



ISETL

**Horizon Technologies in Higher Education:
Teaching & Learning in a Time of Change**
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Prompt Engineering for Enhanced ChatGPT Results

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Proposal Type

Panel Session

Abstract

In this roundtable session, educators will explore how to write effective prompts for ChatGPT to produce more useful results. By mastering the art of crafting prompts, educators will be equipped to teach students better ways to leverage artificial intelligence into their workflows, encourage critical thinking, and foster creativity. By the end of this session, participants will have a toolbox of techniques and strategies to create effective prompts.

Objectives

Participants will understand the principles and techniques for creating effective and creative ChatGPT prompts.

Participants will share best practices and insights with colleagues in small group discussions.

Participants will collaborate with other educators to develop new and innovative ways of using ChatGPT prompts in the classroom.

Primary Audiences

Instructors/Faculty, Early Career Faculty

Summary

The roundtable session "Prompt Engineering for Enhanced ChatGPT Results" aims to provide educators with the skills and knowledge needed to craft useful prompts for AI bots. The session will begin with an introduction and icebreaker activity to set the stage

for the discussion. Participants will then engage in a discussion of the principles and techniques for creating effective and creative ChatGPT prompts. This will include an analysis of effective prompts and strategies for creating prompts that are appropriate for different age groups and learning objectives.

Participants will then engage in a collaborative activity to create new prompts, working with colleagues to brainstorm and refine ideas. Small group discussions on strategies for using ChatGPT prompts in various teaching contexts will provide insights and opportunities to learn from colleagues. The session will conclude with a reflection and sharing of key takeaways from the session. By the end of the session, participants will have developed a deeper understanding of how to use ChatGPT prompts effectively to enhance their teaching and foster creativity in their students. The session will be interactive, engaging, and relevant to educators across a variety of disciplines and grade levels.

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Proposal Keywords: (3-5 keywords)

Prompt Engineering

Artificial Intelligence

Chat GPT

Teaching and Learning Challenges Experienced by Teachers in Rural Communities: Case of South Africa

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Proposal Type

Research Session

Abstract

This study explores the teaching and learning challenges experienced by teachers working in selected rural secondary schools in South Africa. Quantitative method was adopted for the study. The Purposive and random sampling procedures were used respectively to select the schools and a sample of 120 teachers across ten secondary schools. Questionnaires were administered to all randomly-selected 120 teachers, though only 98 duly completed the questionnaires. The collected data were analysed using frequency distribution. The study shows that teachers in rural-based secondary schools in South Africa are negatively affected by the adopted curriculum, student-teacher ratio, and lack of textbooks, among others.

Objectives

To investigate the challenges experienced by educators working within selected rural communities in South Africa. Thus, this paper aimed at determining the challenges experienced by teachers working in selected rural communities, to investigate causes of poor academic performance of learners in selected rural schools and also develop strategies to be used by teachers in such rural areas to improve teaching.

Primary Audiences

Instructors/Faculty, SoTL Scholars

Summary

Historically, colonialism in the African continent, together with its prejudices, among which are healthcare, security, economic development, and many other services especially deficiency to education have highly influenced the quality of life which is currently experienced, lived and observed in many African countries. According to Yesufu (1973), education was used as an instrument for the revitalization of the African continent in the early 1960s when different African nations recently gained independence. This resonates with the words of President Mandela who states that

“education is a tool for change”. In the same light, Mitra (2011) states that education has always been seen as a tool for desired changes. Similarly, Akojee and Nkomo (2008) posit that institutions of learning are established in rural areas in order to enhance development in such places. Bookin Weiner (2015) holds the view that institutions of learning are situated in rural areas in order to help cater for the needs of the host communities and their surroundings

Thus, the quest for desired development in rural African environments has brought about the establishment of different institutions of learning. This is in congruence with the submission of the works of Sehoole and Nkomo (2007) as well as Dina and Shah (2016) who hold the view that institutions of learning are established in rural settlements to create desired developments. In the context of South Africa which is the focus of this study, primary schools, high schools, technical colleges, and universities, in various parts of the countries have been established. The institutions of learning are both government and private owned with the aim of educating and enlightening citizens for them to be duly empowered and capacitated knowledge wise. The private owned institutions of learning are however regulated by the government to ensure that the desired goals are achieved.

However, review of the works of Uleanya and Gamede (2017) as well as Akoojee and Nkomo (2008) show that the access to quality education remains a challenge. For instance, while some learners experience ‘access with success’, some others are exposed to ‘participatory access’. This tends to raise issues around the subject of (in)equality of which South Africa is known to be the most unequal nation in the world (University of Cape Town News, 2021; Stats SA, 2020; Mlaba, 2020). This is evident in the Quintile system experienced in South African schools. Meanwhile, ‘access with success’ implies a case where learners get to enjoy quality education as the required Learning Teaching Support Materials (LTSMs) are made available to them, whereas, the reverse is the case for their counterparts who experience ‘participatory access’ which is used to mean exposing learners to education without being concerned about the quality of provided. Thus, in this regard, learners are exposed to education, yet the required LTSMs to enhance their learning and promote teaching activities are not taken into due consideration. This is common in rural South Africa and is seen as constituting and being contributory to teaching and learning challenges. Thus, this study explores the teaching and learning challenges experienced by teachers working in selected rural secondary schools in South Africa. Quantitative method was adopted for the study. This is in alignment with the works of Kumar (2019) and Creswell (2014) who consent to the use of quantitative method which involves the collection of large data in a study in order to aid generalization of findings. The Purposive and random sampling procedures were used respectively to select the schools and a sample of 120 teachers across ten secondary schools. Questionnaires were administered to all randomly-selected 120 teachers, though only 98 duly completed the questionnaires. The collected data were analysed using frequency distribution.

The findings of the study show that teachers in rural-based secondary schools in South Africa are negatively affected by various factors such as: the adopted curriculum, language of instruction, student-teacher ratio, and lack of textbooks, among others.

Suffice to state that education has been considered as an important and useful tool for enhancing change and ensuring development in rural South Africa. This has led to establishment of schools, however, due to participatory access predicated on various factors, challenges are experienced in teaching and learning which hampers the ability of the learners and has led to issues such as high drop-out rate, high unemployment rate, high rate of poverty, lack of development, among others which are prevalent in rural South Africa.

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Proposal Keywords: (3-5 keywords)

Rural Communities; Rural High Schools; Teaching and Learning Challenges; South Africa

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"I feel ya!": Preparing college students for empathy-based community engagement

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Elon University, Elon, NC, USA

Proposal Type

Practice Session

Abstract

Recently, our students have faced increased challenges in connecting with service learning community partners. This is likely due to pandemic-related social limitations and increased interaction through electronic versus face-to-face social encounters, resulting in less connection, less patience and understanding, and social isolation. This session focuses on a university-wide collaboration designed to help students build meaningful connections in the community. Faculty from multiple disciplines collaborated to develop an empathy-based training for students to complete before they begin as service volunteers. Cultural humility, biases and empathy are among the main topics in this training, enabling students to develop meaningful connections with community members.

Objectives

Participants will:

1. Identify challenges in building human connection post-pandemic.
2. Discuss skills and strategies designed to help students foster relationships in the community.
3. Understand the advantages and potential for empathy training connected to service learning courses.

Primary Audiences

Instructors/Faculty, SoTL Scholars

Summary

Undergraduates have experienced a decline in empathy over the years, most likely due to increased interaction through social media and fewer face-to-face encounters (Konrath, O'Brien & Hsing 2011). The resulting effects can include lack of connection,

less patience and understanding, and, in many cases, social isolation. Of particular concern is how students interact with the local community, given their recent social limitations related to the Covid-19 pandemic, and the connection between social empathy and civic engagement (Hylton, 2018). Recently at our university we became aware of our students' lack of preparation for community engagement on many levels, especially the need for skill development in empathic communication. Moreover, it is possible that enhancing emotional connections in communities could "facilitate higher levels of self-efficacy in communities" (Botha, Joubert, Morgan & Wilmot, 2022). This session focuses on a university-wide collaboration designed to help undergraduate students serve more effectively and empathically in the local community. Faculty and staff from multiple disciplines collaborated to develop an empathy-based training program for students to complete before they enter the community as service volunteers. Cultural humility and sensitivity, personal bias and empathic communication are among the main topics of focus in this training, moving students to develop and nurture meaningful connections with people in the community.

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Proposal Keywords: (3-5 keywords)

Empathy, service-learning, training undergraduates, community relationships

Infusing Entrepreneurship on Technical and Vocational Education and Training (TVET) College's curriculum.

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Unizulu, Richards bay, umhlatuze, South Africa

Proposal Type

Panel Session

Abstract

Entrepreneurship education has become important for students who wish to pursue career in the field of Business and entrepreneurship. The phenomenon to globalisation that is sweeping the world is threatening to swallow up weak economies and small entrepreneurs.

According to (Schumpeter, 1934; Baumol, 1996; Mair & Marti, 2009), entrepreneurial activities promote rapid economic growth in various countries around the globe and create several jobs for people. This study will use quantitative method to collect data from respondents in TVET Colleges. These participants acquire entrepreneurial skills from TVET College and are potential employees of the labour market.

Objectives

The aim of entrepreneur education is to produce students who will meet the demands of the labour market and create employment opportunities; to improve and develop students' life skills; cognitive, interpersonal, and psychomotor skills. Gatawa (1999) points out that curriculum should be able to produce skilled manpower needed to produce goods and services.

Primary Audiences

Curriculum Specialists, Higher Education Administrators

Summary

Hence, curriculum should be designed to meet the needs of individuals and those of their countries as well. It is speculated that most people who has graduated will make a living by being employed in corporate industry because they lack entrepreneurial skills, as their skills and interests are so inclined. It is important for the curriculum planner to

give serious attention to what students should learn, to realise the aspirations of all stakeholders and to develop entrepreneurship skills (EMS, 2001).

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Proposal Keywords: (3-5 keywords)

Keywords: Entrepreneurship, infusing, Technical, Misconception and Training.

Evaluating development of student metacognition during online instruction

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Proposal Type

Research Session

Abstract

Metacognition is important for academic success. Metacognition includes the ability to monitor and regulate thinking processes. Unfortunately, most incoming college and university freshman do not have well-developed metacognitive skills and therefore often struggle academically during their first years of college. Students in an online introductory university course were provided primer questions to help them develop metacognitive practices. This presentation will share results from a multi-year study and implications for future online course instruction.

Objectives

1. Participants will learn about the metacognitive prompts used in an online course.
2. Participants will be able to reflect on study results to apply them in their own courses.
3. Participants will see how faculty can help students in online courses use metacognition skills.

Primary Audiences

Instructors/Faculty, SoTL Scholars

Summary

Methods

This study involved multi-year mixed methods experimental research design. At the beginning of each semester, students were provided basic metacognitive instruction. This instruction remained constant throughout the study. Originally, the same two metacognitive prompts were used exactly the same for each learning module. Later in the study, a clarification statement was added to the two metacognitive prompts. The

intervention each semester was instructor provided individual student feedback to their responses to the metacognitive prompts.

The study instrument is the online discussion prompts. Data collected was student responses to the metacognition prompts.

The analyses included both qualitative and quantitative methods. Responses were read by two researchers and coded for level of metacognition. Interrater reliability was determined by having 10% of responses read and coded by both researchers comparing results. Quantitative methods include analyzing coded responses using a chi square.

Findings

Preliminary findings show an increase in the amount and level of metacognitive responses from the beginning of each semester to the end of each semester. Data will be further analyzed.

Implications

The implications of this study is that other instructors of online courses are able to see the processes used to increase student metacognition. The methods used to encourage metacognition are straight forward and easy to replicate by others. The novelty of this study is that it utilizes techniques designed to foster student metacognition while in an online course. Typically, metacognition is utilized in traditional face to face courses and not courses taught entirely online. It was interesting to observe the the metacognitive changes students made as they progressed through the asynchronous online course.

Further analysis is under way and results will be shared at the conference.

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Proposal Keywords: (3-5 keywords)

Metacognition

self reflection

student learning

Using Your LMS to Aid Student Learning: A Discussion of Student Experiences with Canvas

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Proposal Type

Research Session

Abstract

In 2020, our college moved from Blackboard to Canvas. After several semesters of use, we administered an online survey and held focus groups with students to learn how they use Canvas. Findings revealed the course structures that aid student learning, identified the importance of several specific Canvas features, and gave insight into the ways students engage with courses, in and out of the classroom. In this interactive session, we will discuss strategies that can be used in Learning Management Systems to aid student learning. Some strategies align with standard practices, like those in Quality Matters, while others contradict these practices.

Objectives

As a result of attending this session, participants will be able to:

- describe the course structure that students find beneficial to learning
- discuss the challenges students face when engaging with our courses in LMS systems
- identify the key features of Canvas that students see as most important (non-Canvas users can consider similar features in their LMS system)
- explain how students interact with course materials
- create faculty development opportunities with regard to LMS use
- consider new features for future LMS systems

Information from this session will be applicable regardless of LMS used, although Canvas users may find it especially beneficial.

Primary Audiences

Instructors/Faculty, Instructional Technologists

Summary

After discussion in the University of Cincinnati Blue Ash College Learning+ Teaching Center in 2022, it was decided that Canvas student user experience research would be helpful in guiding future professional development activities. After a transition to Canvas from Blackboard in 2019/2020, the first two full years of teaching in Canvas focused largely on basic uses of Canvas and pandemic troubleshooting. As more advanced Canvas training is considered, we determined that understanding how our students are using Canvas could help us identify the important features of focus and examine how current uses can be improved.

As this project was designed to identify how students were using Canvas, it was important that we include students in the research process. Three UC Blue Ash students worked as student researchers on this project.

Results of pilot focus groups held during Fall Semester 2022 aided in the development of an online survey and refined focus group questionnaire, which were both administered in Spring Semester 2023. Student researchers led focus group sessions with a total of 15 students and 366 students (8 percent of our student population) completed our online survey.

Generally speaking, and unsurprisingly, our research found that how faculty use Canvas matters to student learning. As one student stated, "The way in which professors organize the class materials in Canvas speak strongly to the user end experience. Some are vastly better than others." Students were clear in establishing the importance of linear modules with dates applied to modules, assignments, and pages. In fact, more than 86 percent of students agreed or strongly agreed that having dates in Canvas was important. These dates were important, because students use the To-do List and Calendar to organize the tasks they have for their classes, with 38 percent of students saying they access the To-do List first when entering Canvas. "It is extremely hard to know when something is due if teachers do not post to the to-do page on canvas," one student offered. Other findings revealed that students struggle when third-party tools are not integrated and feel overwhelmed by the number of announcements they are receiving from professors. They like the Canvas phone app for checking grades and looking at what they have upcoming, but not for accessing work or submitting assignments. In an interesting finding, we learned that many students did not know about or find useful "Start Here" modules or pages, a standard item we suggest based on the Quality Matters Rubric. Instead, students indicate they either go straight to modules or the syllabus when first accessing a course. Another interesting finding is that students think of the Canvas Inbox as a text messaging service, not a place to send emails to professors. This alters the type of messages students send, as they said they appreciate not having to use proper punctuation or complete sentences. This finding illustrates a disconnect between faculty and students in their understanding of this particular feature.

Overwhelmingly, our students indicated that they like Canvas and find it easy to use. Our survey found that 75.6 percent say it is easy to view, read, and download materials and 70% say it is easy to navigate. When asked about their satisfaction, 59.4 percent were satisfied, and only 6.5 percent were dissatisfied. One student said: "It is the best

learning system I've used as a student, and it would be the stupidest thing ever to get rid of it if that's what's going on here." Certainly, a move away from Canvas is not upcoming for us, but this research did lead to specific suggestions for our faculty:

- Add dates to Canvas for all assignments, even those in third-party resources, so they will appear in the to-do list and calendar; students saw this as critical to their success.
- Consider aligning modules, lessons, units, etc. with weeks and/or including start and end dates to indicate when they take place in the semester.
- Use the modules section of canvas to organize course materials instead of announcements.
- Link/integrate third-party tools whenever possible.
- Minimize the number of announcements you are sending. As they add up, students are less likely to read them because it is overwhelming.
- Post grades in Canvas and make sure the overall grade is visible so students can follow their progress; using the Canvas gradebook also allows students to use "what if" grades to see how an assignment grade could impact the overall grade.
- Use Canvas for course materials; students like it!

On our campus, this research has had many practical implications. Our Learning+ Teaching Center, which commissioned this project, is using the results to develop specific faculty development workshops aimed at helping faculty use Canvas in ways that are beneficial to student learning. For example, they will be hosting faculty for snacks and Canvas tip and tricks right before our monthly required, in-person faculty meetings. Our student researchers will also be presenting the findings to faculty along with discussions of the general student experience with Canvas. We hope to share our findings in other venues, like the ISETL conference, to increase dialogue about the ways students are using LMS systems and the way that may differ from the assumptions faculty and instructional designers make about student learning. The pandemic changed the way students learn, thus we must also consider the ways that we teach, and part of that is understanding the importance of the technology we are using. We hope to help facilitate some of that discussion.

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Proposal Keywords: (3-5 keywords)

Canvas, student experience, learning

Stimulating Active Learning in Computing Classrooms Using Online Collaborative Whiteboarding

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Proposal Type

Practice Session

Abstract

We will present how educators can utilize online collaborative whiteboarding tools, such as Miro, to improve active learning and foster student engagement in in-person classes. We will address how to utilize Miro within the face-to-face classroom environment, because this tool has affordances that allow for exercises and activities that are difficult to facilitate using existing technology (such as smart whiteboards) in face-to-face classrooms. This type of whiteboarding can offer infinite space to construct boards, can be easily duplicated, reproduced, preserved for future reference, and distributed to students.

Objectives

As classroom instruction has returned to in-person learning, educators have an opportunity to incorporate many of the online tools adopted to enhance the online learning experience into in-person classroom settings for active learning. Participants will learn how to use and implement Miro, an online collaborative whiteboarding software, for in-person classrooms to improve active learning and student engagement. We will discuss how to develop activities to create a dialogical space between students and their peers, and with their instructors. This presentation will provide instructors with another tool in their toolbox that can be used to stimulate active learning in the classroom.

Primary Audiences

Instructors/Faculty, Curriculum Specialists

Summary

The use of interactive whiteboarding tools to encourage active learning is not new to the scholarship of teaching and learning. Primarily, scholars have focused physical, interactive whiteboards in classrooms to improve student engagement [4]. While interactive whiteboards provide the affordances of digital interactivity that are not capable with a traditional whiteboard, they are severely limited in who is able to utilize

the board at any given time, in that one must actually approach a board to interact with it.

Recent developments of online collaborative whiteboarding software address the limitations of physical interactive whiteboards, as they allow all students the ability to simultaneously engage with the board [1]. Online collaborative whiteboard software, such as Miro or Google Jamboards, enable students and instructors the ability to access and interact with digital whiteboards from their own personal computing devices, such as mobile devices, tablets, laptops, or desktop computers. This software has recently drawn the attention of scholars interested in examining how they can be used to improve student engagement in online learning environments [2], while others have explored their use in traditional, in-person settings [3]. Online collaborative whiteboards have been examined in university discussion sections to create dialogical spaces, which are spaces where students are comfortable and encouraged to engage in dialogue about course material [3]. In particular, the use of these types of whiteboarding tools improve student-to-student and student-to-teacher interactions and dialogue, and student engagement with course materials.

