

Assignment 5: Bringing it all Together and Pitch

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EAD-861: Adult Learning

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Description of the Problem

Since the debut of widespread generative artificial intelligence in society, members of the academic community have expressed concern in the efficacy of their instruction given the widespread use and availability of this emerging technology. Instructors have expressed uncertainty, frustration, excitement, and hope regarding the role of AI in higher education and express a need for additional learning and development regarding AI in academia (Alqahtani & Wafula, 2024; Mathew & Stefaniak, 2024; Memarian & Doleck, 2024, Yu et al., 2024).

Academic professionals need training and development in artificial intelligence as it relates to teaching and learning in higher education. This includes basics of AI operations, AI ethics, policies, and standards, and instruction in AI-mitigative or AI-enhanced learning strategies (Alqahtani & Wafula, 2024; Mathew & Stefaniak, 2024; Memarian & Doleck, 2024, Yu et al., 2024).

Learning Objectives

This professional learning program was designed to increase AI literacy for Jacksonville University professors and staff. Learners can anticipate engaging in a variety of instructional activities designed to help build upon their existing AI knowledge, enhance their critical thinking and reflection around ethical and safe AI use, and provide guidance and ideation towards AI-enhanced or AI-mitigative learning design strategies.

AI Background Knowledge

Learners will be able to explain the basic concepts and terminologies of artificial intelligence, including machine learning, neural networks, and natural language processing.

AI Ethics and Policy

Learners will be able to critically assess the ethical considerations and potential societal impacts of AI technologies, including issues related to bias, privacy, and accountability.

AI and Learning Design

Learners will be able to design and implement AI-driven tools and strategies to enhance personalized learning experiences and improve educational outcomes for their learners.

Contextual Learner Analysis

The targeted demographic for this learning experience are adult faculty members at Jacksonville University in Jacksonville, Florida. This learning experience will be offered to all faculty, so a diverse array of background knowledge and specialty areas are represented. Common core characteristics may include being part of the same discourse community, having completed some form of higher education, and being active course facilitators and educational professionals. All participants use the same learning management system to facilitate learning at the university and all have access to Microsoft Copilot via their institutional logins (Jacksonville University, 2024).

No formal AI guidance has been provided by the university at the time of this program's launch, and all participants have the autonomy to allow, or disallow, AI use in their courses. It is assumed that participants will enter this learning opportunity with varying levels of knowledge as it relates to AI in higher education. Due to the diverse pool of participants, it is also assumed that there will be varying levels of comfort with AI in addition to a diversity of perceptions as it relates to AI's impact in higher education.

It is also assumed that the majority of participants do not have an extensive background in teaching and learning design. While experts in their content areas, this does not necessarily equate to expertise in learning design concepts and theoretical frameworks in teaching and learning (Oleson & Hora, 2013). Further, as these adult learners have varying schedules, availability, and background knowledge, learning should be flexible, learner-centered, and situated in their current lives.

Personal Philosophy Towards Learning

I view learning as a cyclical, organic, and lifelong process. Learning may be viewed as developmental, occurring throughout life in stages; learning may be viewed as a behavioral process, resulting in a change in how we behave or perform, or a cognitive or social process. Learning is something that occurs when we take what we know, and who we currently are, and expand existing parameters in a way that broadens our perspective. I believe learning should incorporate the learner's world, culture, and viewpoints. It is crucial to honor the learner's lived experience by creating adaptable, applicable, and student-focused learning experiences.

For adult learners, learning must be practical, applicable, and flexible, accommodating their unique adult responsibilities and priorities. Flexibility, organization, applicability, and choice are key to motivating and engaging adult learners. As adults may approach their teachers as their peers, effective learning experiences should respect their autonomy, identity, and background, while aligning with their unique needs. Learning should integrate new knowledge into existing schemas and be social, fostering collaboration and support for deeper understanding.

Theoretical Framework

Using Transformative Learning Theory as the theoretical framework for this adult learning program on artificial intelligence (AI) in higher education is highly justified due to its focus on fostering critical reflection and perspective transformation. Transformative Learning Theory, as articulated by Mezirow (1978), emphasizes the importance of challenging existing assumptions and encouraging learners to critically reflect on their experiences, which is crucial in the rapidly evolving field of AI. This approach not only enhances learners' understanding of AI concepts but also prepares them to adapt to technological advancements and ethical considerations in AI applications. Moreover, integrating AI into adult education through a transformative lens can promote deeper engagement and lifelong learning, as it aligns with the need for continuous skill development in a technology-driven world (Lytras et al., 2024).

Transformative Learning Theory provides a robust framework for designing AI education programs that are both reflective and adaptive to the needs of adult learners and has been used in scholarly literature to study teachers' understanding of the influence of social structures and belief systems on student learning via case studies (Christie et al., 2015). The Transformative Learning Theory is applicable to adult learning as it is designed to foster critical reflection and personal transformation in a multitude of settings (Cranton & Taylor, 2013). Since the rise of generative artificial intelligence, numerous studies on AI involve the use of transformative learning theories to guide their research given the transformative nature of the technology (Addy, Kang, Laquintano, & Deitrich, 2024; Walter, 2024).

