning (UDL) principles faculty can use in their classrooms along with the research that describes why the strategies work. The card deck also includes published research that is the source for each strategy included.

The presenter will conduct a mini-workshop to show participants how to use this game-inspired approach to teach instructors inclusive teaching strategies that benefit all students. This involves participants reviewing and discussing strategies they identify as relevant to their instructional responsibilities.

The approach has been well received at the presenter's home institution. Workshop feedback will be shared. For example participants in every pilot rated the workshop as useful with all but 3 rating it the highest category: very useful. Lessons learned from the initial pilots will also be shared including how it supports campus climate and institutional transformation.

All participants in this session will receive a pack of cards along with information for obtaining free copies of the card deck if they decide to adopt the strategies at their own institution. All materials are released under a creative commons license (CC BY-NC-SA 4.0).

References

- Carlisle, L. R., Jackson, B. W., & George, A. (2006). Principles of social justice education: The social justice education in schools project. *Equity & Excellence in Education*, 39(1), 55-64.
- Freeman, T. M., Anderman, L. H., & Jensen, J. M. (2007). Sense of belongingness of college freshmen at the classroom and campus levels. *Journal of Experimental Education*, 75, 203-220.
- Pascarella, E. T., & Terenzini, P. T. (1991). *How college affects students: Findings and insights from twenty years of research*. Jossey-Bass Inc., Publishers, San Francisco, CA.

Activating Curiosity: Practical Strategies for Difficult Classroom Conversations

Kitty Maynard, Karen Masterson, *University of Richmond*
Jill Sundie, Jaime Roots, *Washington and Lee University*

Abstract: Inspired by the approaches of depolarization expert Mónica Guzmán, this practice session aims to provide tools to navigate classroom discussions on controversial topics. Guzmán offers techniques to create curiosity-driven conversations in order to mitigate polarization. Participants will experience these techniques firsthand, apply them, and discuss their classroom applicability. By exploring Guzmán's approach as a classroom tool, participants will gain useful strategies to adapt and employ in their own courses.

"In these polarized times, faculty in every field face the possibility that class discussions will elicit strong emotions and opinions or fall into uncomfortable silences. In an attempt to better prepare and lead productive and inclusive discussions around difficult topics, a cohort of faculty from Washington and Lee, Hendrix College, and the University of Richmond met monthly throughout spring and summer of 2023 to study the problem and develop strategies. They did this with the guidance of experts in a six-month program sponsored by the Associated Colleges of the South and underwritten by the Mellon Foundation. The effort culminated in a day-long workshop in September, during which the faculty applied what they had learned and crafted classroom exercises designed to bring into their own courses.

This practice session features four members of that cohort who will provide an active demonstration of what they learned from one of these experts, Mónica Guzmán, author of *I Never Thought of It That Way: How to Have Fearlessly Curious Conversations in Dangerously Divided Times*. A depolarization expert, Guzmán challenges her readers to focus on curiosity during fraught conversations with friends, relatives, and coworkers. This session will use workshop-style format to demonstrate how this approach can be useful in an academic setting. We begin the session by introducing ways that our own assumptions can lead us to "sort, other, and silo," which shuts down productive dialogue with others. Guzmán suggests we can mitigate this human tendency by asking questions that seek to understand, not debate. Those questions seek clarification, elaboration, and understanding of the "other's" experiences. This practice of questioning creates a positive feedback loop that can broaden knowledge and expand what we think we know. Throughout the session, participants will be able to experience first-hand the effectiveness of Guzmán's techniques by applying her framework. The session will then open up to a larger conversation on how these techniques can be valuable in the classroom. Presenters will share specific examples of how to integrate this practice into class discussions and provide time for participants to reflect on ways these techniques might help address challenges they face in their own courses. Throughout the session, we will share approaches to support instructors in various classroom scenarios.

The goal of this session is to bring more faculty into the strategic process of defusing tricky classroom discussions before they become "difficult." By offering a look at Guzmán, the presenters hope participants will take away useful strategies to adapt and employ in their own courses, and be inspired to offer related ideas and strategies that they have found useful. Few faculty are spared the work of managing conversations around difficult topics. The presenters believe that, if handled strategically, these classroom discussions need not be avoided, but rather encouraged and turned into valuable learning opportunities for building bridges.

References

Guzman, M. (2022). *I Never Thought of It That Way: How to Have Fearlessly Curious Conversations in Dangerously Divided Times*. Benbella Books.