In spring 2021, we utilized Miro, an online collaborative whiteboard software, which offered us a platform to design active lesson plans for our course in an online setting in a class on the social and ethical implication of technology in society. We chose this tool to create a dialogical space in online learning. Students reported feeling more comfortable participating in online learning and experimenting with the course content. Students were more eager to accomplish whiteboard-assisted exercises using this online collaborative whiteboarding software, especially in regards to building sociotechnical models that detailed the relationship between technologies and society. We were able to bring in a variety of mediated content through preconstructed Miro Whiteboards to engage students. Even as most students expressed frustration with remote learning in general, they expressed appreciation for this method of engagement and that it helped them feel a stronger sense of presence, and connection their peers and instructors

Beginning in fall 2021, we adapted the Miro activities developed originally for online learning so that they would be suitable for in-person instruction. We have found that the software has technical affordances that are difficult to achieve in face-to-face classrooms. This type of whiteboarding offers infinite space in which to construct activities, can be easily duplicated, reproduced, preserved for future reference, and distributed to students. We have found that this tool has improved active learning in our course by allowing for activities that are impossible with either traditional whiteboards or smart whiteboards.

In this presentation, we will describe how the affordances of Miro can aid in active learning in the classroom, and present some examples of activities that we created. For example, we will have participants engage with a sample Miro board that could be used in a classroom, which will include an introduction activity, group activities, and a takeaway board. We will present an example Miro board that included activities

designed to get students to think about how recommender algorithms shape their online experience with websites such as YouTube.

In the presentation we will also address the practical application of Miro in the classroom. Specifically how the tool can be used in the classroom to engage students in a variety of social and technical computing concepts, which could include: mapping the sociotechnical relationship using network charts; designing entity relationship diagrams (ERD); diagramming the syntax of writing algorithms; understanding and applying concepts and structures in programming.

Will we provide tips on how to setup and implement Miro in ways that are effective for teaching and learning. This will include discussions of Miro board organization, the board design process, and how to create activities utilizing Miro templates. Additionally, we will discuss utilizing built-in Miro templates to create engaging activities, organizing activities, and integrating third-party applications (e.g. Google Drive, Adobe Creative Cloud, GitHub, etc.).

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Proposal Keywords: (3-5 keywords)

active learning, online collaborative white boarding software, educational resources

Let's Talk! art and visualization strategies to support inclusive STEM classroom discussions.

Dr Alexis Peirce Caudell

Indiana Univeristy, Bloomington, IN, USA

Proposal Type

Practice Session

Abstract

Active learning, including engaging discussions that promote critical thinking, effective communication skills, and deep conceptual understanding (Freeman et al., 2014), is crucial for fostering a vibrant learning environment. But, when attempting to initiate conversations in the classroom, educators frequently encounter challenges such as persistent silence, resistance from students, the overpowering presence of a single voice, microaggressions, and distracting off-topic or side conversations. In this session, we will explore classroom-tested simple art and visualization strategies that have proven successful in stimulating dialogue. These techniques can facilitate discussions that promote and nurture inclusive and effective student interactions and learning within STEM classrooms.

Objectives

Participants will actively collaborate to generate a diverse and innovative set of classroom visualization strategies designed to effectively support student discussions in STEM classrooms.

Through insightful discussions and interactive exercises, participants will gain a deep understanding of the common barriers that hinder student engagement and participation in classroom discussions. This knowledge will enable them to proactively address and overcome these obstacles, fostering inclusive and dynamic learning environments.

By delving into real-world examples and success stories, participants will be inspired to generate practical and tailored ideas for incorporating visuals that cultivate a supportive and collaborative learning community within their own classrooms.

Primary Audiences

Instructors/Faculty, Early Career Faculty

Summary

References (up to 5)

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Proposal Keywords: (3-5 keywords)

Inclusive Teaching Practices

Active Learning

Discussion

STEMVisual Thinking

Multiple Pathways to the Same Destination: Student Agency and Motivation

Dr. Stephanie L Wasmanski
Wilkes University, Wilkes Barre, PA, USA

Proposal Type

Practice Session

Abstract

Research has shown that high levels of self-regulatory behaviors are positively correlated with student motivation (Sun & Rueda, 2012; Wolters & Benzon, 2013) and that higher levels of student motivation (Bolkan, Goodboy, & Kelsey, 2016; Martin, Galentino, & Townsend, 2014), and self-regulated learning strategies (Stegers-Jager, Cohen-Schotanus, & Themmen, 2012; Wolters & Hussain, 2015) contribute to academic success. What if students were empowered to determine how they meet course objectives and hold themselves accountable by completing assessments that demonstrate their new skills and knowledge? How could you shift your focus to give students the ability to choose their own pathway to knowledge in your own classroom?

Objectives

Please join me as we explore flexible pathways to learning outcomes, while maintaining academic rigor and enhancing student motivation. In this session, you will hear the perspectives of a faculty member about the shift from prescriptive control to active facilitation and learn about ways to adjust your own teaching style to increase student motivation and engagement. Participants will:

*Explore how flexible pathways to learning outcomes contribute to enhanced learning experiences.

*Identify ways to adjust your own teaching style to increase student motivation and engagement.

Primary Audiences

Early Career Faculty, Instructors/Faculty

Summary

We, as educators (Pk-20), commonly feel pressure to ensure that all students leave our classrooms with the skills and knowledge necessary to move on to the next grade or

course in the program with success. Educators are also tasked with motivating students while making the content relevant and engaging without sacrificing quality. Research has shown that high levels of self-regulatory behaviors are positively correlated with student motivation (Sun & Rueda, 2012; Wolters & Benzon, 2013) and that higher levels of student motivation (Bolkan, Goodboy, & Kelsey, 2016; Martin, Galentino, & Townsend, 2014), and self-regulated learning strategies (Stegers-Jager, Cohen-Schotanus, & Themmen, 2012; Wolters & Hussain, 2015) contribute to academic success. Furthermore, students with the ability to personalize and choose their own learning opportunities have been shown to take more responsibility for their own learning (Irvine, Code, & Richards, 2013). During this session, a faculty member will share about her research on student motivation and about the shift from prescriptive control to active facilitation in an online college course. Methods used to increase student engagement and autonomy while fostering competence include the shift from faculty-led discussion prompts to student-moderated discussion forums and prescribed assignments to assignment opportunities which allow students to select assignments of interest and submission dates. While there isn't a "one-size fits all" approach, there are many ways to adjust teaching styles to meet the psychological needs of our students without the need for extreme change. Best practices and key items to consider when making a shift to autonomy supportive teaching will be shared. Participants will be asked to share their own experiences with student agency and will be prompted to think of ways in which they could increase student motivation within their own classrooms.

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Proposal Keywords: (3-5 keywords)

Student agency, autonomy, motivation, student choice, personalized learning

Artificial Intelligence for Educators

Dr. Lucretia M. Fraga

University of the Incarnate Word, San Antonio, Texas, USA

Proposal Type

Practice Session

Abstract

This session introduces an AI and machine learning module for educators, covering key terms, concepts, and practical applications of AI tools. Participants explore ethical implications and bias, bridging traditional teaching methods with AI technologies for inclusive learning environments and enhanced teaching.

Objectives

By the end of the session, participants will have the opportunity to answer polling questions about AI and experience a module created for educators that:

- introduces the basics of artificial intelligence (AI) and machine learning, including key terms, and concepts,
- encourages hands-on experience using AI tools and technologies, such as chatbots to enhance teaching and learning experiences,
- encourages critical evaluation of the ethical and social implications of AI with issues related to bias

Primary Audiences

Instructors/Faculty, Instructional Technologists

Summary

The proposed session aims to introduce higher ed faculty to the fundamentals of artificial intelligence (AI) and machine learning. It will cover aspects of an AI module that covers key terms, concepts, and practical applications of AI in education. The participants will be introduced to AI tools like chatbots, voice assistants, and natural language processing to enhance teaching and learning experiences for preservice teachers. Additionally, the session will encourage critical evaluation of the ethical and social implications of AI, particularly related to issues of bias.

Participants will be guided through an introduction to AI and machine learning. They will learn about the basic principles and techniques behind AI and its impact on various industries, including education. The session will then move on to the practical application of AI tools and technologies in the context of teaching and learning.

Participants will have the opportunity to explore chatbots, voice assistants, and natural language processing systems. They will learn how these AI tools can be integrated into the classroom to facilitate personalized learning experiences and instant feedback.

Through demonstrations, participants will gain knowledge in using AI tools. They will learn how to create and customize chatbots for educational purposes, design voice assistant activities for interactive lessons, and utilize natural language processing to analyze student responses and provide targeted interventions. The session will provide step-by-step guidance and real-life examples to help participants grasp the potential of AI in enhancing teaching and learning practices.

Moreover, the session will emphasize the importance of critically evaluating the ethical and social implications of AI. Participants will explore issues related to bias in AI systems, such as algorithmic discrimination and the perpetuation of existing societal inequalities. The goal is to raise awareness to make informed decisions about the use of AI in their future classrooms.

The significance of this session for the audience lies in its ability to support higher ed faculty for the evolving landscape of education technology. AI is rapidly transforming various industries, including education, and it is crucial for educators to be familiar with AI concepts and tools. By equipping higher ed faculty with AI knowledge and experience, they will be better prepared to navigate and harness the potential of AI in their teaching practice. The session aims to bridge the gap between traditional teaching methods and emerging AI technologies, enabling higher ed faculty to create more engaging, personalized, and inclusive learning environments.

Practically, the content of this session offers higher ed faculty a valuable skill set that can enhance their teaching careers. By understanding the basics of AI and machine learning, and gaining experience with AI tools, higher ed faculty can effectively integrate these technologies into their classrooms. They will be able to create innovative and adaptive learning experiences that cater to individual student needs, promote critical thinking, and foster creativity. Additionally, the session's focus on ethical considerations surrounding AI ensures that higher ed faculty are equipped to address the potential challenges and biases associated with AI implementation.

Overall, this AI session provides higher ed faculty with a comprehensive introduction to AI and its practical applications in education. By combining theoretical knowledge, experience, and discussions on ethical implications, the session empowers higher ed faculty to embrace AI as a powerful tool for enhancing teaching and learning while ensuring responsible and equitable implementation.

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Proposal Keywords: (3-5 keywords)

artificial intelligence

AI

higher education

ChatGPT

generative pre-trained transformer

Glocal Digital Citizenship Education through Digitalization of Curriculum and Instruction

Dr Emmanuel Jean-Francois
Ohio University, Athens, Ohio, USA

Proposal Type

Research Session

Abstract

The proposed presentation argues that the global digital citizenry could integrate local contexts and realities to form a glocal digital citizenry. More importantly, the experience of the global pandemic coronavirus (COVID-19) has uncovered the digital divide locally and globally, but at the same time contributed to the digitalization of almost all social, economic, and cultural transactions, including curriculum and instruction. Moving forward, how can digitalization be further sustained to foster glocal digital citizenship education? The purpose of the proposed presentation is to articulate how digitalization of curriculum and instruction could serve as a strategy to foster glocal digital citizenship.

Objectives

At the end of the presentation, the participants will be able to:

- Discuss the concepts of glocal digital citizenship education, as well as digitalization of curriculum and instruction;
- Reflect on how glocal digital citizenship education can influence the digitalization of curriculum and instruction.

Primary Audiences

Curriculum Specialists, Faculty Developers

Summary

The progress in information and communication technology (ICT) during the past decades had forced us to live in a digitalized and networked society regardless of the level of individual's connectedness. Organizations, communities, and societies at large have embraced or utilized the opportunities offered by Internet facilitation, digital media, and web-based networking to engage in interactions or influence the interactions of individuals to the point that the people born from January 1977 to December 1997 have been labeled "The Net Generation" (Tapscott, 2009, p.16). Consequently, the concept of digital citizen has emerged to convey the sense of identity and community that has developed through the utilization or consumption of the digital media. In education, scholars have argued for students to be not just digital citizens, but also global digital citizens who engaged and are engaged in the interconnected world (Hannum et al., 2009; Merryfield, 2012). However, there is a digital divide within and between societies that create opportunities for digital localism inspired either by specific nationalist ideologies or fear of otherness. Having said that, it is important to stress that the local and the global are not part of a zero-sum game. They are intimately interrelated through a glocal construct. The proposed presentation argues that the global digital citizenry could integrate local contexts and realities to form a glocal digital citizenry. More importantly, the experience of the global pandemic coronavirus (COVID-19) has uncovered the digital divide locally and globally, but at the same time contributed to the digitalization of almost all social, economic, and cultural transactions, including curriculum and instruction. The question is: Moving forward, how can digitalization be further sustained to foster glocal digital citizenship education? The purpose of the proposed presentation is to articulate how digitalization of curriculum and instruction could serve as a strategy to foster glocal digital citizenship.

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Proposal Keywords: (3-5 keywords)

digitalization, digital literacy, global digital citizenship, instructional technology, curriculum and instruction.

Connecting Classroom Learning to the Community and Practicing Cultural Awareness and Humility

Dr. Randy L. Seevers

University of Houston-Clear Lake, Houston, TX, USA

Proposal Type

Poster Session

Abstract

This presentation describes a project-based activity that is specifically designed to supplement teacher candidates' learning and broaden their perspective of teaching students who have disabilities and to enhance their understanding and appreciation for different cultures, attitudes, beliefs, and perspectives. A major part of cultural humility is understanding and analyzing one's own reactions in a thoughtful and intentional way, which includes being tolerant, respectful, curious, and empathetic towards other cultures. Thus, for this assignment, candidates were asked to self-reflect upon a series of related experiences by examining all aspects of events and experiences from different perspectives.

Objectives

The participants will be able to: 1) reflect upon and analyze a project-based activity on teacher candidates' understanding and awareness about one's own point of view, assumptions, ideas, and habits as well as understanding and awareness about the point of view, assumptions, ideas, and habits of individuals from other cultures, 2) become self-aware and reflective upon one's own cultural humility by initiating and developing interactions with culturally different individuals, and 3) identify commonalities in multiple points of views that must be considered when fairly and flexibly designing classroom environments.

Primary Audiences

Instructors/Faculty, Early Career Faculty

Summary

I will describe a project-based project that promotes intercultural pedagogy and share results that significantly increased students' engagement in the community. It is hoped that this project is one that the participants will find valuable in replicating in their own classrooms. Details of the project are provided below.

Pre-service teachers self-reflect upon a series of related experiences by examining all aspects of events and experiences from different perspectives. That is, pre-service candidates were expected to reflect on the activities they engaged in. Required Learning Enhancement Tasks include: (1) Complete Self-assessment Checklist, (2) Complete Conversations About Culture: Video and Lesson Plan Conversations About Culture: Video and Lesson Plan - University at Buffalo School of Social Work - University at Buffalo, (3) Community Engagement: Participate in 1 "League of the Rising Hawk" activity or "UHCL Get Involved" event, (4) Community Engagement: Participate in educational events like lectures, lunch and learns, book clubs, and workshops (celebrating Black History Month, Pride Month, Women's History month, etc.), (5) Career Development: Participate in 1 professional development/education related activity or event (e.g., conduct an open dialogue interview with a parent of a child with a disability, volunteer in a service-related activity such as Special Olympics Rodeo or attend a CADD training, etc.), (6) View IRIS video: Jose's Story and reflect on what they would do, (7) Review the following article: Tam, Kai Yung, Zhao, Mei, Seevers, Randy L., Liu, Yuan & Bullock, Lyndal M. (2022) Examining physical accessibility of campuses for university students with mobility impairments in China. *Journal of Postsecondary Education and Disability*, 35(2), 161-174 or choose to review an article from an international journal of education of personal preference, and (8) Read a book or watch a movie about a disability from the perspective of someone with the disability (Instructor has a list of approved books: e.g. Temple Grandin's *Emergence Labeled Autistic* or Christy Brown's *Left Foot*)

Preservice teachers submit a comprehensive reflection piece detailing their engagement experiences and what they learned from these experiences. The teacher candidates consider what are their impressions going into the activity. That is, they attend to any bias perceptions going into the activity. During this project-based assignment, pre-service teachers respond to how they reacted to the experiences and describe what they were thinking. Candidates are also requested to write down specific moments in which their impressions may have changed. In addition, the candidates note in what ways these experiences changed the way they will think/perceive/react and had to identify specific actionable steps to address any biases in the future, speaking up/out for others when they see injustice, etc.

The process for collecting data included analyzing teacher-candidate reflections on experiences, highlights of successes and challenges, and targeted questions related to specific experiences. Results suggest that undergraduate pre-service teachers benefit from these experiences. The Learning Enhancement Tasks (LETs) Reflection Rubric will be shared with participants.

References (up to 5)

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Proposal Keywords: (3-5 keywords)

Pre-service Teachers, Cultural Awareness, Cultural Humility, Teacher Preparation, Education

Collaborative Conversations in the Classroom: Faculty Perspectives on the Uses and Limitations of ChatGPT in Teaching and Learning

Dr. Sean Buckreis, Dr. Heidi Whitford
Barry University, Miami, FL, USA

Proposal Type

Practice Session

Abstract

Faculty provide perspectives on the uses and limitations of ChatGPT in teaching and learning in higher education, focusing on exploring classroom practices and conversations in real time. The presenters discuss utilizing ChatGPT to enhance teaching, and their strategies for revising assignments to accommodate the possible use of ChatGPT by students. The possible downsides of ChatGPT are also considered, such as ethical issues when students cheat on assignments, or the lack of deep learning when it is used to replace students' critical thinking. The presenters also consider how to assess student learning with respect to students using ChatGPT to complete assignments.

Objectives

Objectives

Objective 1: Participants will gain an understanding of conversations that are taking place in classrooms with faculty and students regarding the impact of ChatGPT, including its uses, limitations, and possible ethical issues.

Objective 2: Participants will learn about specific examples and modifications of assignments that professors have utilized in different classroom settings, including undergraduate, graduate, and doctoral classes.

Objective 3: Participants will discover strategies to apply to different teaching and learning scenarios in the classroom that are adapted to the possible use of ChatGPT.

Primary Audiences

Early Career Faculty, Instructors/Faculty

Summary

Purpose

The purpose of this presentation is to provide faculty perspectives of the uses and limitations of ChatGPT in teaching and learning in higher education. In particular, the authors will focus on exploring classroom practices and conversations with students that have recently taken place. The presenters discuss utilizing ChatGPT to enhance teaching, as well as their strategies for revising assignments to accommodate the possible use of ChatGPT by students. The possible downsides of ChatGPT are also considered, such as ethical issues when students cheat on assignments, or the lack of deep learning that may occur when ChatGPT may be used to replace students' critical thinking. The authors also consider how to assess student learning with respect to students using ChatGPT to complete assignments.

Objectives

Objective 1: Participants will gain an understanding of conversations that are taking place in classrooms with faculty and students regarding the impact of ChatGPT, including its uses, limitations, and possible ethical issues.

Objective 2: Participants will learn about specific examples and modifications of assignments that professors have utilized in different classroom settings, including undergraduate, graduate, and doctoral classes.

Objective 3: Participants will discover strategies to apply to different teaching and learning scenarios in the classroom that are adapted to the possible use of ChatGPT.

