Teaching AI as a Productivity Tool: Practice and Pedagogy

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Abstract

This presentation explains a classroom practice that empowers students to deploy artificial intelligence (AI) applications as productivity tools. The practice begins with workshop-style instruction on prompt engineering and ethical considerations followed by an AI awareness assignment in which students select an appropriate AI application, use it to deliver a project and then write reflection essays on their selected tool and the processes they used. This classroom practice is presented within the broader context of a university initiative in teaching AI that includes campus-wide workshops and student competitions. While leadership educators must hold students accountable for academic integrity when using AI, this practice emphasizes proactively teaching students effective uses for AI rather than merely addressing it in a negative connation associated with academic dishonesty.

Session Learning/Participant Objectives

- Participants will understand AI in the context of ongoing digital and technological transformation and will explore three leadership theories applicable when navigating constant change.
- Participants will learn about an approach for incorporating AI tools into classroom teaching that emphasizes student exploration.
- Participants will consider professional readiness for teaching about AI and deploying AI tools in the classroom.

Session Description

As early as 2018, the *Chronicle of Higher Education* explored "how artificial intelligence is changing teaching" (McMurtrie, 2018, p. 1). However, since ChatGPT, an artificial intelligence tool, became the fastest technology application on record to reach 100 million users (Paris, 2023), a sense of urgency surrounding artificial intelligence (AI) has taken hold on college campuses. While much of the concern is over AI's role in perpetrating academic dishonesty, this presentation focuses on its potential to positively influence student outcomes. As two Wharton scholars concluded: "intentionally implementing teaching strategies with the help of (AI) can be a force multiplier" (Mollick & Mollick, 2023, pp. 3). We concur with the assertion that "it is a nearly undeniable fact that ChatGPT and other generative AI have come to stay and will continue revolutionizing the current educational system" (Baidoo-Anu and Owusu, 2023, p. 58). We recommend leadership educators approach AI as part of society's ongoing digital and technology transformation. In this context our approach has foundational support found in three robust leadership theories as explained by Potosky & Lomax (2013): complexity leadership

theory (organizational processes), relational leadership theory (dynamic relationships) and transformational leadership theory (inspirational vision).

Various scholars have demonstrated how AI tools, when deployed effectively, improve student motivation and engagement (Huang, Lu & Yang, 2023; Pratama, Sampelolo & Lura, 2023). In the spirit of those findings, our presentation shares a practice that begins with workshop-style instruction on prompt engineering and ethics training. This instruction is followed by an AI awareness assignment in which students select an AI application, use it to deliver a project and then write reflection essays on their selected tools and the processes they used. The presentation describes a range of tools available to students that go beyond the popular ChatGPT, including applications such as Midjourney (images), Ryter (writing assistant), Soundful (audio), and Synthesia (presentations). This classroom practice is also discussed in the broader context of a university initiative for teaching AI that includes campus-wide workshops and student competitions organized by a faculty learning community under the guidance of our Center for Teaching and Learning. The overall initiative considers artificial intelligence proficiency as necessary career-preparedness. Baidoo-Anu and Owusu wrote: "integrating generative AI tools in the classroom and teaching students how to use (them) constructively and safely could also prepare them to thrive in an AI-dominated work environment after school" (p. 59).

Finally, this presentation addresses the professional readiness of teachers to effectively deploy and teach AI tools. Celik (2023) asserted "the knowledge to technologically and pedagogically utilize AI-based systems is crucial for the teaching profession" (p. 1). On this point, the presentation will explain how the lead author of this proposal became a "certified prompt engineer" in preparation for the workshop-style teaching and to better inform the overall development of the classroom practice (see resource link below).

References

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Resources

The Blockchain Council's Certified Prompt Engineer course provides online training to promote efficiency and skill in creating prompts with large language models. The training is intended to increase proficiency in the craft of generating prompts that produce precise and contextually relevant responses. For more information about the course, please visit: https://www.blockchain-council.org/certifications/certified-prompt-engineer/