Contracts & Badges: Grading for Learning

Emily Dane-Staples, *St. John Fisher College*

Abstract: Student learning approaches differ, but instructors rarely adapt grading to accommodate this. Many students chase grades rather than true learning, with some aiming for mastery while others settle for passing. Replacing numeric grading with badges shifts the focus from gaming the system to demonstrating achievement. Crafting a learning contract gives students more autonomy in their performance goals.

Using rubrics or numeric grading systems, instructors meticulously plan learning sessions and assignments to gauge students' level of achievement in comparison to predefined benchmarks. However, these assessments often remain singular occurrences, with a single test or assignment determining a student's grasp of a learning outcome. This approach is flawed because various factors can hinder a student's ability to demonstrate their learning at a specific moment or through a single type of assessment. Critics of rubrics argue that they overly simplify and reduce the complexity of professional work (Bearman & Ajjawi, 2021).

Furthermore, traditional numeric or percentage-based grading systems can lead students to prioritize grades over actual learning (Knekta, 2017). Many experienced faculty members have encountered students fixated on fractions of points to push their grade from a B+ to an A-. These discussions become more about the grade than the actual learning demonstrated. Numeric grading also allows for gaming the system, potentially masking a student's performance on specific learning objectives. Students might calculate that even without completing a particular assignment, they can still attain their desired grade.

An alternative approach is to replace traditional numeric grading with a badge-based system, redirecting the focus from chasing a specific number to demonstrating the achievement of learning objectives. In this system, each learning objective is presented as a badge to be earned, with varying levels of achievement corresponding to different grades (A-C). However, a baseline standard representing what constitutes learning for a specific objective (C-level work) becomes the target. Instead of striving for a minimum percentage, students work towards earning a specific number of badges across all learning outcomes, putting learning at the forefront. Various forms of assessment throughout the semester—such as exams, papers, homework, and projects—allow students multiple opportunities to showcase their learning, ensuring that poor performance on one assessment won't jeopardize their overall grade.

Contract grading complements this approach by providing clear guidelines at the beginning of a term for students to attain a specific grade. This helps students concentrate on their work and behaviors rather than external labels like "A student" or "C student." Contract grading offers students a well-defined path to achieving their desired grade, making it particularly beneficial for those aiming for top marks (Stommel, 2018).

In this session, we will delve into the principles and intricacies of this grading method and guide participants in envisioning its implementation in their own classes. Rooted in backward design and Universal Design for Learning (UDL) practices, attendees will reimagine their grading methods, establish performance benchmarks, and consider contractual criteria for evaluating learning outcomes. Through collaborative peer discussions, we will take an investigative approach to student-centered learning and grading practices, fostering a transformative learning experience.

References

- Bearman, M., & Ajjawi, R. (2021). Can a rubric do more than be transparent? Invitation as a new metaphor for assessment criteria. *Studies in Higher Education*, 46(2), 359-368. <https://doi.org/10.1080/03075079.2019.1637842>
- Knekta, E. (2017). Are all pupils equally motivated to do their best on all tests? Differences in reported test-taking motivation within and between tests with different stakes. *Scandinavian Journal of Educational Research*, 61(1), 95-111. <https://doi.org/10.1080/00313831.2015.1119723>
- Stommel, J. (2018, March 11). How to ungrade. <https://www.jessestommel.com/how-to-ungrade/>.

Do ReviewBites Improve Nurse Practitioner Student Learning: A pilot study

Ellen Farr, Mary Ann Dugan, *The College of New Jersey*

Abstract: Educators must employ innovative teaching methods to meet evolving student preferences. Research indicates students require frequent refocusing, benefit from student-centered pedagogies (Blake, 2023), and, notably, digital native Gen Z nursing students prefer multimodal learning (Chicca & Shellenbarger, 2018; Singh & Dangmei, 2016). To address limited research on video impact, authors collaborated with two undergraduates to create video reviews reinforcing nurse practitioner learning. This well-received approach engaged graduate students, enhanced content retention, and aligned with their learning preferences. This presentation will emphasize the process used in developing and refining the videos with a forward look to adapting to other curricular areas.