Conceptual Framework

There are the enthusiastic adopters, the cheaters, the opt-outers. While there are undoubtedly many more types and categories of perspectives and utilization of ChatGPT and its derivatives. We had conversations with students in different courses, and based on these conversations, we came up with some adaptations to respond to the several categories of users that we have thus far observed.

There are several articles that discuss various ways that ChatGPT is impacting higher education that provide a conceptual framework for this presentation. Alafnan et al. (2023) discuss the possible uses of ChatGPT in higher education, with particular attention paid to strategies for teaching. Alafnan et al. discuss adapting business, composition, and communications courses to mitigate the impact of students using ChatGPT. Among the strategies suggested, one is to not let students have certain theoretical assignments that are take-home. This suggests that Alafnan et al. recognize the limitations presented by ChatGPT which may be impacting student learning. Alafnan et al. also discussed another strategy, which was to use case study based assignments that incorporate personal reflections. A limitation discussed by Alafnan et al. was the lack of student learning as an impact of using ChatGPT, as well as the inability of instructors to differentiate between student works that use and do not use ChatGPT. Similarly, Sullivan et al. (2023) used content analysis methods to discern the academic integrity issues brought about by the widespread use of ChatGPT in universities. Among the concerns discussed, Sullivan et al. mentioned academic

integrity as one of the most frequently cited concerns with a negative impact of ChatGPT in higher education. Firat (2023) conducted a study to explore faculty and student perceptions of ChatGPT which found a long list of opportunities as well as problematic challenges and limitations. Haensch et al. (2023) provided a study of students' Tiktok videos that were tagged with ChatGPT and found that most of the videos discussed using ChatGPT to write essays and code, and also ways to evade ChatGPT detection software.

Activities

This session will take place in two parts: First, we will explore the use AI (primarily ChatGPT) as a teaching strategy in different courses, at the undergraduate and graduate levels, and provide examples of each. Second, we will discuss the importance of assessing student learning in the AI impacted environment. If students are using AI to cheat on assignments, what are they learning? What steps can faculty take to prevent cheating and enhance learning? Finally, we will discuss findings and implications of conversations with students regarding the uses of ChatGPT.

Conclusion

The primary audience for this presentation is graduate and undergraduate faculty in higher education institutions. The presenters intend for this to be an exploratory and emergent discussion of the classroom conversations that have taken place between and among students and faculty. In addition, we will discuss the resultant tools, tips, and techniques used to adapt to the new reality presented by the impact of ChatGPT. We will also invite the audience to consider questions of the impact of ChatGPT on scholarly and academic identity among faculty. Willem (2023) provided an interesting discussion of how the use of ChatGPT has disrupted academics' identities with confusion regarding the ethical and appropriate way to cite the use of ChatGPT in scholarly works. In summary, we intend for this to be an emergent and collaborative discussion of how we, as faculty, can overcome the negative aspects of ChatGPT while optimizing the positive aspects to improve teaching and learning practice in higher education.

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Proposal Keywords: (3-5 keywords)

ChatGPT, teaching strategies, student learning, faculty perspectives

Art, Instagram, and Reflection: Engaging College Students through UDL in a Museum-Based Project

Keri J Green, Dr Joe Delaney

Johnson & Wales University, Providence, RI, USA

Proposal Type

Practice Session

Abstract

Step into a world of art! This practice session will showcase a UDL project that immerses college students in a transformative learning experience through art, technology, and reflection. After visiting a local museum, students adopt the role of editor for a magazine and create a series of posts that highlight the interplay between a chosen theme and key course concepts. Additionally, students delve deeper through a one-page reflection, articulating the rationale behind their theme and its meaningful connection to the course. Discover how this “insta worthy” project ignites student engagement, fosters critical thinking, unleashes creativity, and nurtures inclusive learning environments.

Objectives

Identify select UDL principles and their application in engaging students in a museum-based project

Learn strategies for integrating art, technology, and reflection to enhance student learning, critical thinking, and creativity

Primary Audiences

Instructors/Faculty, Faculty Developers

Summary

The purpose of this project is to engage the students in critical thinking, creativity, and the application of course concepts in a real-world context. The use of Universal Design for Learning (UDL) principles ensures that the project is accessible and inclusive for all students, taking into account their diverse learning needs and preferences. The development of this project was the result of a collaboration between the instructor and an instructional designer.

Here's a breakdown of the UDL project which starts about 4 weeks into a 16-week course.

Preliminary Museum Visit: Visit the Rhode Island School of Design Museum to provide students with some background information and guidance on how to approach the art exhibits.

After the preliminary museum visit, the class discussion explores different perspectives on chosen themes and encourages students to share their initial thoughts and ideas.

2nd Museum Visit: During the museum visit, students are encouraged to immerse themselves in the art exhibits, paying close attention to the theme they've chosen. Students are provided with guidelines to make the most of their visit to make sure they pay close attention to details in observing the artwork including colors, shapes, and other relevant elements aligned to their theme.

Note-taking: Students take notes or jot down initial reactions and thoughts about the artwork. These notes serve as valuable references for their Instagram posts and reflections.

Photography: Students take pictures of the museum pieces they find inspiring or relevant to their theme.

Instagram Posts: After the museum visit, students create 7-9 Instagram posts using provided templates. The templates are designed to be visually appealing and inclusive with the following elements: 1. Visual content: Students use the pictures they took during the museum visit as the primary visual element for each post. 2. Captions: Each post includes a caption that relates the artwork to the chosen theme and the course concepts. Students should strive for concise yet informative captions. 3. Hashtags and tags: students include hashtags and tag relevant accounts or organizations so that they increase the visibility and reach of their posts. 4. Alternative text: students provide alternative text (alt text) for each image, describing the visual content, to ensure accessibility for individuals with visual impairments who use screen readers.

Reflection: In addition to the Instagram posts, students write a one-page reflection on why they chose the theme and how it relates to the course. This reflection helps students connect their personal experiences at the museum to the academic concepts covered in the course. Students are provided with clear instructions with a structured format and a set of prompts to guide them that include emotional responses to the artwork, connections to course materials, and the impact of the museum visit on their understanding of the theme. Students are encouraged to express their own perspectives and opinions in the reflection to foster critical thinking and allow for a diverse range of insights.

By combining the experiential learning of the museum visit, the creative engagement of Instagram posts, and the reflective writing component, this UDL project offers students multiple means of representation, expression, and engagement. It accommodates

various learning preferences and enables students to demonstrate their knowledge of the course material.

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Note, the following UDL principles are addressed in this project:

Recruiting Interest (checkpoint 7.1, 7.2)
Representation (checkpoint 1.1, 1.3, 3.3)
Engagement (checkpoint 5.2)
Action & Expression (checkpoint 6.3)

Proposal Keywords: (3-5 keywords)

UDL

student engagement

insta-worthy

PROMOTING AND DEVELOPING TEACHER LEADERSHIP IN EDUCATIONAL CONTEXTS: TEACHING AND LEARNING IN A TIME OF UNREST AND DISORDER

PROMOTING AND DEVELOPING TEACHER LEADERSHIP IN EDUCATIONAL CONTEXTS: TEACHING AND LEARNING IN A TIME OF UNREST AND DISORDER Lynne A Hammann
Retired: Mansfield University of PA, Rock Hill, SC, USA

Proposal Type

Practice Session

Abstract

"Leaders must also take the difficult step of organizational leadership by transforming the islands of excellence into systematic impact" (Reeves, 2006, p. 159) (*italics mine*).

Danielson's (2006), in *Teacher Leadership That Strengthens Professional Practice*, cites Reeves's challenge for educational leaders. In these uncertain times for education, we may find his vision is both necessary and exciting. As Reflective Educational Leaders, we have the opportunity and responsibility to identify and address concerns that are critical to our educational system and our society (Loeschke, 2007).

Objectives

- a. Construct individual knowledge of reflective educational leadership
- b. Engage in reflective decision-making, critical thinking, divergent thinking, complex problem-solving, transfer, etc.
- c. Identify authentic situations to collaborate and make reflective decisions about educational leadership
- d. Collaborate with your colleagues in all of the above, including knowledge-sharing, perspective-taking, and problem-solving
- e. Plan Vision Plan for future and continued reflective educational leadership in individual contexts

Primary Audiences

Faculty Developers, Instructors/Faculty

Summary

Educators, parents, and members of society see many troublesome concerns in our educational system and society today: for example, cheating; bullying/cyber bullying; poverty; child abuse (physical, sexual, psychological); divorce; good and bad male-female role models chosen; lack of civility and empathy; misuse of technology (cyber bullying, cheating, "sexting," etc.); and absenteeism. Evertson, Emmer, & Worsham (2006) observed that "Public scrutiny of our schools has never been more intense than it is today...demands on schools and teachers for accountability and more student testing...societal pressures...[in] changing social and demographic conditions" (p. xv). As reflective educational leaders, we have an opportunity and responsibility to address these issues that are serious threats to our educational system and our society.

In today's society of educational issues and contexts, diverse and even hostile perspectives about the role of education as well as its importance exist. Unfortunately, in many present educational structures, reflective educational leaders may be isolated or disconnected from others and face obstacles to collaboration (Wineburg, 2003). Therefore, recognizing these isolating factors and contextual restrictions is a critical step in encouraging the development of educational leaders. In addition, we must remember that individuals function within contexts and in turn are influenced by these contexts. Moreover, these social contexts (e.g., education, workplace, recreation, family, etc.) are made up of individuals and influenced by the people in them. Leadership skills can be both taught and learned: we may be learners in some contexts and teachers in others.

Effective leaders are able to articulate a shared vision, build confidence in others, and create a process that people believe in. Reflective educational leaders develop from individuals who function within multiple contexts, and in turn are influenced by these contexts. Individuals may be learners in some contexts and teachers in other ones, leaders in some environments and students in other ones. Successful leaders are open to new ideas, optimistic about solving problems, know how to pull students and colleagues in diverse contexts together around a worthy cause, as well as being able how get the best from these individuals/groups in both traditional and non-traditional academic contexts.

Leadership skills are both taught and learned. Therefore, it is important that learners are engaged in meaningful learning activities and actively construct their own individual knowledge. Educational leadership opportunities are not limited only to those in administrative positions or in traditional academic contexts. In the 21st Century, Reflective educational leaders are needed in every field where learning and teaching take place: P-12 classrooms, administration, higher education, student life, residence life, school-community partnerships, and professional organizations (e.g., National

Commission on Teaching and America's Future, 1996; Parsons & Brown, 2002; Terry, 1999-2000).

Regarding teacher leadership, Danielson (2006) identified "that set of skills demonstrated by teachers...who have an influence that extends beyond their own classrooms to others within their own school and elsewhere... managing a process of change...motivate colleagues to become more skilled and thoughtful regarding their work,...recognize an opportunity to institute a practice that will improve the school's program" (p. 12). The skills she described are applicable to diverse contexts of teaching and learning opportunities beyond the classroom. In addition, we must remember that individuals function within contexts and in turn are influenced by these contexts. Moreover, these social contexts (e.g., education, workplace, recreation, family, etc.) are made up of individuals and influenced by the people in them.

Furthermore, identification of the characteristics and descriptions of educational leadership is clearly an ill-structured problem (Hammann, 2007), especially in the challenges facing education today. We, ISETL participants—as individual educational leaders—are all “islands of excellence.” You may already have colleagues/peers in your environment with whom you are working. But often you may not. You may feel that you are alone in your ideas and plans. Therefore, you will continue w/your leadership behaviors by finding individuals with whom to work—maybe constructing a Focus Committee or an Action Committee, changing your island into an isthmus, as it were as you connect w/peers, then connecting your isthmus into a continent. These islands and other geographic metaphors need not be in the same time zones, geographic locations, or even technological/virtual classrooms or contexts.

In accord with Piaget, Vygotsky, Danielson, and other constructivists, it is believed that learners should be engaged in meaningful learning activities and actively construct their own individual knowledge. Moreover, the knowledge base in educational psychology today reflects current research, theories, and their implications for learning and teaching in a variety of contexts. Being guided by this research, participants view our responsibilities as providing learning opportunities for students to construct their own understandings of course concepts and to connect their new knowledge with their prior knowledge.

For that reason, this presentation is structured to provide participants opportunities to reflect on their existing leadership skills, to identify potential leadership skills, and to construct connections with colleagues in other contexts. Learning goals include active engagement and participation, knowledge-sharing, and reflective thinking.

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Proposal Keywords: (3-5 keywords)

Active Learning

Intentional Course Design

Community Building

Instructional Technology

Expanding Pedagogical Horizons through Inclusive and Innovative Faculty Training and Support

Dr. Lyda Downs, Deepa Shriram
Walden University, Minneapolis, MN, USA

Proposal Type

Practice Session

Abstract

Faculty are the many rays that shine and brighten the horizon for students. It is essential for faculty to be trained and supported in a manner that not only demonstrates but provides support for individual needs through inclusive and innovative methods. Faculty interactions have a direct impact on the student experience. This session will examine the importance of inclusive and innovative teaching practices in higher education and offer ideas for faculty training and ongoing support. Inclusionary learning environments that encourage student participation, improve learning outcomes, and support diversity and equity can be developed by faculty through broadening their pedagogical horizons.

Objectives

Participants who attend will:

1. Understand the role of mentorship and collaboration in enhancing faculty training and ongoing support.
2. Gain practical insights and examples of successful inclusive and innovative faculty training programs from an online institution.
3. Learn about resources and support networks available for faculty to enhance their pedagogical knowledge and skills.
4. Cultivate awareness of the significance of creating inclusive and innovative learning environments that cater to diverse student needs, promote active student participation, and enhance learning outcomes.
5. Reflect on personal teaching practices and develop action plans for expanding pedagogical horizons through inclusive and innovative approaches.

Primary Audiences

Early Career Faculty, Instructors/Faculty

Summary

This session will explore and provide strategies for faculty training and support while recognizing the significance of inclusive and innovative teaching practices in higher education. Inclusive excellence in higher education requires intentional efforts to cultivate a safe and inviting learning community (Pearce, 2022). Faculty have an integral role in creating inclusive classrooms and fostering a sense of belonging among diverse student populations. Positive faculty experience/s can lead to positive student outcomes, which can also impact a faculty longevity and student retention. That is why a comprehensive faculty training and ongoing support program has been designed to promote inclusive practices and enhance faculty abilities to effectively engage with students from various backgrounds using innovative techniques learned in training.

The comprehensive faculty training begins with a three-week asynchronous orientation for all new faculty, it is led by a facilitator who is an experienced faculty member. The orientation classroom mimics the student experience. Technology tools in the online classroom are also introduced and required for faculty to master to successfully complete the orientation. This student vantage point experience gives faculty a unique understanding and level of compassion when encountering students who may be having difficulties with technology. Following the initial training, ongoing support mechanisms are established to ensure the sustainability of inclusive and innovative practices. This support includes webinars, faculty collaboration learning communities, an extensive learning management system, and faculty coaching opportunities where faculty members can share experiences, exchange ideas, and receive guidance from experienced a board-certified coach. According to Jarvie-Eggart et al. (2023), fostering a community of care and encouragement positively persuades faculty, resulting in increased motivation to continuously expand their pedagogical horizons and their understanding of inclusive and innovative pedagogy. It is important to understand that pedagogical horizons is a concept that goes beyond traditional teaching methods. It encourages faculty members to embrace innovative approaches that cater to diverse learning styles, backgrounds, and abilities (Sowell, 2023). By doing so, educators can address the unique needs of their students and create an inclusive educational experience.

This session will discuss the content and practical strategies used in initial faculty training. Approaches for on-going support to expand pedagogical horizons will be shared. The discussion will emphasize the need for ongoing professional development programs that equip educators with the knowledge and skills necessary to effectively implement inclusive and innovative teaching practices. By fostering a supportive and collaborative learning environment, institutions can encourage faculty to experiment with new and innovative instructional methods, share best practices, and learn from each other's experiences.

Resources will be shared that assist faculty in their professional growth. These resources will include online communities and educational technology platforms that provide access to pedagogical tools and innovative teaching resources. By engaging with these resources, faculty maintain inspiration, and stay updated with the latest developments. This comprehensive approach to ongoing faculty development contributes to the advancement of inclusive teaching practices, the fostering of a

growth mindset, and the development of a community of care that focuses on faculty and student needs. It is important to note that our faculty training and ongoing support is continuously enhanced through data collected from training and support surveys, these surveys lead to constructive improvement.

In conclusion, this session will provide a comprehensive overview of the importance of inclusive and innovative teaching practices in higher education and demonstrate how it can be initiated from day one and maintained throughout the years with ongoing faculty support. Higher education institutions that are proactive with equipping faculty with the necessary training and ongoing support, retain faculty who are encouraged and empowered to expand their pedagogical horizons, create inclusive learning environments, and promote student success.

References (up to 5)

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Proposal Keywords: (3-5 keywords)

Faculty training; Faculty support; Inclusion and innovation.

8

Title: Online Learning Spaces: A Portal of Opportunities

Teresa Lobalsamo

University of Toronto Mississauga, Mississauga, Canada

Proposal Type

Panel Session

Abstract

This presentation examines virtual study abroad options and the ways in which they are able to maintain established characteristics of Diversity/Global Learning while broadening student access to this high-impact approach to undergraduate learning. Through the use of various digital technologies, the inclusion of several redesigned experiential learning opportunities, the high-enrollment Humanities course at the centre of the talk (a survey of Italian Cultural Studies) became an interactive, accessible global learning space that, by several measures, exceeded expectations and surpassed what had previously been possible in person.

Objectives

Participants in attendance will be invited to exchange experiences, discuss their own pandemic and post-pandemic practices, and reflect on how the ways in which any practices brought forward during the presentation may be adapted to their own learning spaces.

Primary Audiences

Higher Education Administrators, Instructors/Faculty

Summary

This presentation examines virtual study abroad options and the ways in which they are able to maintain established characteristics of Diversity/Global Learning while broadening student access to this high-impact approach to undergraduate learning.

As per Abrahamse et al. 2015, an undergraduate, international study abroad experience can be "a cornerstone for the acquisition of global competence" that encourages students to become effective global citizens through their experience with and "understanding of a broader international context," as well as through their ability to participate in a setting that is distinct from the campus classroom - "in multicultural and international settings." Alongside the restrictions on gatherings and traveling,

brought on by the COVID-19 pandemic, the implementation and positive impact of such experiential learning opportunities were also limited.

However, through the use of various digital technologies, the inclusion of several redesigned experiential learning opportunities, the high-enrollment Humanities course at the centre of the talk (a survey of Italian Cultural Studies) became an interactive, accessible global learning space that, by several measures, exceeded expectations and surpassed what had previously been possible in person.

Participants in attendance will be invited to exchange experiences, discuss their own pandemic and post-pandemic practices, and reflect on how the ways in which any practices brought forward during the presentation may be adapted to their own learning spaces.

References (up to 5)

(Abrahamse et al., 2015)

(MIT, 2020)

Proposal Keywords: (3-5 keywords)

Delivery modes post-pandemic, Innovative Pedagogical Strategies, Intentional Course Design, Post-Traditional Learning Online, Alternative Assessment, Inclusive Teaching Strategies, Community Building, Civility, and Student Engagement

Ensuring Equitable Access to High-Quality Experiential and Applied Learning at Scale

Lisa Angermeier, Charity Bishop, Heather Bowman, Jerry Daday, Christian Rogers
Indiana University-Purdue University Indianapolis, Indianapolis, IN, USA

Proposal Type

Panel Session

Abstract

Empirical research shows that student participation in applied and experiential learning, such as first-year experience programs, service learning, collaborative learning, and capstones benefits their learning and success. However, significant equity gaps remain in participation and engagement, with students from historically underserved populations (e.g. first-generation and students of color) being less likely to participate. This panel session will share strategies for scaling and assessing high-quality applied and experiential learning that benefit all students. Attendees will have the opportunity to practice using taxonomies to evaluate the fidelity of implementation and rubrics to assess student learning of these experiences.