When designing learning experiences based on artificial intelligence, it is important to understand the rate at which AI advancement has occurred, and the varying levels of knowledge, perceptions, and attitudes towards AI when designing and facilitating the learning experience.

Mezirow (1991) discusses transformative learning as learning that enhances “level(s) of awareness of the context of one’s beliefs and feelings”, critiques one’s “assumptions and particularly premises, an assessment of alternative perspectives”, the ability to “negate an old perspective in favor of a new one”, and the ability to “take action based upon the new perspective” (p. 161). When dealing with such a disruptive advancement as AI, we are asking educators to think of the disconfirming event (rise of generative AI), we are asking them to rethink what they believe about teaching and learning, and we are asking them to thoughtfully decide if, and how, AI will be used in their practices.

Using Mezirow’s early descriptions of transformative learning, this learning experience includes a stepwise process for learner exploration and discovery that aligns with Mezirow’s ten-step process for transformative learning. This process includes conceptualizing the disorienting event, being the rise of AI, critical self-examination of existing beliefs regarding AI and teaching and learning, the identification of a shared experience of discomfort amongst their peers, a strategic exploration of new options for instruction, the changing role of the course facilitator, and the building, testing, and implementation of new learning into existing roles and lives (Merriam & Bierema, 2014).

Guided by transformative learning, participants will explore the basics of artificial intelligence to better understand what it is and how it works, and will explore the ethical considerations associated with artificial intelligence use and misuse in academia. Participants will reflect on their own personal biases related to artificial intelligence with their professional learning community and will reflect on how artificial intelligence is used in their field and in the workforce. Due to the transformative and reflective nature of the topic and program, content will be arranged in sequence, starting with artificial intelligence background, history, and mechanics,

then moving on to artificial intelligence ethics and critical thinking development. Once foundational knowledge has been acquired, participants will advance to artificial intelligence use in learning design, and artificial intelligence exploration and skills development. The sequencing of the program is intended to foster critical thinking, collaboration, reflection, and individualized ideation and creation based on the specific needs and lives of the adult learners engaging in the course.

Content Presentation and Engagement Methods

This program has been designed with the adult learner in mind. As we know participants will be coming into this program with a variety of skills, schedules, and desired takeaways; flexibility, accessibility, and customization are key to motivating and engaging the participants.

Given the scope and rapid acceleration of artificial intelligence advancement, there exists a need for comprehensive experience that focuses on providing tailored guidance and instruction in areas that resonate with the learners. As such, the learning experience has been divided into a sequence of four month-long modules to facilitate that growth and development.

Participants may choose to engage in modules 1-3 according to their own goals. Each unit will consist of instruction, engagement, and reflection activities designed to advance participant comfort and knowledge with understanding, using, and implementing artificial intelligence into their practices, if they choose to do so. To qualify for the final module, Level 4: AI Explorer, they must have first completed all previous modules. All content in this experience is asynchronous with a final synchronous showcase at the end of each module.

Module	Learning Objectives	Key Tasks
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<p>Level 1: AI Navigator</p>	<ul style="list-style-type: none"> • Learners will explore the background of artificial intelligence, to include key terminology and definitions and will be able to define commonly used terms related to artificial intelligence • Learners will explore effective prompt generation and will use their learning to generate artificial intelligence output • Learners will explain bias and ethics related to artificial intelligence use 	<ol style="list-style-type: none"> 1. Examine current AI perceptions via reflective activity. 2. Engage in asynchronous direct instruction on AI basics and prompt generation 3. Provide artifacts of prompt generation in participant notebook. 4. Showcase item: AI prompt and artifact
<p>Level 2: AI Critic</p>	<ul style="list-style-type: none"> • Learners will critique artificial intelligence output for accuracy, applicability, and ethical use • Learners will explore potential concerns related to artificial intelligence and bias 	<ol style="list-style-type: none"> 1. Learners will reflect on what they perceive to be issues with AI bias and accuracy 2. Learners will engage in asynchronous direct instruction on artificial intelligence data sources and examples of bias in action

	<ul style="list-style-type: none"> Learners will develop artificial intelligence mitigative strategies in the classroom 	<ol style="list-style-type: none"> Learners will explore AI mitigative strategies using a dedicated AI Mitigation chatbot (MagicSchoolAI) Showcase item: Examples of bias in AI output
<p>Level 3: AI Innovator</p>	<ul style="list-style-type: none"> Learners will use generative artificial intelligence to enhance their existing learning design practices by generating products for academic implementation Learners will reflect on artificial intelligence use in academia and their field 	<ol style="list-style-type: none"> Learners will explore the course design process using the ADDIE model Learners will analyze current successes and areas of improvement in course content Learners will use generative artificial intelligence to create artifacts to supplement existing instructional content. Learners will create a resource guide that contains information on artificial intelligence use in their fields. Showcase item: resource guide and artifacts

