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Original Article

The Uncertainties of Student Affairs Professionals in the Age of Artificial Intelligence

Francisca Owusu[1*] *& Bismark Wiafe Bimpong*[1]

[1] Ohio University, Athen Ohio 45701. USA.
[*] Author for Correspondence ORCID: https://orcid.org/0009-0007-1126-0966; Email: fo840222@ohio.edu

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ABSTRACT

The introduction of artificial intelligence (AI) has led to a global revolution across industries and service sectors. AI raises concerns such as job displacement and academic dishonesty. Their duties, involving using different technologies, have led them to incorporate AI technology into their work. This paper delves into the future of the student affairs profession, with a specific focus on the impact of artificial intelligence. The paper analyzes existing literature to identify emerging trends of uncertainties and points out potential opportunities associated with integrating AI into the role of student affairs professionals. This paper explores the nuances of integrating AI into student affairs, including both the opportunities and potential threats. In this paper, it was argued that professionals should identify the aspects of their job that necessitate a personal touch and concentrate their efforts on enhancing human experiences.

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INTRODUCTION

"Hello, my name is Siri, I'm here to help answer any questions you may have." This is an example of a common greeting found on university websites and other service provider platforms. It shows how artificial intelligence (AI) is utilized in today's world. Daily, AI is used to find weather conditions, road directions, online banking, and payment of goods and services. 77% of people today rely on technology to survive (Science in Our World, 2015). AI has already made its way into the educational environment, replacing traditional on-campus

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registration, teaching, and evaluation with online interactions and digitization (Cabellon & Junco, 2015). Researchers have examined the implications of incorporating this new AI technology into student affairs. However, not enough is done on the nuances associated with the opportunities and threats. Therefore, this paper explores the complexities by answering the following questions: What are the uncertainties for student affairs professionals with the introduction of the new AI? How different is the new AI from the traditional technological tools used by professionals? Where should our focus as professionals be in the world of AI?

There are layers and levels to using AI within higher education (Barret et al., 2019). According to Cheston and Shock (2017) the basic level of artificial intelligence is considered conversational interfacing, which allows for surface-level interactions with students. Conversational interface offers students the opportunity to receive answers to their questions through text-based communication. Not only is this an example of AI but also an example of how student affairs professionals strategically adapt systems to meet and serve students at their point of needs. Thus, the services of professionals are tailored towards the generational needs of students.

While technology has been used in education for a long time and continues to advance, research shows that the COVID-19 pandemic accelerated the integration of computer technologies into higher education (Rashid & Yadav, 2020). It significantly increased the reliance on technology in higher education, particularly through the implementation of online education. This situation had a profound impact on the roles and responsibilities of student affairs professionals, compelling them to adapt and evolve in response to the challenges posed by the pandemic. The need for remote work and reliance on digital networks for communication, payments, and learning became necessary. All sectors had to quickly adapt to the digital age. Education suddenly transitioned from the traditional classroom setting to an online environment prompting educators to rapidly embrace AI and technology in the education system.

Data from a study conducted by Chu et al., (2022) shows a significant rise in the use of AI since 2020 with a 150% increase compared to the previous two years (2020-2019). The authors further stated that the rise in 2021 and 2022 could have been caused by the massive increase in higher education faculty having to teach with technology during the pandemic lockdown. As we move forward from the pandemic, it has become evident that numerous areas within the education sector can be enhanced through technology. Student affairs have become closely intertwined with various technologies, making it necessary for professionals to explore the impacts of AI on student affairs.

AI embodies a range of functionalities and finds widespread application in various industries and educational institutions. It is designed to solve simple and complex problems and make work easier and faster. AI can help to improve the efficiency of any business process, including higher education. For example, chatbots on institutional websites help aid individuals seeking information or support at any hour of the day. Chatbots not only save time for staff members but also ensure that users receive the help they need at any hour of the day. It saves time for other necessary duties. Professionals now have the convenience of automating routine tasks, allowing them to focus on more important matters. Machines have taken over these activities, freeing up professionals' time.

AI elicits both concern and opportunity for professionals in higher education. To effectively cater to the current generation of students, it is necessary to constantly adapt the roles of student affairs professionals to keep pace with the ever-evolving technological landscape. This adaptation demands investing and updating existing systems and providing comprehensive training to ensure professionals can fully function in the AI-driven world. Moreover, integrating AI into professional work also raises concerns about job displacement as AI becomes increasingly involved in providing services to students. Additionally, the malfunction of AI systems could potentially expose confidential information, highlighting the need for caution.

Whether we embrace it or not, AI is here to stay (Crompton & Burke, 2023). Therefore, professionals

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must proactively address the uncertainties it brings as it enters higher education. This paper synthesized ideas from existing literature to identify the tensions and trends associated with integrating AI into student affairs. It discusses the contemporary use of AI in student affairs and proposes best practices to mitigate the consequences of the AI revolution on professionals and their work.