Objectives

Following this session, attendees will be able to: (1) articulate strategies for scaling applied and experiential learning to promote equitable access on their own campuses; (2) identify and use engaged learning taxonomies to ensure high quality and fidelity to the experience; (3) identify strategies for assessing student learning within these experiences.

Primary Audiences

Instructors/Faculty, Curriculum Specialists

Summary

The seminal 2008 AAC&U publication by George D. Kuh, *High-Impact Practices: What They Are, Who Has Access to Them, and Why They Matter*, has had an outsized influence in higher education. Using data from the National Survey of Student Engagement (NSSE), Kuh found that HIPs such as learning communities, capstone courses, and undergraduate research are effective for all students, but especially for students from historically underserved backgrounds. While these practices increase graduation rates and promote equity by closing achievement gaps among first-generation and racial and ethnic minority groups, these underserved populations are

also the least likely to participate. This realization has amounted to a call to action for many in higher education, especially for those institutions like public colleges and universities that value access, affordability, and genuine upward mobility. Over this same period, a national completion agenda was focusing new attention on graduate rates. State governments charged their public institutions not only with admitting students from all backgrounds, giving them reasonable and equitable chances to graduate, and instilling career ready skills that would benefit local economies. Philanthropies and organizations like Complete College America and the Lumina Foundation underscored this urgency.

IUPUI has historically offered students a transformational experience, especially as it relates to high-impact practices and engaged learning more broadly. One can find virtually all the AAC&U high-impact practices on the IUPUI campus. High-impact practices have some essential features and benefits for students:

Essential Features in Student Experience:

Common Benefits for Students:

Several AAC&U high-impact practices are supported by faculty and staff in the Institute for Engaged Learning within the Division of Undergraduate Education. In August of 2022, the First-Year Experience Program offered a Bridge Program for 3,000 first-time first-enrolled students, who later transitioned into a first-year seminar during the fall semester of 2022. The Center for Research and Learning financially supports approximately 150 students each year so they may engage in funded undergraduate research projects under the mentorship of a faculty member. The Center for Service and Learning financially supports more than 150 students to engaged in meaningful community and civic engagement. There are many other high-impact experiences offered within 17 Schools, including culminating capstone experiences during students' senior year, and project-based learning opportunities across the curriculum. In addition to the formalized HIP experiences, the Office of Student Employment and the Division of Student Affairs are at the center of national efforts to structure on-campus student employment, and especially work-study, like a high-impact practice, with learning outcomes, reflection, and professional growth. These are of special note because practitioners and experts in the field of HIPs have been advocating for us to look at the essential features of high-impact learning (noted above) when seeking to identify transformative engaged learning experiences for students rather than the "list of 11" on the AAC&U website. The campus has strived to take this approach, with peer mentoring, student employment, and student affairs programming being at the heart of high-impact, transformative student experiences on the campus. NSSE data show that first-year students at IUPUI are more likely to participate in high-impact practices compared to peer institutions, all public doctoral, and all of NSSE. For seniors,

participation in HIPs is on par with peers and slightly ahead of all public doctoral and NSSE institutions.

While IUPUI has HIPs that are pervasive, many challenges remain, especially around equity and access, the very same issues Kuh found 15 years ago in his seminal work. The Institute for Engaged Learning at IUPUI was intentionally created in 2018 to promote undergraduate learning through equitable access to pathways of connected curricular and co-curricular, experiential, applied, and integrative learning opportunities. At the core of the IEL's mission is identifying ways of scaling applied and experiential learning, making them pervasive across campus, as a core strategy for promoting equitable access for all students. While scaling is a path to equity and access, our work must also ensure that these experiences remain high-quality, and that these experiences are truly "high impact." As Ashley Finley noted in a 2019 publication from the National Institute for Learning Outcomes Assessment (NILOA)

"The term, "high-impact," almost assumes efficacy. With a name like that, what is left to assess? The answer is plenty. And given the intense focus across institutions of higher education on identifying, tagging, and touting their high impact practices, assessment is what will separate the committed practitioners from the casual adopters."

IUPUI created taxonomies to help faculty and staff evaluate the fidelity in the creation and implementation of various applied and experiential learning opportunities on our campus. And, students are required to reflect on their experience within these opportunities, responding to specific reflection prompts that are aligned to institutional learning outcomes. Direct assessment of student learning is conducted by a team of faculty and staff using AAC&U VALUE Rubrics. The IUPUI engaged learning taxonomies and the direct assessment of student learning using AAC&U VALUE rubrics help to ensure that the campus is providing high-quality and equitable applied and experiential learning opportunities for students.

Presenters: Lisa Angermeier, Charity Bishop, Heather Bowman, Jerry Daday, Chris Rogers (listed alphabetically by last name)

References (up to 5)

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Proposal Keywords: (3-5 keywords)

rubrics, assessment, hips

OPEN EDUCATIONAL RESOURCES (OER) AT CENTRAL CONNECTICUT STATE UNIVERSITY

Dr. Gloria A Brown

Central Connecticut State University, New Britain, CT, USA

Proposal Type

Panel Session

Abstract

CCSU's history with OER spans more than 25 years. Interest grew with librarian-sponsored faculty "learning community groups" in 2016-17, the Student Government Association creating and awarding the "OER Pioneer of the Year Award" in 2017, and state legislators voting in the 2018/19 budget a council to establish an OER program to lower textbook and course material costs for certain courses at all higher education institutions in CT. This presentation will include reported experiences and perspectives of four chemistry professors and seven mathematics professors who used OER in two introductory chemistry courses and four introductory mathematics courses in Spring 2023.

Objectives

Become more aware of and interested in OER as an alternative to commercially available learning materials.

Investigate further the feasibility of OER for their courses.

Approach decision-makers (campus and off-campus) about OER on their campus.

Primary Audiences

Instructors/Faculty, Higher Education Administrators

Summary

The question of digital versus paper as a medium for delivering educational materials has gained interest, especially in the aftermath of the COVID-19 pandemic, during which most schools switched to online teaching. Both student[1] and faculty[2] perspectives have been explored. At CCSU, one of the four campuses of the Connecticut State Colleges and University (CSCU) system, OER use by teaching faculty began more than two and a half decades ago.[3] However, concerted efforts began on campus in 2016-17 to reach out to faculty through "learning community groups"

and to work with student government (SGA) representatives to help push OER forward.[4] The CCSU Library has an OER Team that is available to assist faculty with OER efforts. The SGA-created "OER Pioneer of the Year Award" was first awarded to a Chemistry professor in 2017. OER materials are provided free of cost online to students who also have the option of purchasing printed and bound reprints from the bookstore at low cost. At the state level, an act in the 2018/19 biennial budget of the legislature created the Connecticut Open Educational Resource Coordinating Council for all public and private colleges and universities as part of the executive branch. It required the council to establish an OER program to lower the cost of textbooks and course materials for certain courses at state higher education institutions. The section of the act on "Open Source Textbooks" requires the council to identify high-impact courses for which OERs will be developed.[5] In the January 2023 session the state legislature passed SHB 6771, "an act implementing the recommendations of the coordinating council. Certain introductory STEM courses at CCSU use OER in place of commercial textbooks.

The history of OER at CCSU, as outlined above, will provide context for the experiences and perspectives of the chemistry professors and mathematics professors who used OER in their introductory courses in Spring 2023. The CCSU instructors were asked via email about their history using OER, their perceptions regarding its desirability, effectiveness and efficiency of use, as well as student acceptance and use. Comparisons/contrasts with OER at other institutions will put their experiences in context.

Audience members will have a basis on which to consider the desirability of OER and to share how their institutional and community environments might/might not be open to adoption of OER; the probability of adopting OER in teaching and how they might go about accomplishing this. They may also wish to identify possible roadblocks.

References (up to 5)

[1] Digital or Printed Textbooks: Which do Students Prefer and Why? (usfca.edu)

[2] Digital Texts in the Time of COVID (bayviewanalytics.com)

[3] B. Kjell, "Programmed instruction using web pages," Consortium for Computing in Small Colleges, Second Annual Conference, Proceedings, (Journal of Computing in Small Colleges, v. 12, no. 5), pp. 113-123, 1997.

[4] CTFD MM v1iss6 10.30.17 (ccsu.edu)

[5] Acts Affecting Education (state.ct.us), PA 19-117, § 147, effective July 1, 2019

Proposal Keywords: (3-5 keywords)

OER; textbook options; alternative learning materials; digital textbooks.

HBCU Student Voices: Narratives on Pandemic Teaching and Learning Experiences and utilizing lessons learned to move forward.

Dr. Monica Flippin Wynn^{1,2}, Dr. Dawn McLin³

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Proposal Type

Panel Session

Abstract

The pandemic pivot to remote teaching in 2020 provided students with challenges on how to navigate the online classroom. There has been research conducted where students discussed pandemic experiences, yet it is imperative that all student populations and their pandemic experiences with teaching and learning are shared with our academic communities.

This presentation spotlights research that centers on the teaching and learning experiences of students at one Historically Black College and University during the pandemic.

Results reveal numerous challenges but also suggest student hopefulness and an authentic responsibility for their experiences to support future student practices by sharing their stories.

Objectives

We hope this presentation will provide participants with a reminder of the utility of student voices captured from courses that we teach. The data from how students experienced teaching and learning during the pandemic can inform pedagogy utilized in our classroom, course redesign and curricular opportunities, not to mention influence how we create safe spaces and engage students in our classroom. Finally, as a result of attending this presentation, we hope participants will be inspired to create real-time opportunities to “know the students you teach” and create a supportive, enabling and confirming environment (Rendon, 1994, p. 44).

Primary Audiences

Early Career Faculty, Instructors/Faculty

Summary

Description

The purpose of this research was to focus on the voices of students at historically Black Colleges and Universities (HBCU) and their teaching and learning experiences in online classes during the coronavirus pandemic. The qualitative research was conducted and administered during fall 2021, spring 2022 and fall 2022 semesters. An IRB was completed and approved for this research. Although, statistical significance was not the immediate goal of this qualitative work, the data reported from this study does support the need to continue with additional research in this capacity and student population. Recruitment

Students received a recruitment email/announcement through the Learning Management System (LMS). The announcement introduced the study to the students, provided a rationale for the research and information about the process and guidelines. The Informed Consent, and other materials, (links to IRB information, qualitative research) was housed in the LMS and the survey was administered through the LMS and Qualtrics. Incomplete student responses/participation were eliminated.

Findings:

The findings from this research suggest a range of narratives describing their teaching and learning experiences. While most of the responses discussed the challenges and difficulty endured during this time, there were also responses from students who were grateful to their instructors for being accessible and for showing 'grace' during the pandemic. Responses also revealed that students took pride in being self-reliant in their classroom struggles by crafting strategies and using the tools and resources available through their institution and other sites.

It is also interesting to note that students who responded early in the research (fall 2021) had very different responses from students who responded in spring 2022 or fall 2022. This suggests that the initial pivot to remote teaching and learning during the pandemic was challenging for most students, but subsequently, students adjusted and learned how to navigate the new environment.

Students expressed sorrow and depression at the inability to meet in person with their classmates and with their instructors. Many of the students expressed frustration with the lack of instructor response and course engagement. Students also shared that the lack of structured spaces to reflect on experiences and get assistance with their courses caused mental health struggles and concerns.

Despite the calamity suffered during the pandemic, many students wanted to share their narratives, discuss the problems they experienced in their classes, talk about the difficulty in finding resources, and challenges in instructor communication as lessons learned and how instructors can move forward and provide an improved learning and student engagement experience in the classroom.

Implications

Despite the challenges, the new environment has created some opportunities for growth and development for both students and faculty at this institution. Conversations on course redesign and student engagement are ongoing. Faculty development in teaching and learning, creating inclusive and belonging courses and classrooms have been made available for both full-time and part time faculty. Brown Bags sessions focusing on student engagement, belonging and AI, have been conducted. Research opportunities for early and mid-career faculty have been made available and spaces designed to create community. And most importantly, departments are recognizing the importance to hear and listen to the student voices and experiences by creating opportunities to engage with student voices and reflect on their teaching and learning experiences through focus groups and town halls. This has been a difficult time, and these students' stories are important to hear and share and can provide and offer a new sense of commitment and course of action in teaching our students.

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Proposal Keywords: (3-5 keywords)

Teaching, Learning, Student Voices, Pandemic, HBCU

2

From Insights to Actions: Interviews for Effective Learner Experience Design

Dr. Jerry C Schnepf¹, Dr. Christian B Rogers²

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Proposal Type

Practice Session

Abstract

Effective learner experience design (LXD) leads to engaging, meaningful, and effective learning experiences. Understanding how learners learn, what motivates them, and what challenges they face, is essential for designing effective learning solutions. One of the most effective ways to gain these insights is through conducting learner interviews. In this presentation, we will demonstrate how to conduct effective learner interviews, and how to translate insights gained from interviews into actionable recommendations for LXD.

Objectives

By the end of this presentation, participants will be able to:

Prepare for and conduct effective learner interviews

Analyze and synthesize interview data to gain insights

Translate insights into actionable recommendations for LXD

Apply insights to enhance the learner experience.

Primary Audiences

Instructors/Faculty, Curriculum Specialists

Summary

The student body on college campuses is increasingly more diverse (Cho & Forde, 2001; Deil-Amen, 2011) and students' expectations about their education are constantly changing (Baker et al., 2012). They engage in myriad learning modalities that incorporate online and face-to-face interactions. They have access to an unprecedented body of digital resources from which they synthesize their learning. They have diverse backgrounds, schedules, learning preferences, and levels of

preparedness. In short, students have varied expectations about what it means to engage in a productive learning experience.

Most college faculty members have never received formal training in curricular development or pedagogy (Beyer et al., 2013). Some simply mimic the way their own instructors taught, seldom considering the potential for innovative teaching techniques. Others invest considerable effort into advancing their pedagogy but lack the foundational knowledge that informs modern instructional design. Effective educators not only provide content. They build learning experiences that are relatable and understandable to their students (Bain, 2004). They construct these experiences by combining sound pedagogy with insights into student motivation and expectations gained through empathy (Henriksen et al., 2020; IDEO, 2014).

If empathy for students is essential to effective teaching, what might faculty members do to better understand their students? A practical, learnable, and repeatable approach to gaining student insight would be invaluable to meet this end. Adopting such an approach would help prepare new teachers as they establish their personal pedagogy and empower seasoned educators to continually improve.

Learner Experience Design (LX) is an emerging field that leverages the techniques, mindsets, and approaches from the field of User Experience (UX) and design thinking to help educators create innovative and effective learning opportunities (Ahn, 2019). It combines user-centered instructional design with educational theory, pedagogy, and psychology. Educators who use LX for curriculum development can adapt their instruction to an ever-evolving set of learners using an evidence-based approach (Soulis et al., 2017). There is a need to provide LX training for educators who might unlock the potential to engage students in more effective learning experiences by incorporating a human-centered approach to their curriculum design (Cassim, 2013).

Participants in this session will learn how to apply LX principles to learn about their particular students. It will help them to improve their pedagogy by exploring innovative teaching practices.

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Proposal Keywords: (3-5 keywords)

Learner Experience Design

Curriculum Development

Innovation

Design Thinking

ePortfolios as a High Impact Practice with Multidisciplinary Application in Higher Education

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Proposal Type

Practice Session

Abstract

High Impact Practices, also known as HIPs, are teaching and learning practices that have been widely tested and have been shown to be beneficial for college students from many backgrounds. In this interactive session, participants will walk away with an understanding of ePortfolios, their assessment, and their multidisciplinary application as a high impact practice in higher education.

Objectives

In this interactive learning session, participants will learn about the importance of ePortfolios as an evidence-based, high impact practice, see how we have utilized them and assess them at TTU and will also brainstorm and workshop their own ideas on how ePortfolios might be used in their respective disciplines. It is our hope that participants will walk away from this session inspired to begin using portfolios at their own institutions.

Primary Audiences

Instructors/Faculty, SoTL Scholars

Summary

High Impact Practices, also known as HIPs, are teaching and learning practices that have been widely tested and have been shown to be beneficial for college students from many backgrounds. These practices take many different forms, depending on learner characteristics and on institutional priorities and contexts. (Watson, et al., 2016) The American Association of Colleges and Universities describes ePortfolios (also known as digital portfolios) as digital repositories of student work and in 2016, based upon proliferating research examining the efficacy of ePortfolios, added them to their

list of High Impact Practices (HIPs). Because they are considered an evidence-based High Impact Practice, ePortfolios, especially when constructed within the framework for organizing learning, serve as a critical thinking/ creative inquiry exercise in their creation. When constructed within the framework for organizing learning, ePortfolios are designed to be owned and developed by student learners with guidance from faculty. Moreover, when combined with other HIPs, ePortfolios might be considered a meta-high-impact practice. (Watson, et al., 2016) (Watson, Kuh, Rhodes, Light, & Chen, 2016, p. 66) “The warrant for declaring ePortfolio practice a high-impact activity is that, on average, students who have a well-structured ePortfolio experience exhibit a similar desirable pattern of positive benefits associated with other HIPs (Watson, Kuh, Rhodes, Light, & Chen, 2016, p. 66)

Sociology Internships at Tennessee Tech University, in 2019, underwent intentional instructional redesign to utilize ePortfolios as a high impact practice, in order to engage students in Creative Inquiry guided reflection. Since 2019, students have submitted an end of semester, culminating project in the form of an ePortfolio. During the process of developing the ePortfolio, Students are required to utilize creative Inquiry and critical thinking to complete five specific tasks requiring critical thinking, problem solving, information literacy and assessment.

In addition, ePortfolios have been proven to be applicable in multiple disciplines, allowing for institutional-wide utilization for instructional technology as well as alternative assessment methods. At Tennessee Tech University, we have developed not only the use of ePortfolios as an instructional technology for Sociology, but they are also being widely used in the College of Business and Engineering.

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Proposal Keywords: (3-5 keywords)

high impact practices

instructional technology

instructional redesign

ePortfolios

creative inquiry

Voice Over Content: Expressivism Confronts Artificial Intelligence in the Writing Classroom

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Proposal Type

Practice Session

Abstract

In the early weeks of February 2023, educators in the written arts were faced with a novel threat of obsolescence. The sociological concept known as moral panic is relevant in any discussion relating to Chat GPT. A long-neglected tradition within composition studies seems particularly appropriate for this situation. Expressivist assignments ask students to respond personally and spontaneously to a variety of prompts. Chat GPT may be just the motivation that faculty need to reintegrate an element of writing that many love but are afraid engage with out of concern for displacing a more technically useful aspect of the course.

Objectives

1. Recognize the unique pedagogical opportunities posed by Chat GPT.
2. Devise writing assignments that require students to eschew formal, academic language and write from their own unique, individualistic voice.
3. Reframe faculty members' role as educators in light of new developments in AI, encouraging students to synthesize information in a personally meaningful manner that promotes deeper learning.