<p>Level 4: AI Explorer</p>	<ul style="list-style-type: none"> • Learners will synthesize learning in previous modules to draft a custom AI use policy for their courses • Learners will generate an AI philosophy statement to implement in their courses alongside their AI policy • Learners will create a resource guide for AI use in their courses and practices. 	<ol style="list-style-type: none"> 1. Learners will use resources collected during previous modules to craft an AI use policy for students in their courses 2. Learners will use resources collected during previous modules to craft an AI statement for their courses 3. Learners will share reflections on the evolution of their understanding and approach towards AI because of the learning experience 4. Showcase item: video or written reflection on their growth in the area of artificial intelligence in teaching and learning
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Throughout this experience, various engagement methods will be used that provide feedback and insight while honoring the learners' schedules and lives. These engagement methods include:

1. Discussion boards
2. Video-based discussion activities
3. Journaling
4. Artifact creation and generation

5. Quizzes
6. Collaborative research article discussions

In employing a variety of methods to engage learners, this program will not only provide instruction tailored to the adult learner, but it will also model a variety of digital teaching and learning strategies that can be employed in their courses. The engagement and assessment techniques used in this learning experience align with scholarly literature involving adult learners. These were chosen as appropriate methods to use with this specific population due to their strengths documented in literature.

Method	Rational for Use	Alignment with Transformative Learning Theory
Asynchronous Learning- learners will be able to engage with all instructional content on an asynchronous basis, with all work being due by the end of the modular month.	Literature supports asynchronous learning for adult learners as is exhibited by the Andragogy Learning Theory that emphasizes the importance of self-direction, life experiences, readiness to learn, and problem-solving in adult learning experience (Knowles, 1980).	Asynchronous learning supports the Transformative Learning Theory by providing a flexible learning environment where learners can reflect at their own pace. This flexibility allows for deeper reflection and critical evaluation, key components of

		transformative learning (Mezirow, 1991).
Discussion Boards/Video-Based Discussions- learners will use discussions to reflect on their own transformative experience while learning from others.	Numerous scholars discuss the importance of discussion in learning as a conduit for critical reflection and transformation, including Mezirow's (1991) Transformative Learning Theory, Vygotsky's Social Constructivist Theory (1978), and thoughts contained in Freire's <i>Pedagogy of the Oppressed</i> (2000).	Mezirow's (1991) Theory of Transformative Learning centers on the importance of discourse in helping adults critically reflect and transform their perspectives.
Journaling- learners will be asked to reflect in journal entries between the learner and the facilitator. These journals will be a space to honestly evaluate	Numerous scholars discuss the importance of journaling and reflection in adult learning, allowing learners to critically examine their experiences for deeper insight	The reflective nature found in journaling is central to Mezirow's (1991) theory of Transformative Learning. Journaling provides an opportunity for learners to make meaning of their

individual progress aligned with their individual goals.	development (Brookfield, 1995; Hiemstra, 2001; Kolb, 1984; Moon, 2006; Schön, 1983).	experiences as they become more or less comfortable using AI
Artifact Generation- learners will create artifacts in each learning module that will assist them in navigating the transformative learning process, while providing tangible output for use in courses.	Constructivist Learning Theory (Piaget, 1972) discusses how learners can construct their own understanding and knowledge of the world via experience and reflection. With adults engaging in creation, we are employing a constructivist approach to these activities.	Constructivist learning aligns with Transformative Learning Theory in that it promotes active engagement of the learners, critical reflection, and experiential learning (Mezirow, 1991). Creating artifacts also contributes to Mezirow's idea of acquiring knowledge and skills to implement plans, preparing learners for implementing their learning.
Quizzes- utilized sparingly, learners will engage in quiz activities that measure understanding of typically	The quiz portions of this learning experience correlate to the Cognitivism Learning	Cognitivism and Transformational Learning Theory are related in several ways; both involve

<p>static and un-changing topics, such as the background and development of artificial intelligence and skills related to AI literacy development.</p>	<p>Theory which emphasizes mental processes and schema theory (Piaget, 1972). This will allow program facilitators to measure the processing of information presented by learners.</p>	<p>active processing of information, both involve metacognitive activities such as self-monitoring and self-regulation, and a similar emphasis on organization of knowledge, with cognitivism focusing on schema organization and transformational learning focusing on organizing and evaluating frames of reference. (Mezirow, 1991; Piaget, 1972).</p>
<p>Collaborative Research Discussions- learners will collaboratively read and annotate, as a cohort, shared journal articles and AI policy documentation throughout the program.</p>	<p>Social Constructivism (Vygotsky, 1978) emphasizes the importance of social interaction and collaboration in the construction of knowledge. In reading and analyzing literature together, this experience is leveraging</p>	<p>Mezirow's Transformative Learning Theory (1991) emphasizes the role of dialogue and discourse in the process of transformative learning. These discussions will allow participants to challenge assumptions and</p>

	<p>the power of socializing and collaboration to provide varying insight into the topic at hand, and the concepts of the more knowledgeable other may be employed.</p>	<p>perspectives, leading to transformative insights.</p>
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Pitch



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