As educators, it is imperative that we adapt our teaching methodologies to meet our students' evolving learning preferences and needs. This presentation addresses the critical need to create innovative strategies to assist students in retaining salient course material. As part of The College of New Jersey's Mentored Undergraduate Summer Experience (MUSE) program, we engaged nursing and interactive multimedia undergraduates to research and develop bite-sized video reviews to engage graduate nurse practitioner students. These videos, shown during class breaks, serve as a valuable resource to reinforce student learning and extend their comprehension.

We will begin with a brief demonstration of the review videos and seek input from attendees on how they use video content in their teaching. We will compare responses to our approach and establish a common understanding of this project's uniqueness. We will briefly review the research supporting our approach, highlighting the significance of frequent refocusing during instruction, the benefits of student-centered pedagogies (Blake, 2023), and the preference of Gen Z nursing graduates for multi-modal digital learning (Chicca & Shellenbarger, 2018; Singh & Dangmei, 2016). By establishing a strong theoretical foundation, we emphasize the relevance and urgency of this innovative teaching method in today's educational landscape.

Our presentation's central focus will be to elucidate the project's processes and outcomes. We will share how we guided our two undergraduate students to identify key lecture content, conduct a literature review, write scripts, and decide on essential video components to model effective learner design. We will then report on the process for integrating the completed videos into the curriculum and soliciting nurse practitioner students' reflections on their efficacy. Briefly, we will share the results of our pilot study, emphasizing improvements in content retention and overwhelmingly positive student responses and opinions. Quantitative and qualitative data will be presented, offering a comprehensive understanding of the benefits of this tailored approach.

In addition to discussing the creation methods and study findings, we will engage attendees in a discussion regarding the benefits and drawbacks of adopting this innovative content delivery approach. We hope to inspire attendees to contemplate the applicability of a similar project within their respective disciplines and provide insights into key considerations for those interested in replicating such an endeavor. This collaborative environment will foster an exchange of ideas and best practices. Attendees will gain insights into how to create engaging and concise video content that caters to the needs of their students, regardless of curricular focus.

References

- Bell, J., & Zitter, J. (2023). Documentary short film to improve healthcare provider understanding and support of family caregivers of individuals with serious illness: A pilot study with medical students (Sci225). *Journal of Pain and Symptom Management*, 65(5), e653. <https://doi.org/10.1016/j.jpainsymman.2023.02.275>
- Besera, G. T., Cox, S., Malotte, C. K., Rietmeijer, C. A., Klausner, J. D., O'Donnell, L., ... & Warner, L. (2016). Assessing patient exposure to a video-based intervention in STD clinic waiting rooms: findings from the safe in the city trial. *Health promotion practice*, 17(5), 731-738. <https://doi.org/10.1177/1524839916631537>

- Bilge, A., & Palabiyik, O. (2017). The effect of short films about mental health and disorders on preventing stigmatization in nursing education. *Archives of psychiatric nursing*, 31(1), 88-92. <https://doi.org/10.1016/j.appu.2016.09.006>
- Conceicao, S. C., Strachota, E., & Schmidt, S. W. (2007). The Development and validation of an instrument to evaluate online training materials. <http://files.eric.ed.gov/fulltext/ED504339.pdf>
- Dahodwala, M., Geransar, R., Babion, J., de Grood, J., & Sargious, P. (2018). The impact of the use of video-based educational interventions on patient outcomes in hospital settings: A scoping review. *Patient Education and Counseling*, 101(12), 2116-2124. <https://doi.org/10.1016/j.pec.2018.06.018>
- Herrman, J. W. (2006). Using film clips to enhance nursing education. *Nurse Educator*, 31(6), 264-269.
- Law, M., Kwong, W., Friesen, F., Veinot, P., & Ng, S. L. (2015). The current landscape of television and movies in medical education. *Perspectives on medical education*, 4, 218-224. <https://doi.org/10.1007/s40037-015-0205-9>
- McCann, E., & Huntley-Moore, S. (2016). Madness in the movies: An evaluation of the use of cinema to explore mental health issues in nurse education. *Nurse education in practice*, 21, 37-43. <https://doi.org/10.1016/j.nepr.2016.09.009>
- Membrives, M. D., Isern, M. T. I., & Matheu, M. C. L. (2016). Literature review: Use of commercial films as a teaching resource for health sciences students. *Nurse education today*, 36, 264-267. <https://doi.org/10.1016/j.nedt.2015.10.002>
- Myint-U, A., Bull, S., Greenwood, G. L., Patterson, J., Rietmeijer, C. A., Vrungos, S., ... & O'Donnell, L. N. (2010). Safe in the city: Developing an effective video-based intervention for STD clinic waiting rooms. *Health Promotion Practice*, 11(3), 408-417. <https://www.jstor.org/stable/26738294>
- Neumann, M. S., Plant, A., Margolis, A. D., Borkowf, C. B., Malotte, C. K., Rietmeijer, C. A., ... & Klausner, J. D. (2018). Effects of a brief video intervention on treatment initiation and adherence among patients attending human immunodeficiency virus treatment clinics. *PloS one*, 13(10), e0204599. <https://doi.org/10.1371/journal.pone.0204599>