Primary Audiences

Instructors/Faculty, Early Career Faculty

Summary

In the early weeks of February 2023 questions were posed to writing faculty and administrators throughout the country. At bars, in the office, and during Superbowl parties, educators in the written arts were faced with a novel threat of obsolescence. Op-Eds and articles from diverse publications probed the existence of writing programs in the face of Artificial Intelligence, heralding extinction or demanding a "wake-up call."

The sociological concept known as moral panic, defined as an irrational mass movement based on exaggerated perceptions which exceed the actual threat, is relevant in any discussion relating to Chat GPT. Artificial intelligence has been the subject of folk deviling and the public and academic response has, predictably, followed the expected pattern. Chat GPT does generate succinct prose, assimilating and narrativizing pertinent data and presenting it in an accessible manner. The fear permeating the academic community is that the text could be then copied, with some modification, and passed off as original work. No Chat GPT search, even identical and sequential ones, generates the exact same language, which will make it difficult to trace and even more difficult to cite. Currently, no major professional organization responsible for standardized formatting within academic genres has defined how a citation might look.

Adjustment and regular evaluation, both personal and structural, is essential to the function of any writing course; it is possible that AI will demand such prophylactic reflection, but not because it is the great folk devil that it has, in some circles, been made out to be.

A long-neglected tradition within composition studies seems particularly appropriate for this situation. Expressivism has been called to task for not serving the disciplinary agenda, at times being labelled a disservice to students, yet the reasons for its dismissal might now be the exact reasons for its potential success. Expressivist assignments ask students to respond personally and spontaneously to a variety of prompts; these can be organized and academic or they can resemble metacognitive self-analysis. Voice becomes both the central concern and the primary mechanism for interacting with the world and constructing meaning as students wrestle with such processes as exploring, clarifying, collecting, combining, reading, and writing. Consciously deployed, expressivist assignments can meet the requirements of complex interdisciplinary thinking and synthesis as writers are asked to perform written tasks, cognizant of message and audience, in their own voice. Rather than following any sort of linear process, expressive pedagogy affords students an opportunity to engage in a recursive process of generating, structuring, and evaluating – in short, to develop those higher-order critical thinking skills that we hope our students will develop.

While preparation in academic and disciplinary writing is fundamental to success, writing courses cannot be a simple service to other programs. Chat GPT may be just the motivation that many need to reintegrate an element of writing that many love but are afraid engage with out of concern for displacing a more technically useful aspect of the course. Indeed, in the final stage in the moral panic process, those in power enact meaningful social change in their community. Our role is not to teach students to become a type of academic Artificial Intelligence—it is to help them organize their thoughts and feelings into a legible and transmissible piece of text that is considerate of both message and audience.

This presentation will provide the impetus for us as faculty members to rethink how we administer, structure, and deliver our classes. We must consider whether we want our students to become regurgitative, discursive automatons, repeating our lectures and

reading assignments back to us without fully understanding the information or making it personally meaningful (that critical aspect that leads to deeper learning and long-term retention), or whether we want them to think, to communicate their thoughts clearly and cogently, and to defend them in the face of any contradictory opinions. The real issue is, if AI resembles academic writing as we've defined what academic writing needs to look like, then maybe we are not doing what we really mean to do. If the underlying fear behind this moral panic is that Chat GPT could resemble student work, then is the true folk devil AI or our current instructional approach?

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Proposal Keywords: (3-5 keywords)

Artificial intelligence, expressivist pedagogy, deeper learning

Project Mercury--An Innovative and Combined Approach to Teaching Innovation

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Proposal Type

Practice Session

Abstract

Participants will learn, discuss, and immerse in an experiential exercise that brings to life the key findings from the study. The session plan is based on the innovation frameworks used in Project Mercury, the U.S. Air Force's program in collaboration with the Innovatrium that instills innovation culture, competency, and community within the Air and Space Forces to outpace our peer competitors. Using the Design Thinking Process for Innovation and the Competing Values Framework (CFV), participants will experience how to incorporate innovation efforts into their own organizations that promote cognitive diversity and support a culture of "thick" trust and creativity.

Objectives

#1. Understand the significance of using innovation frameworks like the Design Thinking Process for Innovation and the Competing Values Framework as an innovative and collaborative approach for teaching innovation.

#2. Participate in an immersive, experiential exercise that brings to life the results from the study.

#3. Participants will experience and hear how they can adopt similar innovation practices that are being used by the United States Air Force to lead the way in teaching innovation and sustaining organizational growth.

Primary Audiences

SoTL Scholars, Instructors/Faculty

Summary

In August 2020, the Chief of Staff of the United States Air Force (CSAF) issued guidance to Accelerate Change or Lose (Brown, 2020) that emphasized innovation and "having an ecosystem which harvests the ideas of our Airmen by having a culture that foment and encourages innovation, and by having Airmen who know how to innovate" (Lt

Gen Webb, Project Mercury Innovation Playbook, 2020). To help achieve the CSAF guidance in 2020, the USAF Air Education Training Command (AETC) created Project Mercury and housed the program at Air University under the overview of the Eaker Center for Leadership Development and the Leadership and Innovation Institute. The mission of Project Mercury in cooperation with the University of Michigan's Ross School of Business and the Innovatrium, is "to instill Innovation Culture, Competency, and Community within the Air and Space Forces in order to outpace any and all peer competitors" (<https://projectmercury.us/>). The desired results are achieved through "the pairing of a rich, foundational curriculum with curious team exploration of real problems—using CONSTRUCTIVE CONFLICT™—to develop bold solutions" by placing participants "in intentionally diverse teams that will grapple with challenging problem sets using our proven curriculum" and mentored by "experienced PhD coaches and Project Mercury alumni mentors, participants graduate with the tools they need to build the innovation culture, competency, and community our nation needs" (<https://projectmercury.us/>). In his 2020 memo, Lieutenant General James B. Hecker, the President of Air University, emphasized efforts to

"Develop innovation curricula to serve the needs of our Airmen across the spectrum of their careers and integrate, where school and college faculty deem it appropriate and desirable, it into our existing programs in schools across AU. Create a sustainable innovation-education process to enhance both today's and tomorrow's innovation programs."

The innovation process consists of four steps with key guiding questions (Project Mercury Playbook, 2021):

1. Set a High-Quality Target

What exactly is the challenge I'm trying to address?

2. Enlist Deep and Diverse Domain Expertise

Who has the skills, resources, and influence to help me address the challenge?

3. Take Multiple Shots on Goal

How can I create "experiments" to test possible solutions to my challenge?

4. Learn from Experience and Experiments

How can I take what I've learned and reconstruct my solution?

The process supports the five requirements of a truly innovative company (Hamel & Tennant, 2015): 1) Employees who've been taught to think like innovators; 2) A sharp, shared definition of innovation; 3) Comprehensive innovation metrics; 4) Accountable and capable innovation leaders; and 5) Innovation-friendly management processes.

To date, the effects of Project Mercury have not been studied. Three questions guided this study:

- RQ1—What are the most effective practices for teaching innovation in the USAF?
- RQ2—How does Project Mercury promote a culture of learning and innovation?
- RQ3—To what extent does Project Mercury strengthen “thick” trust among participants?

The four components of framing a study that answers the research questions include:

- 1) Defining and teaching innovation and creative practices that influence organizational development (Brown, 2021; Grissom et al., 2016; Hinck et al., 2021; RAND, 2016).
- 2) Innovation in USAF (Ausink et al., 2016; Brown, 2021; Johnson, 2002; Venable, 2022; USAF and the Innovatrium, 2023).
- 3) Strengthening trust (Ayers et al., 2023; Covey, 2006; Hinck & Hinck, 2023; Hung et al., 2004; Mayer, Davis, & Schoorman, 1995).
- 4) The study nests with and supports Air University's Action Plan Key Focus Area of "Enhance Force Development Delivery" and "Modernize the Environment" as well as the AETC's Operational Approaches of "Pivot to Tech Training" and "Incorporate Digital-Age Technology" (AU, 2022; AETC, 2022)

Design

This study will use a three-stage qualitative approach. In phase 1, researchers will analyze data that is electronically collected on end-of-course surveys from ten cohorts of participants in Project Mercury (n=330). During phase 2, data will be collected and analyzed using transcripts of interviews with instructors and coaches (n=12) conducted in a focus group setting at the end of cohort 10. In phase 3, data will be compared using cross-case analysis on data from phases 1 and 2 to look for overarching themes, convergence and divergence that captures the collective voice of participants to holistically answer the research questions, as well as provide program improvement recommendations. Data analysis will consist of a cumulative coding process that moves from pre-codes to multiple coding cycles that explores data using in vivo, descriptive, and values coding, then pattern and axial coding to produce categories, followed by theoretical coding to identify themes that answer the research questions.

Outcomes/Findings/Implications

Demographic data and initial results of ten? cohorts that help answer RQs 1 and 2 include:

- 330 participants who became Certified Professional Innovators
- 55 Coaches who helped guide cohorts and their projects
- 44 Projects
- 44 Sponsors
- \$3.2M AFWERX design sprint to map the AF Innovation Ecosystem & make searchable (previous Vice CSAF); became Project Holodeck
- \$500K NG development of AIM HI (Academia, Industry, Military-Hybrid Innovation) Institute at Selfridge AFB, MI (MI TAG)
- \$350K Strengthening Airmen resiliency beta Holloman AFB, NM (AETC/CC)
- New Strategic Innovation and Incubation Cell w/in HAF/SSG (VCSAF); became Morpheus
- Creation of JADO Fellows and improved Research TF at AU (AU/CC)
- Project Pacific Prime – catalyst for UAS delivery of priority logistics in a contested environment
- The Design Thinking Process for Innovation (DTPI), the Competing Values Framework (CVF), experiential activities, and leadership coaching are key elements in teaching innovation practices.
- Clear, empirical linkage to “Innovation: Thinks creatively about different ways to solve problems, implements improvements and demonstrates calculated risk-taking” (one of the 10 USAF Airman Leadership Qualities).
- Clear, empirical linkage to “Fostering Innovation: Builds a culture of behaviors and business practices that encourages, champions, and rewards creativity and informed risk taking; is open to change; and rapidly adapts to new conditions and technologies” (one of the 24 Air Force Foundational Competencies).

Presentation attendees will be invited to participate in experiential activities (practical applications) based on the initial findings, followed by deeper discussions about the study findings.

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Proposal Keywords: (3-5 keywords)

Project Mercury, Innovation, Teaching, US Air Force

Incorporating Mixed Reality and Horizon Technologies for Learning Leadership Competencies

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Proposal Type

Practice Session

Abstract

Conference participants will experience how mixed reality (computer generated environments with avatars) scenarios and horizon technologies are key for learning leadership competencies. The participant experience is based on a study (n=1220) involving two different leader development/education programs; initial results show promise in making a substantial contribution to the knowledge and practice of using AR/VR to cultivate leader development. Key findings include study participants reporting 1) their feeling to “thrive” in leading in the human domain increased from 3.48 to 4.81 and 2) that mixed reality scenarios were the best they have experienced in cultivating their leader development.

Objectives

#1. Understand the significance of using mixed reality (computer generated environments with avatars) scenarios and horizon technologies (augmented reality/virtual reality) for learning leadership competencies.

#2. Participate in or observe an immersive, mixed reality scenario and experience the same feelings that study participants felt about why mixed reality scenarios are key in cultivating leader development.

#3. Participants will experience and hear how they can adopt similar mixed reality practices as the United States Air Force is using to lead the way on the frontiers of using mixed reality to cultivate leader development in the human domain.

Primary Audiences

SoTL Scholars, Instructors/Faculty

Summary

Problem/Significance/Framework

In 2018, the U.S. Air Force (USAF) created the Leader Development Course (LDC) to improve leaders' human domain skills (Ausink et al., 2018) and revitalize USAF squadrons (50-700 people). LDC is an eight-day course that trains military and civilian leaders to effectively lead in the human domain or soft skills. LDC is taught by active duty, recently graduated squadron commanders who are paired with academically trained civilian subject matter experts to teach in mixed settings of a large group and a small group (seminars). At the end of LDC, students participate in a capstone experience where students interact with avatars in a mixed reality (MR) scenario environment that challenges students to put into practice the human domain skills they have learned over the preceding days. While studies have been done to show the impact of using MR, no research has been done that captures how MR scenarios aid in developing the capacity of LDC students, future leaders of USAF Squadrons, to lead in the human domain. And the results of such a study would influence and inform the growing use of MR across the USAF.

Between 2019-2022, the USAF brought mixed reality to professional military education at the Air Command and Staff College (ACSC), Chaplain's Career College, and several leadership programs conducted by major commands to train future leaders in their formations. In 2022, the USAF began development and implementation of the Leading Inclusively Virtual Experience (LIVE) program (Hawkins, 2023), which is a learning tool that consists of a mixed-virtual reality experience that uses a combination of interactive scenarios between participants with authentic, real-time dialogue (with avatars). The aim is to provide an immersive experience that challenges participants to engage in difficult conversations involving diversity, equity, and inclusion (DEI). The LIVE program has become known as the hallmark of combining high-quality, immersive, and experiential training that uses innovation and technology to cultivate a leader's development in DEI and belonging. Yet, the results of the program have yet to be fully studied. Two key questions guided this study:

- RQ1—How does mixed reality aid in developing a leader's capacity to lead in the human domain?
- RQ2—How does mixed reality cultivate learning leadership competencies involving diversity, inclusion, and belonging?

The five key components of framing a study that answers the research questions include:

- 1) Understanding the power of using AR/VR in strengthening a leader and their leadership, aka role or capacity of a leader (Clayton, 2020; Clayton & Hodge, 2023; Specht & Sandlin, 1991; Taylor, 2021).
- 2) How different leadership styles influence development (Burns, 1978; Burns, 2017; Conger, 1990; Day et al., 2009; Dinh et al., 2014; Einarsen, et al., 2007; Heifetz, Grashow

& Linksy; 2009; Hinck, 2021; Riggio, Chaleff & Lipman-Blumen, 2008; Van Velsor, McCauley & Ruderman, 2010).

3) Defining the human domain (Ausink et al., 2018; Hinck & Davis, 2020; Tatum et al., 2019).

4) Exploring how diversity, equity, inclusion, and belonging are linked to a leader's capacity in the human domain that improves or cultivates their leadership development (Banakou et al., 2013; Hawkins, 2023; Quintero et al., 2019).

5) The study nests with and supports Air University's Action Plan Key Focus Area of "Enhance Force Development Delivery" and "Modernize the Environment" as well as the Air Education and Training Command's Operational Approaches of "Pivot to Tech Training" and "Incorporate Digital-Age Technology".

Design

This study will use a four-stage qualitative approach. In phase 1, researchers will analyze data that is electronically collected on three Likert-style questions and three opened questions relating to mixed reality scenarios in a Capstone Experience from end-of-course student surveys (n=989) from the Leader Development Course during AY23. Similarly in phase 2, data will be collected and analyzed from participants (n=214) in end-of-program results in the USAF's LIVE program that uses mixed reality scenarios. During phase 3, data will be collected and analyzed using transcripts of instructor interviews (n=17) conducted in a focus group setting mid-way through the teaching cycle and again at the end of the teaching cycle. In phase 4, data will be compared using cross-case analysis between phases 1, 2, and 3 to look for overarching themes, convergence and divergence that captures the collective voice of participants to holistically answer the research questions, as well as provide program improvement recommendations. Data analysis will consist of a cumulative coding process that moves from pre-codes to multiple coding cycles that explores data using in vivo, descriptive, and values coding, then pattern and axial coding to produce categories, followed by theoretical coding to identify themes.

Outcomes/Findings/Implications

Active participation with attendees will include immersion or observation of two mixed reality scenarios over Zoom so that they will have a similar experience as the study participants. While the full study will be completed in the early fall of 2023, the initial results already show promise in making a substantial contribution to the knowledge and practice of using mixed reality to cultivate leader development in the human domain:

1. Based on pre-/post-test results, participants reported their human domain skills to “thrive” in leading in the human domain increased from 3.48 to 4.81 (out of a five-star scale).
2. Capstone and LIVE Participants reported similarly positive experiences regarding improvement in their leadership abilities, particularly involving diversity, inclusion, and belonging.
3. 94% participants strongly agreed/agreed that “LIVE provided me necessary insights into engaging in conversations to foster inclusion, cultural competence, bias literacy, and talent management.”
4. Instructors/Facilitators felt that both they and their students strengthened their capacities to lead in the human domain, as well as their capacities involving diversity, inclusion, and equity. LIVE participants wanted more ways to talk about religious differences.
5. A common theme among all participants was that mixed reality scenarios were the best they have experienced in cultivating leader development in the human domain for diversity, equity, inclusion, and belonging.

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Proposal Keywords: (3-5 keywords)

Mixed Reality, Horizon Technologies, Learning, Leadership Competencies

Cognitive Apprenticeship and Collaboration in Digital Environments: Enhancing Learning through Social Interactions

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Proposal Type

Practice Session

Abstract

The rise of cutting-edge digital technologies has transformed the way we learn and interact with knowledge. This presentation will delve into the Cognitive Apprenticeship model, which is rooted in Constructivism and Social Learning Theory and explore how digital tools can encourage collaboration among learners. We will then examine how this model can be applied to digital environments, such as online discussion forums, collaborative learning platforms, and virtual learning communities. We will demo the use of collaborative digital tools, such as Perusall, VR rooms, and Interactive Canvases, to facilitate collaboration among learners and encourage knowledge construction.

Objectives

Participants will:

- Understand how the Cognitive Apprenticeship Model can enhance the learning experience through collaborative approaches and how it can promote knowledge construction
- Gain an understanding of the importance of collaboration in digital learning and how it can promote cognitive development and critical thinking
- Learn about the different collaborative digital tools, such as Perusall, VR rooms, and Interactive Canvases, and how they can be used to facilitate collaboration among learners

Primary Audiences

Instructional Technologists, Instructors/Faculty

Summary

Cognitive Apprenticeship and Collaboration in Digital Environments: Enhancing Learning through Social Interactions

The rise of digital technologies has transformed the way we learn and interact with knowledge. This presentation will delve into the Cognitive Apprenticeship model, which is rooted in Constructivism and Social Learning Theory and explore how digital tools can encourage collaboration among learners. The focus will be on understanding the fundamental principles of Cognitive Apprenticeship and how we can utilize digital environments to enhance the learning experience through collaborative approaches.

The presentation will begin with an in-depth overview of the Cognitive Apprenticeship model, highlighting its theoretical underpinnings and key components. We will then examine how this model can be applied to digital environments, such as online discussion forums, collaborative learning platforms, and virtual learning communities.

The second part of the presentation will emphasize the importance of collaboration in enhancing learning in digital environments. Drawing on examples from previous studies, we will explore how collaborative learning approaches can promote cognitive development, foster critical thinking, and encourage knowledge construction.

Finally, we will discuss the use of cutting edge digital tools to facilitate collaboration among learners. We will examine the impact of technological tools such as social media, video conferencing, and collaborative software on promoting social interactions and encouraging collaborative learning.

This presentation aims to emphasize the significance of Cognitive Apprenticeship and Collaboration in Digital Environments. By discussing the essential principles of Cognitive Apprenticeship and emphasizing the use of digital tools to foster collaboration, we hope to provide educators and learners with practical insights and tools that can enhance their learning experiences.

