Leveraging AI in the Classroom: Enhancing Learning Experiences at DeVry University



by Genevieve Sapijaszko, Professor, DeVry University



Artificial Intelligence (AI) has emerged as a transformative force in the rapidly evolving educational landscape, offering unprecedented opportunities to tailor and enhance the learning experience. DeVry University, has been embracing technological advancements for more than 90 years and has strategically integrated AI into its curriculum and pedagogical practices to benefit students and educators. This paper explores the multifaceted ways AI is utilized within DeVry University to augment the learning experience, reflecting on both the current implementations and future directions of AI in education.

Adaptive Learning Platforms

Since 2018, DeVry has been adopting AI-powered adaptive learning platforms, focusing on math courses. These platforms embody the essence of personalized education, dynamically adjusting the content and difficulty level based on individual student performance. The goal is to identify and bridge knowledge gaps, solidifying students' understanding of fundamental concepts. This approach can help enhance learning outcomes and fosters a more engaging and supportive learning environment where students can progress in their own way, without feeling left behind.

Curriculum Integration of AI and Machine Learning Courses

Acknowledging the critical role of AI in shaping future job markets, DeVry has integrated a dedicated course in Artificial Intelligence and Machine Learning into six of its degree programs and two certificate programs. This strategic inclusion ensures that students are conversant with the theoretical underpinnings of AI and gain hands-on experience in applying AI techniques in real-world scenarios. By equipping students with these industry-relevant skills, DeVry is preparing them for the challenges and opportunities of the AI-driven workplace.

The DeVry AI Lab

The establishment of the DeVry AI Lab in 2023 marks a significant milestone in the university's commitment to integrating AI into education. The lab serves as a hub for researching the skills necessary to excel in an AI-enhanced workplace, influencing curriculum development, learner experience design, and career services. Through the AI Lab, DeVry is not just teaching about AI; it embodies AI principles in its educational approach, helping students become well-prepared to navigate and contribute to an increasingly AI-centric world.

Personalized Support and "Nudges"

In partnership with Civitas Learning Space, DeVry utilizes AI to provide personalized support and encouragement to students through "Inspire." This tool employs data analytics to identify students at risk of falling behind, offering timely interventions that can significantly enhance student engagement and success. These "nudges" guide students to receive the support they need precisely when needed, fostering a nurturing and responsive educational environment.

Integrating AI Chatbots for Enhanced Learning

The integration of AI chatbots into DeVry's CEIS 312 course (Introduction to Artificial Intelligence and Machine Learning) exemplifies how AI can create more efficient and engaging learning environments. Chatbots offer instant answers to student inquiries, reducing frustration and response wait times. This 24/7 availability allows students to receive assistance outside regular office hours, promoting flexibility and accessibility in learning. Moreover, the chatbot's interactive nature makes the learning experience more dynamic, encouraging students to develop self-reliance and critical thinking skills.

Practical Application of AI in Course Content

In CEIS312, the practical application of ChatGPT to demonstrate Python coding for tasks such as dataset cleaning and algorithm development underscores the tangible benefits of AI in education. This hands-on approach reinforces theoretical knowledge and cultivates valuable technical skills, preparing students for the complexities of the modern workforce.

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Conclusion

DeVry University's extensive approach to integrating AI into the classroom underscores the transformative potential of technology in education. By personalizing learning experiences, enhancing curriculum relevance, and fostering an interactive and supportive learning environment, DeVry is not only responding to the technological imperatives of the present but also anticipating the educational demands of the future. As AI continues to evolve, its role in education is poised to expand, offering exciting opportunities for innovation in teaching and learning. DeVry's ongoing commitment to leveraging AI positions it to be a leader in crafting the future of education, where technology and human potential converge to create enriched learning experiences for all.