Engagement, accountability, and reflection: Connecting FYE Students to Campus

Whitney Katirai, Lindsey Keenan, Scott Heinerichs, *West Chester University*

Abstract: Academic and social (i.e. non-cognitive) factors have proven to be an important part of student success. One-way higher-education institutions have addressed these factors is through the requirement of a first-year experience (FYE) course. Research has demonstrated that FYE courses assist in positive retention and on-time graduation rates. There are many different curricular models for FYE courses throughout the country. This presentation will focus on an FYE courses curricular design considering both the academic and social factors of first year students using curricular assignments that requires co-curricular engagement, accountability, and self-reflection through a badge credentialing approach throughout the entire course.

Upcraft, Barefoot, and Gardner (2005) suggest that first-year students succeed when they make progress toward developing academic and intellectual competence, establishing and maintaining interpersonal relationships, exploring identity development, deciding on a career and lifestyle, maintaining personal health and wellness, developing civic responsibility, considering the spiritual dimensions of life, and dealing with diversity (i.e. social/non-cognitive factors). The FYE curricular design developed is a unique pedagogical approach to assist students with each of the areas identified by Upcraft and colleagues, as essential to first-year student success. The model leverages co-curricular activities (social) that exist on our own campus and integrates them into the students' academic study through a badge credentialing process. The four topic areas for badges were selected as they are popular trends in higher education that promote overall academic and social well-being. These areas include: technology; diversity, equity, inclusion, and belonging; mental health; and campus community/wellness. Students demonstrate the attainment of their badge through engaging in the activity (addressing the social/non-cognitive) and then completing a self-reflection of how the engagement contributes to their academic and social success.

This unique pedagogical approach to campus connectivity in a First-Year Experience (FYE) course, with a focus on diversity and inclusion, mental health, and campus community is advancing practice by utilizing engagement, accountability, and reflection through the badge activities integrated into our FYE course. The findings from our research can be used to shape FYE courses at other Universities and contributes to the scholarship on high-impact practices for first-year students.

References

Upcraft, M. L., Gardner, J. N., Barefoot, B. O., eds. 2005. Challenging and supporting the first-year student: A handbook for improving the first year of college. San Francisco: John Wiley & Sons, Inc.

CONCURRENT SESSION 11

**Friday, February 9, 2024
3:45 PM - 4:30 PM**

Assessing teaching's contribution to student learning of course learning objectives.

Steve Matuszak, Bob Edmison, *Virginia Tech*

Abstract: The goal for any educational system is student learning, which must be measured to understand the extent to which it is achieved. This requires assessment of student learning placed in faculty's hands in a timely manner so they can make targeted adjustments to increase student learning. I.E., faculty need to know if what they're doing is affecting changes in student learning of course learning objectives (LOs) as close to real-time as possible. This session will identify obstacles and potential digital solutions to accomplishing this from the VT Digital Assessment Tools Community of Practice (CoP).

Based on the "Brief Description" above, there are critical limiting factors to accomplishing such real-time, valuable assessment of student learning of course LOs. This session will address these limitations inherent in our current model of course-level learning assessment and offer a new model. This new model includes a conceptual framework for integrating learning design and assessment along with potential digital assessment solutions to overcome the barriers. These limiting factors include:

- 1) Assessing student learning is inherently a complex, challenging process because learning and skills are often multi-dimensional (i.e., many sub-competencies). As a result, progress on those dimensions often varies across and within students.
- 2) We lack effective and simple tools to measure the extent to which students are learning the LOs at the course level.
 - a. Most assignments, exams, etc. map to multiple LOs. As a result, while grades inform faculty about student learning in general, they don't provide real-time data on how well students are learning specific course LOs.
 - b. Grades, while useful, are also comparative. As a result, they do not help faculty understand student progress on the dimensionality of skill development. For instance, while students with an "A" have arguably learned more than students with a "B" and so on, it could mean the "As" only know 50% of the LOs or specific sub-competencies, while "Bs" know only 25% and so on.
- 3) If and where these effective, simple tools may exist, they are likely not - Formative (i.e., real time) nor Scalable to typical class sizes.