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Proposal Keywords: (3-5 keywords)

Cognitive apprenticeship, Vygotsky, Virtual Reality, Collaborative tools

ChatGPT in preservice teacher education coursework: The three roles you can use to get started

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Proposal Type

Practice Session

Abstract

While some research has been conducted on response accuracy in education (Tlili, 2023), its use in teacher education has not been forthcoming. Using data from an in-progress study in which ChatGPT was enrolled as a student in a preservice teaching methods course, this practice session describes how teacher educators can implement ChatGPT into their online courses. Recommendations focus on assigning one of three roles to ChatGPT: 1) ChatGPT as a collaborator on content, 2) ChatGPT as an advisor on content 3) ChatGPT as a creator of content.

Objectives

1. Participants will be able to identify potential assignments that are appropriate for use with ChatGPT.
2. Participants will be able to identify three different roles that ChatGPT can occupy in online instruction and the pros and cons of each role.

Primary Audiences

Instructors/Faculty

Summary

While effective on-line instruction in the field of preservice multilingual teacher education been an established medium for more than two decades (Codreanu, 2020), the implementation of ChatGPT into preservice teacher education has not been forthcoming (Metzler, 2022). To date, the research remains limited to explorations of its response accuracy (Tlili, 2023).

In this presentation, participants will examine the responses of preservice students to their experiences with ChatGPT and identify assignments in their courses which are appropriate for implementing ChatGPT. The presentation will be informed by data from a two-semester in-progress qualitative study of how ChatGPT is used in a

preservice methods course on teaching multilingual learners. Data includes students' reflections on 10 written assignment (approximately 500 pages), five discussion board assignments and interviews over 1.5 semesters. ChatGPT was used in three roles in the class described below. The presenters will open with a ten-minute overview of the course and the in-progress qualitative study.

Table 1.

Three Roles of ChatGPT

Next, using findings from the three roles and the interviews, the researcher will spend 15 minutes discussing how to identify assignments in a course which are conducive to using ChatGPT and the affordances and constraints of assigning roles with respect to course design. Data from interviews, which is forthcoming, will be used to contextualize the students' experiences. Interview questions will ask students to discuss how ChatGPT shaped their thinking about their work as future educators of multilingual students. Topics will include the constraints and affordances that the three roles described above held for them as pre-service teachers while enrolled in the class and the potential for ChatGPT to inform their practice in the future. The discussion will be placed within the larger issue of what planning is needed to implement ChatGPT into teacher educator coursework in general and its potential for preparing preservice teachers to work with multilingual learner in particular.

For the next 15 minutes, participants will have the opportunity to discuss their own experiences with ChatGPT and identify assignments in their courses which are conducive to ChatGPT. For the remainder of the session, the participants will be encouraged to discuss their thoughts with the group on how they might implement ChatGPT into their courses.

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References (up to 5)

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Chatbots in education. Smart Learning Environments,
<https://doi.org/10.1186/s40561-023-00237-x>

Proposal Keywords: (3-5 keywords)

ChatGPT

Teacher education

Online education

Facilitating and Supporting Writing Wicked Good Problems for Student Engagement

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Proposal Type

Practice Session

Abstract

Problem-based learning (PBL) encourages students to engage with the course content and take personal responsibility for their learning. A PBL pedagogy decenters the learning from the instructor who shifts from presenter to facilitator. In this interactive session, participants will learn how PBL can be utilized to not only stimulate student engagement but also foster creativity, critical thinking, social skills, and life-long learning. Attendees will learn the rationale for PBL, characteristics and sources of good PBL problems. In addition, the presenters will share a template for developing problems in faculty learning communities and the benefits of this structure.

Objectives

Participants will identify the rationale for problem-based learning.

Participants will identify characteristics and sources of successful problems.

Participants will engage in problem-based learning.

Participants will brainstorm potential problems to meet their course learning outcomes.

Primary Audiences

Faculty Developers, Instructors/Faculty

Summary

The purpose of this workshop will be to introduce/review problem-based learning (PBL) with faculty and faculty developers and discuss how to use learning communities to facilitate the growth of PBL in their institutions. The presenters will define problem-based

learning (PBL) and describe the rationale for PBL as well as discuss the characteristics and sources of successful problems. Attendees will be shown example problems from across several disciplines, and they will have the opportunity to solve a sample problem. The presenters will also discuss the benefits of learning communities for promoting and fostering PBL at your institution as well as provide a template and resources for structuring the learning community. The presenters will share examples of problems developed in our learning community.

The pedagogical strategy problem-based learning (PBL) presents students with significant, contextualized, real world situations along with resources, guidance, and instruction to help them develop their content knowledge and problem-solving skills (Mayo, Donnelly, Nash, Swartz, 1993). PBL requires that the instructors serve as a facilitator of the problem-solving process instead of the presenter of knowledge. Instructors either find or write good problems that allow students to explore the course's key concepts, facts, and processes. While students' learning becomes more self-directed, instructors guide student learning by monitoring student discussions, providing mini lectures, asking questions, revealing additional information, providing resources, and encouraging participation across all members of the group. PBL's shift in learning responsibilities can be advantageous for students as it nurtures research, negotiation, teamwork, reading, writing, and oral communication skills (Allen, Donham & Bernhardt, 2011).

Faculty learning communities offer an ideal space for faculty to learn PBL strategies and develop problems. To facilitate faculty's development of a PBL approach within their courses, they need a safe space where they can develop their knowledge of PBL and practice developing their skills for implementation. Faculty Learning Communities are critical to the practice of scholarly teaching and the scholarship of teaching and learning as they create a time and space for faculty to engage in teaching innovations (Richlin & Cox, 2004). In particular, we found that the feedback on our problems was critical to not only developing the knowledge necessary for PBL but also created accountability that helped faculty prioritize spending time on developing their problems. The feedback provided by our peers was critical to the development of thoughtful challenging problems that had clear instructions and were easy to follow as peers from other disciplines were able to not only serve as the "novice" learner but also use their knowledge of the PBL methodology to offer suggestions that enhanced the quality of the problem.

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Mayo, P., Donnelly, M.B., Nash, P.P. and Schwartz, R.W. (1993) Student perceptions of tutor effectiveness in problem based surgery clerkship. *Teaching and Learning in Medicine*, 5, 227-233. <http://dx.doi.org/10.1080/10401339309539628>

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Proposal Keywords: (3-5 keywords)

Problem-based learning, Learning Communities, Critical Thinking, Life-long Learning

How I Learned to Stop Worrying and Love the Chatbot: Using Generative AI to increase student engagement and design better assessments.

Keri Green, Erin Kalish, Heather Myers
Johnson & Wales University, Providence, RI, USA

Proposal Type

Practice Session

Abstract

At the end of 2022, AI chatbots like ChatGPT exploded onto the scene with the ability to “write” an essay in seconds. Early conversations have focused on the academic integrity problems created by this new technology, but banning this technology from the classroom may not be the best approach. These tools are here to stay and will be a part of the workplace of the future. In this session, we will explore ways to strategically use generative AI to increase student engagement, and even how generative AI can be used in assignment and assessment design.

Objectives

By the end of this 50-minute interactive learning session, you will be able to

- Design assignments to limit generative AI usage
- Utilize generative AI tools, like ChatGPT and Google Bard, to create class activities, assignments, and rubrics
- Use generative AI tools to improve substantive feedback to students and individualize instruction
- Create activities that help students understand the potential and limits of generative AI technology

Primary Audiences

Faculty Developers, Instructors/Faculty

Summary

When ChatGPT entered the scene in late 2022, the immediate reaction across higher education focused on stopping students from using it to complete assignments. Schools rushed to implement zero tolerance policies that are hard for faculty to enforce. Rather than trying to completely ban its use, instructors and course designers need to recognize that the technology is already being adopted in the workplace setting students will enter after graduation. We should help students understand the potential and limitations of this technology and how to use it most effectively while they are in college. This will provide students with hands-on experience with an increasingly in demand skill. In addition, these tools can be utilized to help us (educators and designers) create engaging activities and assessments, improve our feedback, and get us past the “blank page” of lesson planning and writing.

The interactive learning session we have planned will focus on the practical use of generative AI tools in the higher education setting. We will begin with a very brief overview of some generative AI tools and the way generative AI is being used in workplace settings. Next, we will explore the potential benefits of AI for faculty by sharing examples of how AI can improve teaching and learning in the classroom. Generative AI tools can be used to create materials tailored to a specific group of students. We will demonstrate how it can be used to create formative and summative assessments and activities like games and simulations as well as how AI can help create personalized assignments or develop alternative assignments employing the principles of UDL. AI can even help faculty get out of a grading rut by helping draft substantive feedback for students that identifies strengths and weaknesses in student work. Generative AI can also help faculty draft and test feedback for assignments that tackle charged topics. After some examples of how AI can help with course design, we will explore the fruitful ways it can be used by students.

In the second part of the session, we will demonstrate how to write and refine prompts to get the most of these AI tools. When creating a prompt for AI, it is important to be as specific as possible. The more specific the prompt, the more likely AI is to generate accurate and relevant results. And if AI does not initially generate useful results, the prompt can be refined or follow up questions can be asked to improve the generated material. Then participants will get a chance to practice everything we've covered in the session thus far and experiment with a few AI tools, either in small groups or as a full group depending on the size of the audience.

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Proposal Keywords: (3-5 keywords)

student engagement, chatbot, AI, learning design, assignment design

Intentional Course Design in Online Adult Learning

Dr. Corina Caraccioli

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Proposal Type

Practice Session

Abstract

The success of online courses is determined by their design. This presentation will discuss intentional design for online courses and strategies for motivating online students in an interdisciplinary online adult learning course. Intentional design “is a method that involves purposeful actions and takes into consideration the online learning environment, the teaching process, and learner characteristics” (Lehman & Conceição, 2014, p. 19). This presentation will emphasize the importance of predicting adult learners’ needs in order to help them persist in the online environment, while considering Malcom Knowles’s andragogical principles when designing online courses and facilitating the learning experience.

Objectives

Participants will recognize the unique characteristics of online adult learners and learn about andragogical principles they can employ in designing online courses.

Participants will be prompted to reflect on their own experience designing and teaching online courses.

Participants will engage with their peers in collaborative learning and knowledge sharing through group discussion focused on intentional course design.

Primary Audiences

Instructors/Faculty, Curriculum Specialists

Summary

Intentional course design is instrumental in online learning. It is particularly important to note who are our online learners, as the emergence of online learning has changed the profile of higher education students. The focus of this presentation is to discuss the

characteristics of the adult learner and the development of an interdisciplinary online adult learning course informed by andragogical principles (Knowles et al., 2020).

Merriam and Baumgartner (2020) discuss the fast-paced advancement of technology and present three new learning theories that address issues specific to online learning: community of inquiry, connectivism, and collaborativism. The presenter will provide an overview of these learning theories in contemporary society and connect them to the importance of intentional course design for online courses. Teaching online courses requires planning and involves employing design elements and strategies to foster student motivation: creating the learning environment, consistency, variety, relevance, content prioritization, setting up clear expectations, personalizing interactions, incorporating feedback, and predicting learners' needs (Lehman & Conceição, 2014).

Following that, the presenter will discuss andragogy as a lens for online course design. Andragogy is a term introduced in the United States in 1967 by Malcom Knowles. Andragogy is focused on the education of adults and is based on several assumptions about how adults learn: their need to know why they need to learn something; the learners' self-concept of being responsible for their own decisions; the role of the learners' experiences; adults' readiness to learn what they need to know; adults' life-centered orientation to learning; motivation (Knowles et al., 2020).

The audience will then be engaged in a pair and share activity and prompted to reflect on and discuss their experience with designing and facilitating online courses for post-traditional/adult learners. After this activity, the presenter will share her experience designing and teaching an online asynchronous adult learning course while considering andragogical principles. This course is an elective for any undergraduate student enrolled in a fully-online program and will also become a required course for online students enrolled in our Bachelor of Applied Science program. This course has been successful and it will also be offered in a hybrid modality at a correctional facility to incarcerated students.

The course syllabus will be shared and discussed with the audience. Below is the course description:

"This course is designed for [university name] online students to enable them to more fully understand the learning process in an online environment and to reflect on their own learning and educational journeys as adult learners. The online education experience comes as a culture shock to many students, hence the goal of this course is to equip [university name] students with knowledge, skills and habits necessary to navigate their online academic experience successfully and enhance their critical thinking skills.

We will learn about theories of adult learning and development, growth mindset, and research-based strategies to be successful as an online learner. We will also discuss technical particularities of online education. You will be encouraged to critically reflect on how these theories apply to your own learning, academic and personal goals. Our readings will primarily come from the fields of adult education and psychology."

The presenter will share details about the course design process, types of assessments and student feedback, and present this course as a case study for discussing intentional course design that employs andragogical principles in online education.

References (up to 5)

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Proposal Keywords: (3-5 keywords)

online course design, adult learning, andragogy

You're the Expert: "Teach" ChatGPT and other AI Interfaces to Create Lesson Frameworks using your Expertise.

Dr. Marilyn B. Taft

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Proposal Type

Practice Session

Abstract

ChatGPT is a tool that can assist faculty and instructors in using an AI interface to develop lesson frameworks using their scholarly and professional expertise. The ways in which faculty "teach" the interface by asking questions using higher-order thinking skills increase the likelihood that the lesson frameworks in the AI responses will be useful for classroom settings and will be a time-saving strategy that enables faculty to focus on research in their content areas.

Objectives

After attending the session, participants will be able to use an AI Interface to design lesson frameworks and assignments within their discipline. They will be able to use disciplinary specific inputs to "teach" the AI site to respond with logical outputs. They will use higher order thinking skills and their expertise to critically assess and modify the outputs to create a lesson framework according to their professional standards.

Primary Audiences

Curriculum Specialists, Instructors/Faculty

Summary

ChatGPT and similar generative AI interfaces are in the news and in classrooms at every educational level, including colleges and universities in the United States and throughout the world.

ChatGPT is a natural language processing system that uses complex algorithms to generate what a human might write in response to a variety of queries. Users ask questions and the ChatGPT interface responds with an answer. Its conversational design allows users to ask follow-up questions and probe more deeply using additional information at every step. User inputs affect the outputs.

While scholars and educators debate the pros and cons of using AI interfaces in the classroom, there is little doubt that such interfaces will have a greater and greater impact on teaching and learning in public education and at the college and university level. Some public schools and institutions of higher learning have chosen to ban it completely, while others have embraced it as a new tool for learning. Due to limited time, this session will not discuss student use of AI interfaces to complete assignments or the increase in plagiarism since the onset of Covid.

This practice session will address the use of ChatGPT as a tool to assist faculty and instructors in using an AI interface to develop lesson frameworks using their scholarly and professional expertise as inputs to design the basic components of a lesson with differentiation to meet a variety of student needs. We will discuss how to use higher-order inputs to prompt the interface to respond with desired outputs. This is also a helpful strategy to assist faculty who teach prospective K-12 teachers who may wish to use AI interfaces to design lessons for elementary and secondary schools. Attendees will have the opportunity to design a lesson during the session using a personal device.

References (up to 5)

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Proposal Keywords: (3-5 keywords)

Artificial Intelligence

Lesson Framework

Instructional Design

Teaching

Gamification in Online Courses: Impacts and Lessons Learned

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Proposal Type

Practice Session

Abstract

This session will explore the transformative potential of gamified learning in fully online courses and share results from an institutional pilot using game elements and mechanics in the learning process. Students created avatars, viewed the course via visualized dashboard, earned prizes for completing assignments, while faculty utilized AI (artificial intelligence) to create customized progress reports for each student. Through this presentation, attendees will gain insights into the history and evolution of gamification, understanding some effective implementation strategies, and explore practical examples of gamified learning in action to tap into students' intrinsic motivation, foster active engagement, and optimize faculty time.

Objectives

1. Develop a clear understanding of the potential benefits and challenges associated with implementing gamified learning approaches.
2. Gain practical knowledge on how to leverage a gamified interface to save faculty time while maintaining or improving instructional quality.
3. Analyze gamification strategies used to support and enhance the learning experience of student populations across the disciplines.
4. Explore student and faculty perspectives on using the gamified interface to improve student engagement, motivation, and satisfaction.

Primary Audiences

Instructional Technologists, Instructors/Faculty

Summary

With the increasing prevalence of digital technology and the ever-growing need for innovative teaching approaches, gamification has emerged as a powerful tool to

enhance student motivation and engagement. By harnessing game design principles, educators can transform traditional learning experiences into interactive and immersive adventures that captivate learners' interest. Additionally, gamification can provide educators with time-saving opportunities, enabling them to focus on individualized instruction and feedback.

The impact of such technologies includes the social and addictive behaviors they can create, particularly that offer rewards, immediate gratification, and visualized elements that engage users (Hamari, et. al., 2015). Higher education professionals also aim to utilize such technologies to position learning to be a more engaging, interactive, and addictive experience that can support improved student retention. Therefore, it's no surprise that over 118 different theories are used to study gamification (Krath et al., 2021). Gamification is the "use of game design elements in non-game contexts" (Deterding et al., 2011) and have been introduced in the higher education context to mixed reviews.

Some have found gamification integrations lead to improved motivation, engagement, time on task, and learning outcomes (Landers et. al., 2014), while others express doubts about its efficacy and effectiveness to impact learning. Dicheva & Dicheva (2017) report inconclusive research on the limited understanding of mechanisms and methods of gaming in educational contexts, as practice has outpaced the research. Hence, we need better designs and more research to understand the possibilities, implications, and potential impacts. Regardless, learners today respond to gamification, and it is experiencing significant growth, with its market share expected to balloon from 17.2 billion in 2023 to 96.8 billion by 2023 (<https://www.precedenceresearch.com/gamification-market>). Therefore, it is essential to explore the perils and possibilities for integrating gamification into learning in the academy and to ascertain its impact on the student and faculty experience.

This presentation will share the results of an institutional pilot that occurred at a mid-sized university in the mid-west. It will explore both the student and faculty perceptions of using the gamified interface (Delphinium) and the impact it had on student motivation, engagement, ease of use, faculty time investment, satisfaction, and overall experience. Although not a research presentation, surveys and focus groups were conducted for participating faculty and students, and recommendations and conclusions are drawn based upon the findings.

During the session, participants will participate in live polling, interactive use of the gamified interface, and dyad/triad discussion. They will be able to engage directly via

a demonstration of the gamified interface in a fully online course and will have the opportunity to see the gamified experience from the perspective of both the student and faculty. Participants will explore the functionalities and features (of the backend administrative aspects as well as the front-facing visualized course dashboard). Additionally, participants will see the self-paced tutorials created for faculty and student use and will explore favorite aspects of the gamification experience. Presenters will share the lessons learned during the pilot, the findings/observations from the study, and the next steps in moving forward. More importantly, participants will have the opportunity to identify implications for potential integration of gamified learning in their own practice.

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Proposal Keywords: (3-5 keywords)

online learning

gamification

gamified learning

Using Music to Teach Cognitive Schema

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Proposal Type

Practice Session

Abstract

Since most people enjoy and are aware of music, there is a great opportunity to use music to introduce students to a variety of cognitive structures that guide our perceptions of reality and shape how we interact with others. Four major cognitive schema can be discussed by listening to a variety of music while asking students to identify the musical style, the typical listener, behaviors associated with the music, and our opinions of the music.