Defining Artificial Intelligence

To comprehensively understand how professionals have utilized AI, it is imperative to first grasp what AI truly entails. What comes to your mind when you hear artificial intelligence? Is it machine, computer, technology, ChatGPT, all the above, or something else? Authors and scientists have defined AI in several ways according to the context in which they are employed. The Organization for Economic Corporation and Development (2020) defines AI as a machine-based system that can make predictions, recommendations, or decisions that impact real or virtual environments based on a set of objectives defined by humans. These AI systems are designed to operate with different levels of autonomy. Additionally, the United States Security Commission on AI (2021) expresses AI as the capacity of a computer system to solve problems and accomplish tasks that would ordinarily require human intelligence. This definition encompasses a wide range of technological inventions including mobile applications and a variety of software such as word processors, presentation software, and Excel, that are utilized to perform complex calculations, generate insights from data sets, and facilitate data visualization in student affairs.

In practical terms, AI is like a team of digital brains. It can solve complex math problems and analyze big data for valuable insights Wang (2019). AI is not just about writing tools or mobile apps for student learning; it also powers sophisticated software like Excel, which goes beyond simple calculations (Hutson et al., 2020). According to Open AI (2023), AI is the simulation of human intelligence in machines programmed to think, learn, and solve problems like humans. In essence, AI technologies are like digital colleagues that adapt, learn, and help professionals navigate the complexities of modern education. For this paper, AI is defined as any technological inventions and systems that adopt algorithms and function like humans. These functions include solving mathematical problems, communicating with humans, analyzing and interpreting data, making decisions based on available information, learning from experience, and adapting to new situations.

Historical Context

AI has been around since 1956 and was initially expected to have a significant impact on society (Ocaña-Fernándezet al., 2019). However, the initial lack of progress was due to the approach taken by early systems, the authors expressed. The historical milestones of AI, according to Haenlein and Kaplan (2019), include the creation of the first electronic computer in the 1940s. Additionally, Haenlein and Kaplan (2019) explained that the Dartmouth Conference in 1956 marked the beginning of AI as a field. It led to the development of expert systems in the 1970s and 1980s and the rise of machine learning and deep learning in recent times.

One significant milestone was the development of Natural Language Processing (NLP) techniques in the 1950s and 1960s, which aimed to enable computers to understand and generate human language (Mosteanu, 2022). NLP enables machines to understand and interpret human language, leading to advancements in virtual assistants like Siri and Alexa (Haenlein & Kaplan, 2019; Mostaneanu, 2022). Machine learning algorithms, on the other hand, have made significant strides in areas such as recommendation systems, fraud detection, and personalized marketing (Bhbosale et al., 2020). Haenlein and Kaplan (2019) further stated that this innovation paved the way for applications such as automated translation systems and voice assistants that we rely on today.

The emergence of computer vision in the 1960s and 1970s led researchers to begin exploring ways to teach computers to interpret visual data, leading to the development of algorithms capable of recognizing objects, faces, and even complex scenes (Mosteanu, 2022; Ocaña-Fernándezet al., 2019). The history of AI demonstrates human creativity and the advancement of technology. For professionals to comprehend the ongoing revolution that AI has brought to their work, it is imperative to delve into

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the historical context of Artificial Intelligence. Therefore, this section of the paper highlights the emergence of Google Search and Chatbots as examples of how AI has transformed the way professionals in higher education give and find information and gain knowledge on the internet.

METHOD

The study utilized a method that involved evaluating, analyzing, and synthesizing 35 articles to generate findings that would address the research questions. All articles selected for the study were peer-reviewed and were essential for answering the research questions. The databases that were utilized in the research process included Google Scholar, ERIC, and the Ohio University library database. Below are the findings after critically analyzing the documents.

FINDINGS

Contemporary Uses of AI in Student Affairs

Having examined the historical contexts of AI in student affairs, there is a need to delve into the contemporary utilization of AI. This exploration is necessary to articulate the transformative impact that AI has had on student affairs. Additionally, exploring the current applications of AI tools in student affairs provides valuable insights into how professionals unknowingly incorporate AI into their everyday tasks. Therefore, this section of the paper discusses the contemporary use of AI in the role of student affairs with a specific focus on data analysis, content transcription, and generative AI.

In addition to the chatbots mentioned earlier in this paper, student affairs professionals employ AI in various other forms. AI tools help professionals to integrate information, analyze data, and use the resulting insights to improve decision-making (Russo-Spena et al., 2019). Professionals use AI to generate transcriptions for content to make it accessible to diverse students. This approach changes the way educational materials are delivered and consumed, ensuring that no student is left behind due to hearing impairments, language barriers, or any other factors that may hinder their learning experience. In this section, I will explore how professionals use AI in data analysis, content transcription, and adopt generative AI to improve daily tasks.