The result of the above limitations is faculty often don't know the degree to which their lessons, activities, and approaches, or any pedagogical changes to them, are impacting student learning of the course LOs. Based on a new model that integrates learning design and assessment, this session will offer solutions to close this assessment gap by providing faculty and their departments a methodology for achieving a greater understanding of the level to which specific students are learning specific LOs and skill dimensions, all closer to when learning is occurring (formative). This will be done through:

- 1) Presentation to frame discussion with integrated assessment model and potential technical solutions - 15 minutes
- 2) Breakout group discussions - what is needed to implement the integrated assessment model - 10-15 minutes
- 3) Reflection on group discussions and next steps/resources/collaborations - 15 minutes

References

Current Assessment Model

In the typical course model, exams, assignments, and projects are given grades which provide a general sense of student learning outcomes. In addition, SPOT questions address student preferences. This current model lacks: 1) real-time (formative) assessment; 2) assessment of student learning of specific LOs; and 3) the variance of progress, amongst and within students, on multidimensional skill competencies.

Integrated Learning Design & Assessment Model

The following proposed model contains:

- 1) SPOT questions concerning students' perceptions of their learning the course LOS.

- 2) Mapping specific aspects of exams, projects, and assignments to specific LOs accompanied by real-time assessment.
 - a. As a result, faculty can better understand during the course the extent to which students are understanding specific LOs.
- 3) Assessment at the lesson-level.
 - a. For faculty to make immediate adjustments to improve student learning.
- 4) Pre-test/survey focused on previous (foundational/pre-req) course LOs.
 - a. Helps assess if students have retained understanding LOs from pre-req courses.

Using AI Voiceovers to Augment Instructor Presence

Sean Holland, *University of Alaska Fairbanks*

Abstract: Explore the implications and practical applications of using AI voice clones on behalf of instructors to efficiently create instructional video and audio content for students in asynchronous courses.

A significant advancement in the realm of generative AI is the current sophistication of AI voice generators capable of creating speech nearly indistinguishable from real humans, including highly accurate voice clones of a unique individual's speech. The educational media team at University of Alaska Fairbanks Center for Teaching and Learning has begun to pioneer a model of media production in collaboration with faculty in which instructional media content can be created on behalf of an instructor without the need to re-record on multiple occasions. It creates the potential to streamline certain aspects of the instructional video creation process. While this is an opportunity and thrills certain instructors with the possibility to save time and provide more quality instructional content to students, it also raises questions surrounding identity, ownership, student perceptions of instruction, and even the relationship between instructor and instructional designer. This presentation will discuss our approach and the guardrails we have built internally to allow this to function, while sharing some success stories. The session will include opportunities for hands-on creation of voice models as well as Q&A.

Beyond Writing: Moving Towards Linguistic Justice in Any Course

Carly Overfelt, *Wayne State University*

Abstract: Higher education has recently begun to see an emphasis on supporting linguistic diversity in the classroom. These efforts have largely focused on writing pedagogy; however, supporting linguistic diversity and moving towards what Baker-Bell calls "linguistic justice," is possible-and important!-in every course. Any time students are using language, there is potential for linguistic bias. There is also opportunity in those moments to resist Standard Language Ideology. This practice session reviews the recent literature on language and social justice in higher education and guides participants through applications for their own courses-humanities and STEM.

"Higher education has recently begun to see an emphasis on supporting so-called ""non-standard"" and ""non-native"" English in the classroom. Especially since the publication of April Baker-Bell's *Linguistic Justice* (2020), educators have renewed focus on uplifting not only Black language, but all students with marginalized linguistic backgrounds. These efforts have largely focused on writing pedagogy; however, supporting linguistic diversity and moving towards what Baker-Bell calls ""linguistic justice,"" is possible-and important!-in every course. Any time students are using language, be it in online posts, oral presentations, lab reports, asking questions in office hours, etc., there is potential for linguistic bias. There is also opportunity in those moments to truly ""hear"" students and resist Standard Language Ideology. This practice session reviews the recent literature on culturally relevant/sustaining pedagogy and guides participants through applications for their own courses-humanities and STEM. Inspired by ""small teaching,"" this session invites participants to identify one change they can make in their course to move towards linguistic justice.