Objectives

The object of this session is to introduce an active learning opportunity to help teachers consider a way to help students better understand the major cognitive schema that shape human perception and interactions. By attending this session, teachers will be able to use this activity in their own classes as an engaging way to reveal cognitive structures to their students.

Primary Audiences

Instructors/Faculty, Curriculum Specialists

Summary

The concepts of social cognition and cognitive structures are important aspects of constructivism and human communication theory (Griffin, 2003; Littlejohn, 2002). In interpersonal communication texts, the authors typically present various types of cognitive structures and provide connections to our communication. For example, Trenholm and Jensen (2013) introduce four different schemata that relate to communication. These include prototypes ("an organized set of knowledge that reflects the best example of a category of persons, objects, or events"), personal constructs ("mental yardsticks for deciding how two things are similar yet different from a third thing"), stereotypes ("a set of beliefs about the probable behavior of members of a particular group") and scripts ("guides to action," Trenholm & Jensen, 2013, pp. 137-139). Many of these structures are so common in our everyday experience that it is

easy to take them for granted. In fact, students may not realize how much people's schemata affect perceptions and interactions with others.

By asking students to listen to different musical selections and fill in a simple rubric, different schemas become apparent. This creates an opportunity to discuss how our cognitions relate to our communication. Students who have learned about cognitions in prior classes should "see" their own cognitions come into focus. Those who are not familiar with the vocabulary of cognitive structures should begin to see the connections between the formal terms and their own observations as the class activity and discussion proceed.

Participants will listen to five musical selections of varying styles and be prompted to complete a rubric that asks them to identify the musical style, list the typical listener, express their personal opinion of the music, and state the behaviors they associate with the music. Each of these prompts reflect the four cognitive categories listed above. The beauty of the activity is that students do not need to understand music. In fact, the varying levels of expertise of everyone across the differing musical styles creates the opportunity for a rich class discussion about everyone's cognitive structure. For example, a person with a simple cognitive structure may call the music being played "jazz" while someone with a more sophisticated structure may label it "bebop." Is it simply "classical" or is the piece more accurately labeled "Late Romantic?"

After listening to all the selections, the classroom can have a guided discussion that allows students to connect their answers to broader categories and, ultimately, to the myriad ways our cognitive categories shape our perceptions of the world and how we interact with others.

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Proposal Keywords: (3-5 keywords)

- o Cognitive Structures
- o Musical Styles
- o Human Perception
- o Schemata

Creating a campus-wide community focusing on implementation of enduring pedagogical and andragogical practices.

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Proposal Type

Practice Session

Abstract

This interactive presentation will focus on implementation of the Improvement of Postsecondary Education award for diverse HBCU faculty. Funding from the grant provided faculty with ongoing professional development and support augmented their performance with online, hybrid and traditional delivery formats. Professional development focused on effective instructional delivery and student engagement while strengthening the institutional emphasis on academic success. The success of the grant was due to the purposeful collaboration with departments across campus. Data analysis within and across four faculty cohorts will be presented and recorded testimonials from engaged faculty were collected and will be shared.

Objectives

Attendees will be able to identify pedagogical strategies from the Quality Matters Rubric.

Attendees will be able to examine pedagogical strategies from micro-lectures using One Touch Studio.

Attendees will be able to engage in utilization of GoReact Video Annotated Software tools.

Primary Audiences

Higher Education Administrators, Instructors/Faculty

Summary

Enhancing faculty development by offering training via Quality Matters increased the number of faculty who have advanced online pedagogical knowledge that increased student engagement and academic success. This presentation will focus on

implementation of the Improvement of Postsecondary Education award for diverse HBCU faculty. Funding from the grant provided full time and part time faculty with ongoing professional development and support augmented their performance with all instructional delivery formats. There was a clear focus on sustaining student enrollment and retention during professional development implementation.

Assisting faculty to develop high-quality instruction that positively affected student learning outcomes has been found to be complicated by time limitations, lack of resources, and inexperience using student data to make iterative improvements. By providing faculty focused professional development using resources and knowledge focused on effective instructional delivery and student engagement in hybrid and online courses, the institution strengthened its emphasis on academic success and student engagement. The success of the grant was due to the purposeful collaboration with departments across campus.

Faculty were empowered to re-imagine instructional delivery that was student-centered and rigorous. The professional development sessions included implementation of evidence-based practices in online teaching, which was comprised of Quality Matters, One Touch Studio and GoReact. Training faculty with the Quality Matters Rubric allowed for online teaching skills that guided course development (Weaver, Robbie, & Borland, 2008). Collaboration with existing faculty resource centers allowed faculty to engage in workshops focusing on meeting the special needs of learners through assistive technology and technological applications suited for various student populations (Dosch, & Zidon, 2014). The pedagogical strategies were implemented across online, hybrid and traditional courses. Training the faculty to use the One Touch Studio Package with Video Camera and Lightboard Control Center provided opportunities to easily record professional micro-lectures focused on student learning. The GoReact Video Annotated Software (VAS) tools were used online or offline to provide written, spoken, and visual comments which were synchronized to video recordings or live feeds. Therefore, educational programs were able to use videos interactively to examine and reflect on classroom practices in an online environment via multimedia software (Rich & Hannafin 2009; Martin & Siry, 2012).

Throughout the 2022-2023 academic year, four faculty cohorts were engaged in focused professional development opportunities. Pre-surveys were used to obtain demographic information and faculty perceptions of the technology, and the post-surveys focused on capturing the perception of change after completing the professional development. Faculty Quality Matters projects and certificates were collected and analyzed. Faculty who attended the One Touch Studio professional development sessions were encouraged to create micro-lectures and completed post session surveys. During the GoReact workshops faculty were provided accounts and opportunities to explore the software and engage in video analysis with the focus on student learning. Data analysis within and across cohorts will be presented. The captured testimonials from faculty who completed the training were collected and will be shared.

The interactive session will provide attendees opportunities to identify pedagogical strategies from the Quality Matters Rubric as well as examine pedagogical strategies from micro-lectures using One Touch Studio. Attendees will be able to engage in the utilization of GoReact Video Annotated Software tools. Small groups will be asked to brainstorm solutions to scenarios and then share these with the entire audience.

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Proposal Keywords: (3-5 keywords)

Historically Black College and University

Community Building

Enduring Pedagogical Practices

Incorporating Virtual Reality (VR) and Generative Artificial Intelligence (GAI) in a Masters of Social Work Family Therapy Course

Dr. Cynthia Faulkner, Rick Bartlett, Mike Jones
Indiana Wesleyan University, Marion, IN, USA

Proposal Type

Practice Session

Abstract

This presentation establishes a clear understanding of generative artificial intelligence (gAI) and virtual reality (VR) by exploring their definitions and applications. It delves into the immersive nature of VR and the process of creating immersive videos. The use of VR in teaching domains for enhanced understanding and application is discussed, along with showcasing four family therapy interventions. Additionally, the application of gAI tools, like Google Scholar, for research-related assignments is examined. The presentation concludes by addressing next steps and proposed research. By delivering concise insights, this presentation highlights the transformative potential of VR and gAI in the student experience.

Objectives

This presentation will:

1. Provide definitions of generative artificial intelligence (gAI) and virtual reality (VR).
2. Examine the immersive nature of VR and discuss the process of creating immersive videos using Oculus headsets.
3. Showcase the four family therapy interventions using virtual reality.
4. Explore VR and generative AI's applications for teaching domains using Bloom's VR/AR Taxonomy.
5. Discuss gAI research tools and their ability to generate targeted content in response to keyword prompts.
6. Identify the presenters' next steps for VR and ongoing research on knowledge, experience, and level of comfort with VR and gAI tools.

Primary Audiences

Instructional Technologists, Instructors/Faculty

Summary

In this presentation, we will first establish a clear understanding of gAI and VR, exploring their definitions and applications.

Then, we will explore the concept of VR and its immersive nature and discuss the process of creating immersive videos. We will incorporate VR's applications into teaching domains that enhance understanding, application, analysis, and evaluation of VR course material. We will showcase how VR can create a sense of presence and enable users to view three-dimensional virtual environments through an Oculus headset while observing four family therapy interventions; motivational interviewing, solution-focused therapy, dialectical behavior therapy, and cognitive behavioral therapy.

Finally, we will explore the concept of generative AI and its applications for teaching domains that enhance understanding, application, analysis, and evaluation of research-related assignments. We will examine how gAI research tools, such as, Google Scholar, Elicit, and Semantic Scholar leverage vast datasets and advanced learning algorithms to generate targeted content in response to key word prompts.

We will also discuss next steps, such as students facilitating a family therapy session through a gAI-inhabited avatar in the Oculus headset, as well as research that is in progress that examines knowledge, experience, and level of comfort with VR and gAI tools.

With a concise yet insightful delivery, this presentation will provide the audience with an understanding of VR and gAI's potential to transform the student experience. It will equip them with examples of VR and gAI integration in a family therapy course, empowering them and their organization to stay ahead of the competition in today's digital era.

References (up to 5)

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Meta Oculus Quest <https://www.meta.com/>

Semantic Scholar <https://www.semanticscholar.org/about>

Proposal Keywords: (3-5 keywords)

Virtual Reality, Generative Artificial Intelligence, Oculus

Combining Real-Time Polling, Case Studies and Collaborative Learning to Foster Community-Building, Student Engagement and Critical Thinking in the Health Sciences Classroom

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St. Johns River State College, St. Augustine, FL, USA

Proposal Type

Practice Session

Abstract

Case studies have been used in many fields of study, however, science and medicine rely heavily upon this teaching method precisely because of the ability of the case study to create a rich narrative of clinical evidence and foster critical thinking skills. Using a combination of case studies, collaborative learning and real-time polling resulted in a teaching strategy useful in both face-to-face instruction as well as online synchronous anatomy and physiology courses. Students found the weekly case studies engaging, beneficial to their understanding of the course material and promoted community-building in the classroom which may translate to improved student success.

Objectives

In this workshop, participants will:

- 1) collaborate in a problem-based learning environment to solve a clinical problem.
- 2) evaluate clinical evidence including patient narrative, symptoms and clinical data.
- 3) construct questions and lines of reasoning to help identify the cause of the clinical problem.
- 4) utilize real-time polling to gauge the individual group response and monitor the thinking of other groups for self-assessment

Primary Audiences

Instructors/Faculty, Curriculum Specialists

Summary

The case study approach to teaching is a widely-practiced methodology to promote the development of critical thinking skills and problem-based learning. In medicine, case studies can be viewed as a form of story-telling, creating a narrative revolving around a patient highlighting a particular disease or condition which is relatable to students and also correlates to patients they will see in their own clinical practices (1,2). While case studies have been used in many fields of study, science and medicine rely heavily upon this teaching method precisely because of the ability of the case study to create a rich narrative of clinical evidence and a problem to solve. The case study approach is highly flexible and adaptable to any classroom environment. Anatomy and Physiology is a discipline which lends itself well to the usage of case studies and problem-based learning strategies to apply previously learned material to clinical problem solving, collaboration and team-building (3,4). In addition, case studies are a methodology which can increase motivation, foster social skills and aid students in building community which will in turn hopefully increase student persistence and retention (5). While there is a growing body of literature detailing the use of case studies in a classroom setting, there is limited data regarding overall effectiveness and specific outcomes. There is some evidence to suggest that the use of case studies can enhance motivation and improvements in student performance (5). What I am interested in however, is how using case studies can reduce academic and social anxiety and improve student self-efficacy as well as foster community and teamwork. Here, I have combined the case study method with group learning and real-time polling to create a learning tool that is relatively time efficient and flexible. In this qualitative study, I am taking into consideration the student perspective to gauge how they feel about this teaching teaching, if they found it helpful and how it impacted their experience of their courses.

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Proposal Keywords: (3-5 keywords)

case studies

real-time polling

Applications of Virtual Reality (VR) in Teaching Social Studies Methods Course

Dr. James Oigara

Salem State University, Salem, MA, USA

Proposal Type

Practice Session

Abstract

Virtual Reality (VR) is an emerging possibility for delivering educational content and experiences to students learning. Content can be delivered on many different devices, from smartphones and tablets to head-mounted displays. VR experience makes learning fun and can be used to enrich collaborative activity to deepen students understanding of abstract concepts. In some instances, VR can more accurately illustrate some features, processes, and so forth better than by other means, allowing extreme close-up examination of an object, observation and examination of areas and events unavailable by other means. This session explores effective ways of integrating Virtual Reality experiences into lessons.

Objectives

The attendees will have the opportunity to experience the virtual reality environment of some social science concepts the presenter has used in class. The presenter will provide VR headsets for the attendees to use during demonstration. Attendees will learn how to incorporate immersive VR technology environment into the classroom and explore different VR apps and approaches in teaching abstract concepts. The presenter will answer questions on using Virtual Reality in education

Primary Audiences

SoTL Scholars, Instructors/Faculty

Summary

Introduction

Research shows that educational software benefits the learning process and makes it more interesting for students (Chen & Teh, 2013). One of the innovative technologies for education is Virtual Reality (VR). Virtual Reality offers tridimensional (3D) computer

environments with advanced forms of interaction that can provide motivation to the learning process. Virtual Reality offers unique learning experiences through its ability to provide real time 3D visualization and afford various types of interactivities within virtual learning environments (Chen & Teh, 2013). According to Clark (2006), VR can be used to make the learning experience more interesting and fun. VR makes it possible to explore real world situations that were impossible to visit previously. The underlying reason for the rapid rise in the use of VR technology for instruction is the uniqueness it offers in enhancing learners' cognitive skills (Merchant, Goetz, Cifuentes, Keeney-Kennicutt, & Davis, 2014). The research provides evidence that VR-based instruction is an effective means of enhancing learning outcomes (Merchant, Goetz, Cifuentes, Keeney-Kennicutt, & Davis, 2014).

The most common applications for VR tools have been for military training, medicine, sports, and gaming industry environments (NMC, 2016). The lifelike simulations provide authentic experiences for these users. Alternative applications for VR tools are now being considered in other fields, including education. The aim of this research was to examine students' perceptions of utilizing VR devices for instruction in a social studies course.

Literature

Applying VR in education can aid the discovery, exploration and building of new knowledge about places and situations that could be remote. There is limited research on the use of VR tools in K-12 and in higher education. The educational VR tools can enable teachers to expand on the notion of visuals to include virtual reality (VR) tools that provide "virtual field trip" experiences to students. Using VR technology tools such Google Street view and VR headsets, teachers can provide students with an in-depth knowledge of the cultures, places, and ideas they intend to teach. For example, research shows that students with prior knowledge about a topic are impacted by their understanding of concepts they study (Richardson, Morgan, & Fleener, 2012; Sousa, 2005; Marzano, 2004). Students who have been to a beach and who are reading text about the beach may have a better understanding of the topic than students who have never been to a beach.

The emergence of VR into education provides opportunities to make the content more interesting to students, making learning easier. Virtual Reality is a technology that proves useful in terms of improving teachers' abilities to help students think differently about content (Winn, 1993; Psootka, 1995). Virtual Reality technology can provide innovative educational opportunities that encourage students to approach problems or subject matter from alternative perspectives. Research show that teachers have creative ideas for how to incorporate VR immersive education in the classrooms: how to select activities, how to set up the classroom, applications of VR, how to get support during the activity and how to transport devices (Castaneda, Cechony & Bautista, 2017).

Methodology

Data Collection

Data was collected in the form of student surveys, interviews, and VR course-related assignments. Most survey questions were open-ended and gave the researchers the opportunity to gather the relevant data for the study. There were also close-ended questions to discover whether the user felt that the VR application made the material interesting and/or easier to understand with the use of VR apps as opposed to learning content in a traditional method.

Interviews were conducted with all participants. The in-depth interview involved asking open-ended and semi-structured questions, listening, and recording the answers, and then probing the participants to clarify their responses. Data from the interview was audio-taped, transcribed, coded and then divided into categories.

During the VR course assignments students were asked to use the "Think-Aloud" method to understand what they were thinking when interacting with the VR system (Shim, et al., 2003). The instructor typically had to prompt students to keep them talking as they interacted with the VR applications. This method enabled the instructor to document perceptions and information regarding the use of VR applications. The results were interpreted through individual narrative and description.

Results

Survey data were reviewed and analyzed for a deeper understanding of students' perceptions of VR headset use. Overall, students responded positively towards the use of VR as an instructional tool. Students perceived VR headset as an effective tool that provided an immersive and active experience for learning. Participants agreed that VR headset provided a new way of learning that helped them to understand the complex concepts better and increased their interest and concentration with the course material.

Interview results and course VR activities revealed that VR added value and interest to the course in various ways. Several themes emerged in the interviews, including increased engagement, increased student attention, ability to see 3D visual of content, and improved digital skills. VR experiences provides the ideal technology to make learning more interesting and fun for students.

Discussion and Conclusion

The findings from this study contribute to the body of knowledge related to the integration of VR into classroom instruction. Students' comments on using VR headset for education were positive. Most participants agreed that the presentation of the content material in a 3D version was more appealing than the traditional ways of teaching. These findings show that VR technology could be used in a variety of educational fields, especially those that require a simulation or 3D presentation. Since the results were positive and students experienced little issues with VR, the data suggests that VR presents another method for teachers to employ in the classroom to help students better understand complex concepts. With more VR applications appearing every day, VR has become an engaging way for students to explore remote places including historical landmarks, distant planets, and oceanic locations (Mak, 2016). VR gives students the ability to participate in virtual field trips and connect the learning in the classroom to the real world. Using VR places the student closer to the topic at hand without distractions from the real world.

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Proposal Keywords: (3-5 keywords)

Virtual Reality

Tridimensional (3D)

Mobile learning

Interactive instruction

Promoting Transfer through Caring: Using online and F2F weekly check-in surveys

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Proposal Type

Research Session

Abstract

Motivation plays a key role in the transfer of learning. Post-pandemic and with varying modalities of instruction, influencing motivation can be difficult. We will consider the inclusion of intentional, short, and timely check-in surveys to foster a sense of belonging, reinforce motivation, and ultimately enhance the transfer of learning both in and outside the classroom. Survey questions addressed emotional wellness, time management, course concepts, and applicability of course material in future situations. The presentation will include the survey instrument, feedback for students during term, trends in student emotional wellness, recommendations, and implications for transfer generated from this practice.

Objectives

As a result of attending this presentation, participants will be able to identify a framework for surveys to aid in increasing motivation and sense of belonging in a course. Participants will be able to identify areas of the student experience in their own courses that could fit this framework and then adapt and apply the framework to their own courses. Finally, participants will be able to create surveys, tailored to their context, foster a culture of inclusion in their courses, and support students to transfer their learning beyond the course.

Primary Audiences

Instructors/Faculty

Summary

Mood, motivation, and personal wellness check-ins have been demonstrated to increase engagement in online participation, promote a climate of care, and foster mutual support (Huberty et al., 2021). According to the Active Minds Student Survey, students overwhelmingly report difficulty maintaining a routine and staying connected with others (Active Minds, 2020). In exploring how to address connection, Buskirk-Cohen and Plants (2019) report that student success can be supported by a feeling of

belonging, and Rainey et al. (2019) report that the feeling of belonging, related to the perception that the professor cares about students, may have a strong impact on minoritized students. Instructors need to care about how connected students feel in their courses because there is evidence that this emotional connection contributes to students being able to retain and transfer what they learn from one class to another. Bostosik (in Ferlazzo, 2017) writes, "Transfer of learning occurs when the student is motivated by the topic, motivated to learn, has previous knowledge on the subject, and knows how to connect new information to existing information." The purpose of the study is to find an intentionally-designed, instructor-friendly method to help students feel more connected and motivated in their classes – both online and in-person. As a result, students may be more likely to transfer their learning to serve them beyond the classroom experience.

Study data are weekly check-in surveys about emotional states and personal insights from 150 students in math and English courses since August 2022. These check-in surveys ask students about their confidence, feelings of being overwhelmed, feeling about having time to do the work for the course, interest in the course content, and motivation levels. In addition, surveys included open questions about how they might transfer what they learn in the course to other situations. Results presented include trends about student emotional wellness and what they perceive they can transfer from the course.

The results of the quantitative data show that students in online courses who received summary debriefings in a document perceive the surveys in isolation and report lower levels of motivation and higher levels of feeling overwhelmed. A possible implication is that as a course ends and student motivation flags, students' ability to transfer knowledge to the next course may be inhibited. The in-person students who received immediate debriefings of the survey results report significantly higher levels of motivation, confidence, and interest. Additionally, they report that while they feel connection with other students in the class, they consistently report a higher level of connection with the instructor as a result of the weekly check-ins.

In the qualitative data, students indicate a clear feeling of inclusion. Sample student comments include: "The weekly check-ins helped me let the instructor know how I felt during the week. I liked them because if I was stressed, I could see that others were in the same boat as me. I could see that I'm not alone. I liked them because the check-ins were anonymous. People didn't have to know how I specifically felt." and "Weekly check-ins made me feel less alone. They let me know that I wasn't the only one feeling the way that I was, it was very reassuring, and your kindness made it much more manageable." These representative comments indicate that students felt their challenges were acknowledged which helped them feel they could endure these challenges rather than succumb to them.

In addition, students reported clear ideas of how to transfer skills from the course they are in to future courses. Sample student comments include: "[I can transfer] time management skills, how to analyze if a source has valid information, how to make an infographic etc." and "[I can transfer what I learned about] the graphs for drug doses

being administered and the rate at which they metabolize. [This] could definitely be used outside of the classroom. You can use this equation to find out how long a medicine you take will be in your system and that may be useful."

Interestingly, students are less likely to report how they might transfer concepts from the course. This is consistent with the transfer research indicating that it is easier for novices to transfer a skill to a new context than an idea. A common theme among all students is a feeling of fatigue and falling motivation as the course progresses even as they report sustained interest and confidence. The sense of belonging fostered by the instructor caring about how students feel may create an atmosphere of confidence that allowed students to take the idea of transfer seriously rather than seeing the course as a box to check and then move on.

In addition, the presentation includes conclusions with recommendations for how to use these check-in surveys in classes and the implications for transfer generated from this practice. From our data, a principal recommendation is to make time to do even a short check-in since it clearly promotes a feeling of connection with the instructor. A second recommendation is to explicitly ask students to think about how they can transfer skills from this course to the next. The final recommendation is to explicitly ask students how they can transfer concepts from the course, since this is the most difficult metacognitive task for students. The implication for transfer is that creating an atmosphere of care for the students' experience may help them feel more confident and interested in the course, thus making transfer more likely.

A principal limitation of this study is the lack of direct evidence that students do transfer knowledge from these courses to the next. This limitation will be addressed in future studies tracking the students from the courses reported in this data to the next courses in the sequence. Additional limitations include the small sample size and the continually changing number of students who showed up to take the surveys. Results may be skewed by students who were able to consistently manage their lives to make it to class on a regular basis.

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Proposal Keywords: (3-5 keywords)

Transfer of Learning

Motivation

Inclusion

Intentional Course Design

Humanizing the Asynchronous Online Educational Environment using Video Announcements

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Proposal Type

Research Session

Abstract

As asynchronous online educational opportunities increase, faculty must be prepared to implement a humanistic approach to their online classrooms. Feelings of disconnection can be prevalent in the online environment, including feelings of absent faculty. The use of video announcements allows faculty to record short videos each week explaining the week's tasks as well as any tips or tricks for the students as they work on their assignments for the week. These videos are unscripted, display the humanization of the faculty member, and add an element of personalization to the announcement board. Through video announcements, faculty can promote connections with students.

Objectives

1. Participants will be able to identify key components of a video announcement.
2. Participants will describe the humanistic aspect of providing unscripted videos as part of their announcements.
3. Participants will analyze their capability to provide video announcements within their own courses.

Primary Audiences

Instructors/Faculty, Early Career Faculty

Summary

Methods: This exploratory, non-experimental research is currently being conducted to determine the ability of video announcements to humanize the online asynchronous environment. Faculty teaching courses in an Associates to Bachelors in Nursing degree program have integrated video announcements into their courses in lieu of written announcements. Similar to written announcements, students are asked to listen to the announcement each week to hear about the tasks they will complete. Faculty create

an unscripted video, featuring themselves. Videos are less than 3 minutes in length and provide key details for the week, including any major assignments in future weeks. A mixed methods review of the data collected in the survey will be conducted to determine statistical significance as well as determine themes derived from open ended questions. While all students experienced the video announcements, participation in the survey is voluntary. Inclusion criteria includes students enrolled in the PI's courses during Spring and Summer semesters, 2023. Exclusion criteria include all students not enrolled in the PI's courses during Spring and Summer semesters, 2023 and students less than 18 years of age. Permission was obtained by the University IRB prior to administering the survey.

Findings: Early review of qualitative findings demonstrate an overall positive experience from the student perspective. Data collection will conclude in early July when data will be reviewed for statistical significance. Qualitative data will be assigned into themes at this time.

Implications: Preliminary review of survey data suggest that students feel a greater connection to their instructors with the use of video announcements. Early data suggests the use of text and video announcements. As Likert questions will not be analyzed for statistical significance until the end of summer semester (early July), it is too early to provide recommendations.

*Updated summary available upon completion of data analysis.

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Proposal Keywords: (3-5 keywords)

Video, asynchronous learning, humanizing, connecting

Teaching After Community Violence: What do Students Want from Instructors?

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Proposal Type

Research Session

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 UVA students expected, wanted, and found helpful from instructors after the gun violence on campus on 11/13/23. 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.

Objectives

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 in their ability to support students in their own classrooms or offer evidence-based guidance to faculty navigating the difficult work of teaching in times of crisis. Finally participants will leave with resources and practical tips that can help them prepare to respond in an impactful and equitable way to the next critical incident impacting their students and community.

Primary Audiences

Faculty Developers, Instructors/Faculty

Summary

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 at least 350 students (current number of participants– survey will remain open until June 30, 2023) 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. The survey is ongoing, so we are unable to make any concrete statements about the results at this time. However, preliminary results suggest that the instructor actions students wanted most were, in order, 1) offering flexible deadlines for remaining assignments, 2) asking students for input before finalizing changes to the syllabus or class schedule, and 3) acknowledging the event and the loss of lives. Another striking takeaway from the preliminary results is 75% of students whose instructors "quickly returned to regular routine" found this action unhelpful or harmful.

In addition to quantitative data, this presentation will include student voices. One piece of qualitative data we collected was student responses to the question: "Do you have any advice about how instructors should respond to the variety of student needs that emerge following a violent event in the community?" Our presentation will quote students directly when possible.

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: people of color, women, and people

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.

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Proposal Keywords: (3-5 keywords)

trauma-informed teaching

gun violence

emotional labor

faculty development

student attitudes

Designing for the Future: Assessing the Impact of Learning Theory-Based Strategies in an Undergraduate Leadership Course

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Proposal Type

Research Session

Abstract

Design thinking was integrated into an undergraduate leadership course to facilitate students planning their futures. Course assignments were constructed to allow students to explore different opportunities for their future careers and lives. Student reflections in two different semesters allowed us to understand students' experiences with course assignments and to make adjustments after each iteration of teaching the course. Using design based research, we analyzed the reflections in relation to several learning theories and discovered shifts in learner's experiences in relation to theory. Design principles are proposed for future learning experiences focused on helping students plan their futures.

Objectives

Participants will be able to conceptualize design thinking as a strategy for helping students design their futures.

Participants will develop knowledge of evidence-based strategies for incorporating design thinking for college student learning.

Primary Audiences

Instructors/Faculty, SoTL Scholars

Summary

This study assessed the impact of design strategies for learning experiences in an undergraduate leadership course focused on helping students develop a plan for their future. We grounded the design of this course in three learning theories: Dynamic Systems Model of Role Identity (DSMRI), situated learning theory, and transformational

learning. DSMRI provides a coherent theoretical perspective for conceptualizing, investigating, and intervening in the integrative nature of identity and its developmental mechanisms (Kaplan & Garner, 2017). Role identity consists of the actor's ontological and epistemological beliefs, purpose and goals, self-perceptions and self-definitions, and perceived action possibilities in the role. Situated learning theory asserts that every idea and human action is a generalization adapted to the ongoing environment; it is based on the premise that what people learn, observe, and do is situated in their role as a member of a community (Lave & Wenger, 1991). As a result of increased opportunities for practice within the context of learning, new learners in such a community attain expert proficiency. Transformational learning is "a profound, structural shift in the fundamental premises of thought, emotion, and action" (Mezirow, 2009). Two major components of transformative learning are critical reflection on assumptions, or critical self-reflection, and critical discourse in which the learner validates a best judgment (Mezirow, 2009). The current study investigated two semesters of a personal leadership course to understand learner experiences and processes in relation to principles derived from theory.

Participants for this study included students in two semesters who engaged in design thinking experiences applied to designing their futures for leadership. During one semester, the course was facilitated through a hybrid format (face to face and online) with only about 20 of the 94 students participating face to face each week. In the other semester, the course was delivered in a face to face format only. Assignments in both semesters included a personal leadership vision, a personal growth project (a vision prototype and shadow interview), and reflections on the learning process. Throughout the semester and process, students completed three individual reflection papers that were collected and analyzed for data (297 documents). Documents were coded in MAXQDA Analytics Pro for emergent themes in a variety of areas, including design aspects that related learning theories, process and activity steps, and overall learning experiences and students' struggles and what worked. This yielded 83 codes encompassing 3,145 coded segments. Then, using Excel Macros, we calculated code co-occurrence correlations to generate symmetric matrices, which we imported into the UCINET and NetDraw network analysis software to generate a network map and construct features that worked with correlations of $p < 1\%$ level. The Girvan-Newman cluster analysis (Girvan & Newman, 2002) was used to identify clusters, generate eigenvector values, and set node sizes in accordance with betweenness centrality metrics to determine the most prominent experiences, processes, and theories. Finally, we analyzed the relationships and turned each relationship set's findings into design moves.

The Girvan-Newman analysis produced a semantic network map of conceptual elements and practices that were correlated at the $p < 1\%$ level in the 2021 semester, including four clusters at $Q = 0.424$. To address the problem identified in the 2021 semester, we developed design moves for 2022 that take advantage of strengths, weaknesses, and principles from learning theories. Some of the design moves included more discussion about the purpose and rationale behind various learning activities, providing samples, having students present to each other in their learning communities (small semester-long groups), and more discussions around readings. Through Girvan-Newman analysis, we discovered four clusters with $Q = 0.430$ in our second semester (Spring 2022) network analysis of correlations with $p < 1\%$. Then, we compared patterns, differences, and similarities between the two iterations (Goodrick, 2014).

When comparing the two maps, we observed the theory appears to have gained more clarity and alignment from 2021 to 2022. With the exception of one cluster, the students' experiences were more consistent with theory in 2022. In one of the clusters, there are only some students' activities without any related theory. These students simply do what they believe should be done or what they were instructed to do. Their experience did not expand. It seems they were going through the motions. We may identify the characteristics of surface learners (Marton & Säljö, 1984) and design high-impact practices for them in future research. Students in one cluster closely resemble those from the previous year. Their learning experiences did not align as closely with theory. Another cluster composed of these students, appears to be very community-oriented. A strong sense of community pervades the social network. Moreover, what they did involved community participation, such as joining learning communities and creating or delivering presentations among team members. Lastly, the most notable distinction is a cluster in 2022. Students from this cluster explored identity and appreciated transformative learning theory with a focus on identity and transformative principles demonstrating they are truly learning deeply through these experiences focused on helping them design their futures.

In Spring 2022, design moves were developed based on learning theories to address struggles in each cluster. First, we emphasized collaborative learning through sharing, discussing, and brainstorming CVs, LinkedIn profiles, templates, real-world questions, and participating in mock interviews. Second, we focused on assignment adaptation and reflections by dividing portfolio assignments into interview documentation and learning experience reflection which foster students' agency, autonomy, and authority.

We concluded from this study that educators must create space for productive struggle, cognitive dissonance, and exploration to allow for learner identity in terms of purposes, goals, and self-perceptions. Our findings suggest that leadership educators ground leadership learning experiences in situated learning theory (Lave & Wenger,

1991), transformative learning theory (Mezirow, 1997), and an identity theory such as the dynamic systems model of role identity (Kaplan & Garner, 2017) to promote powerful learning.

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Proposal Keywords: (3-5 keywords)

Design thinking, leadership, higher education pedagogy, learning theories

Enhancing Project-Based Learning through Design Thinking: A Multi-Iteration Study in A University Leadership Course

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Proposal Type

Research Session

Abstract

Project-based learning (PBL) is a valuable teaching method that allows students to engage in real-world activities, apply ideas, and solve problems. However, challenges in its implementation can limit its effectiveness. The Design Thinking for Engaged Learning (DTEL) framework was developed to provide a structured approach for incorporating collaborative PBL in higher education. This paper presents the process, reflections, and findings from utilizing the DTEL framework in an upper-level leadership course where students worked on wicked problems within organizations. Through three iterations, this study identified challenges and successes experienced by students and proposed design moves to address the struggles.

Objectives

Participants will be able to identify the Design Thinking for Engaged Learning (DTEL) framework and its application in a project-based learning setting.

Participants will engage in the Design Thinking for Engaged Learning (DTEL) framework.

Participants will gain insights into the iterative improvement of the framework through multiple iterations in a leadership course.

Participants will think about how to incorporate the DTEL framework into their own educational contexts, effectively support collaborative PBL, and address common student challenges during the process.

Primary Audiences

Instructors/Faculty, SoTL Scholars

Summary

Project-based learning (PBL) is a highly effective teaching method that enables students to engage in real-world activities, apply ideas, and solve problems (Krajcik & Shin, 2014). PBL is most effective when projects are learner-driven and support learners in developing and exercising learner agency. Collaboration is an essential feature of PBL. However, challenges may arise during PBL's development and implementation, including content choice, time management, assessments, and acquiring facilities during the transition to PBL. The Design Thinking for Engaged Learning (DTEL) framework was developed to provide a structure for faculty to engage students in collaborative PBL (Donaldson & Smith, 2017). This paper presents the process and reflections of using the DTEL framework in collaborative PBL in a university course.

In an upper-level leadership course, student teams utilized the Design Thinking for Engaged Learning framework to tackle wicked problems within organizations. The DTEL framework, comprising ten steps, guided learners through a structured design process involving empathizing, defining, ideating, prototyping, testing, iterating, implementing, evaluating, reflecting, and sharing. Students, organized into teams of three to four members, followed this process throughout the 14-week semester to address challenges such as combating racial disparities within a city, supporting financially struggling families, and expanding opportunities for urban students from low socioeconomic backgrounds to join 4-H. By developing and presenting their solutions to the respective organizations, the students actively engaged in collaborative problem-solving, demonstrating the framework's potential to foster collaboration and enhance project-based learning experiences in various educational contexts.

The analysis process often starts with evaluating contextual learning needs, followed by selecting appropriate learning theories to ground a learning experience design. In this analysis, situated learning theory, constructivism learning theory and transformative learning theory were selected. Situated learning theory emphasizes that learning is a process that occurs within authentic social and cultural contexts (Lave & Wenger, 1991); transformational learning theory asserts that individuals can change their perspectives and beliefs through critical reflection and dialogue; and constructivist theory highlights the active role of learners in constructing knowledge through meaningful experiences.

Data Collection and Analysis:

Data included student reflection papers. The reflection papers were collected after each major phase of the design thinking process. These reflection activities asked students to reflect on their struggles, what went particularly well, and how the experience relates to their current and future academic, professional, and personal identities.

Analysis involved thematic and axial coding in the MAXQDA Analytics Pro software for learner experiences in each stage of the process, emphasizing identifying design features that were most effective and least effective. We analyzed the coded reflections focusing on three aspects: student challenges, strengths, and the alignment of learner experiences with the theoretical principles that underpin the design. To

visualize the relationships, we created network maps by examining code co-occurrence correlations at $p < 0.001$ or $p < 0.01$ significance levels. Subsequently, we employed Girvan-Newman cluster analysis (Girvan & Newman, 2002) and adjusted the node sizes in the map based on their betweenness centrality values. Following a thorough network analysis, we developed design moves that enhanced students' learning experiences. By capitalizing on the strengths and applying relevant theories, we effectively addressed their challenges and fostered growth in every iteration.

Findings and implications

Iteration 1 - Fall 2020

Several issues and findings have been identified and numerous design moves have been implemented to address these concerns. Key areas addressed include improving student understanding of the design thinking process, enhancing collaboration and role assignment within teams, providing clearer instructions and guidance, and emphasizing the importance of the design process in addition to the final product. Many of these design moves have been marked as done, while others are partially completed or still in progress. Notably, efforts have been made to help students focus on the real-world implications of their projects and to ensure they understand the grading rubric and expectations for the course.

Iteration 2 - Fall 2021

Students faced various challenges in a design thinking project, including teamwork, time management, understanding research concepts, and using technology. To address these issues, instructors can modify project instructions and framing, emphasize collaboration and time management, provide resources and examples, and incorporate real-world applications. Confidence-building activities, proper orientation, and effective collaboration techniques can also help students overcome struggles during the project.

Iteration 3 - Fall 2022

Students experienced various challenges during the design thinking process, such as problem framing, prototyping, iteration, and creating deliverables. They struggled with divergent thinking, understanding the problem scope, and time management. Design moves that helped them were teamwork, learner agency, relevance, and clear instructions. Also, their experiences aligned with several theoretical principles, such as constructionism, cognitive constructivism, and situated learning. To address these challenges, instructors will provide additional guidance and support during the problem-finding stage.

The trajectory of three iterations

We analyzed the differences and similarities between three iterations. Common struggles across all iterations were related to problem finding or framing, with new

struggles like divergent thinking emerging in later iterations. In terms of what worked, there were no verbatim common categories across all three iterations, but semantically overlapping categories included relevance and agency, as well as social aspects. Problem understanding through researching appeared in 2021, while benefits of instructions or lectures emerged in 2022.

Design moves were proposed for each iteration based on the identified struggles, focusing on addressing challenges related to selecting solutions, team miscommunication, user testing, convergent thinking, problem identification, divergent thinking, empathy work, prototyping, and peer review. These design moves aimed to improve teamwork, build confidence, enhance understanding, and increase engagement in the learning process.

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Proposal Keywords: (3-5 keywords)

Project-based learning; Design Thinking for Engaged Learning; Learning Experience Network Analysis