Learning outcomes

By the end of this session, participants will know: 1) the ways in which linguistic discrimination/bias surface in higher education classrooms and 2) the basic tenets of linguistic justice pedagogy. Participants will be able to: 3) identify potential linguistic bias in one of their assignments, activities, or other course elements, and 4) brainstorm strategies to mitigate linguistic bias or affirm linguistic diversity in that item or task.

Session outline

5 minutes: Introductory activity

Lippi-Green asserts that ""standard English,"" just like a unicorn, doesn't exist; however, everyone has some idea what it is. I will ask participants to draw a unicorn with provided paper and color pencils and talk at their tables to introduce themselves as they do so. I will ask a few volunteers to show theirs and share names.

15 minutes: Transition to linguistic bias

The unicorn drawings will allow me to transition to the power of Standard Language Ideology; ""Standard English"" and ""academic English"" are powerful ideas and have implications for higher education diversity, equity, and inclusion efforts. I will pull a few key quotes from the literature to help give an overview of linguistic justice pedagogies and how instructors are innovating.

5 minutes: Think, pair, share

Audience members will be given the prompt: ""What are all the ways that students are using language in your classes? Ex: Asking a question in class.""

5 minutes: Discussion

Audience members report back as I keep a list at the front on a large paper.

15 minutes: Individual work

Participants will be given organizational matrix handouts that ask them to brainstorm activities, assignments, etc. in their courses. One column prompts them to identify the language use/potential for bias. One column asks them to brainstorm revisions or ideas to promote linguistic diversity in that assignment, task, etc. Two examples are provided on the handout to help.

5 minutes: Report back/conclude

I'll ask a few people to share what they found, and also invite them to ask lingering questions about how to move towards linguistic justice in their courses.

References

- Addy, T. M., Dube, D., Mitchell, K. A., & SoRelle, M. (2021). *What Inclusive Instructors Do* (1st edition). Routledge.
- Artze-Vega, I., Darby, F., Dewsbury, B., & Imad, M. (2023). *The Norton Guide to Equity-Minded Teaching* (First Edition). W. W. Norton & Company.
- Baker-Bell, A. (2020). *Linguistic Justice*.
- Charity Hudley, A. H., & Mallinson, C. (2018). Introduction: Language and Social Justice in Higher Education. *Journal of English Linguistics*, 46(3), 175-185. <https://doi.org/10.1177/0075424218783247>
- Clements, G., & Petray, M. J. (Eds.). (2021). *Linguistic Discrimination in US Higher Education: Power, Prejudice, Impacts, and Remedies*.
- Craft, J. T., Wright, K. E., Weissler, R. E., & Queen, R. M. (2020). Language and Discrimination: Generating Meaning, Perceiving Identities, and Discriminating Outcomes. *Annual Review of Linguistics*, 6(1), 389-407. <https://doi.org/10.1146/annurev-linguistics-011718-011659>
- Fairclough, N. (Ed.). (1992). *Critical language awareness*. Longman.
- Flores, N., & Rosa, J. (2015). Undoing Appropriateness: Raciolinguistic Ideologies and Language Diversity in Education. *Harvard Educational Review*, 85(2), 149-171. <https://doi.org/10.17763/0017-8055.85.2.149>
- Genishi, C., & Alvermann, D. E. (2017). *Culturally Sustaining Pedagogies: Teaching and Learning for Justice in a Changing World* (D. Paris & H. S. Alim, Eds.).
- Guerrero-Rodriguez, P. (2018). Translanguaging in higher education. *Beyond monolingual ideologies*. Bristol, United Kingdom: *Multilingual Matters*. *E-JournALL*, 5(2), 114-118. <https://doi.org/10.21283/2376905X.9.164>
- Hogan, K. A., & Sathy, V. (2022). *Inclusive Teaching: Strategies for Promoting Equity in the College Classroom* (First Edition). West Virginia University Press.
- results, search. (2016). *Small Teaching: Everyday Lessons from the Science of Learning* (1 edition). Jossey-Bass.
- This Ain't Another Statement! This is a DEMAND for Black Linguistic Justice! (2020, August 3). Conference on College Composition and Communication. <https://cccc.ncte.org/cccc/demand-for-black-linguistic-justice>