Data Analysis with AI

One of the most essential functional areas where professionals use technology is data analysis. Professionals use technological tools to analyze their data to make informed judgments. Learning management systems like Canvas and Moodle integrate AI algorithms to assess students' engagement patterns (Campus Alert, n.d.; Garcia et al., 2021). For example, Campus Alert (n.d.) indicates that these systems can analyze students' interactions with course materials, track their progress, and identify areas where they might be struggling. Additionally, institutions like Georgia State University have employed predictive analytics to enhance student retention rates (Renick, 2020). By analyzing historical data and student behavior, the university's AI system flags at-risk students, allowing educators to intervene promptly and offer personalized support.

Moreover, AI-driven tools like IBM Watson Analytics are adopted to examine complex datasets, providing valuable insights for strategic decision-making (Russo-Spena, 2019). These technologies enable higher education professionals to not only enhance academic experiences but also streamline administrative functions. Additionally, higher education institutions are turning to advanced AI-driven tools such as IBM Watson Analytics, stepping into the realm of intricate data analysis. IBM and Watson can navigate complex datasets, extracting invaluable insights that inform strategic decisions (Russo-Spenaet et al., 2019). Integrating IBM into higher education has improved personalized education (Crampton and Burke, 2023; Muñoz et al., 2023).

AI is not only strengthening academic experiences; they are reshaping the administrative processes (Ocaña-Fernández, 2019). Pirehpour (2023) for instance, mentions that Arizona State University optimizes course schedules based on students' preferences and resource availability through AI algorithms. The complexity of data and technology signifies a future where higher education is finely tuned, offering both students and institutions unparalleled efficiency and support. It is necessary

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to recognize that a system malfunction can lead to the distortion of information. This error can trigger false alarms, instilling fear, and panic among affected individuals. Therefore, to prevent any disruption, professionals employ individuals who diligently monitor the system and promptly rectify any errors.

Content transcription

Another great AI invention adopted by professionals is the content transcription. Professionals are increasingly adopting modern technologies to enhance accessibility and make work simpler. One notable application of content transcription is the speech-to-text features widely used platforms such as Microsoft Word. This innovation shows the transformative power of AI in real time. For instance, the speech-to-text button in Microsoft Word exemplifies AI in action. Mosteanu, (2019) points out that with the adoption of advanced algorithms, AI tool converts spoken words into written text, making it immensely valuable for students and staff with different needs.

Even though speech-to-text technology exists, its widespread adoption in educational settings remains limited (Ahmed, 2022). Despite its potential, many students and professionals might not be fully aware of its availability or may find it challenging to integrate into their daily routines. Additionally, the inaccuracies in transcriptions lead to frustration and reduced trust in the technology, discouraging users from adopting it. However, it is essential to acknowledge that the limited adoption of speech-to-text technology could also stem from a lack of awareness and training rather than inherent inefficacy.

Desmet et al. (2018) contend that both the development and adoption of computer-assisted interpreting have been limited, and there is a lack of scientific research on its impact. Institutions and professionals can bridge this gap by providing comprehensive training programs, raising awareness about the benefits of such tools, and integrating them into educational platforms. Overcoming these challenges could pave the way for more widespread and effective use of speech-to-text technology, enhancing accessibility and inclusivity in education and student affairs.

Generative AI

Before the release of ChatGPT, conversational agents have been increasingly used in higher education (Al Muid et al., 2021). Generative AI offers professionals ease of access and availability from any location (Baidoo-Anu & Owusu, 2023). They have the potential to address the concerns of multiple learners at the same time and can adapt to their individual needs (Elshan & Ebel, 2020). Generative AI stands at the forefront of innovation within student affairs, transforming how professionals interact with students and manage administrative tasks in higher education. One significant application lies in personalized communication.

Additionally, student affairs departments employ generative AI algorithms to craft emails, newsletters, and announcements for various student segments (Yeralan & Lee, 2023). For instance, during orientation, generative AI can generate individualized welcome emails to new students, addressing them by name and providing specific details about campus resources and upcoming events. This personalized approach fosters a sense of belonging and connection from the beginning of their academic journey (Muñoz et al., 2023). Informative content creation is an impactful use of generative AI (Gimpel et al., 2023). Educators use technology to automatically generate FAQs and address common student queries (Barus & Surijati, 2022). For example, a university's student support chatbot powered by generative AI produces responses to questions about financial aid, campus facilities, or academic resources.

Yang and Evans (2019) state that a chatbot that can quickly and correctly generate respond to inquiries improves student satisfaction. This is because it gives students timely, relevant information, allowing them to make the most of their college experience. However, Sandu and Gide (2019) discovered in their study that there is a potential threat of compromising personal information when utilizing AI chatbots. The study revealed that 77.8% of respondents expressed concerns regarding the possibility of receiving inaccurate advice from AI chatbots. These findings highlight the need for professionals' attention when adopting the technology.

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Generative AI also plays a vital role in event planning and management. Professionals use AI technologies to draft event descriptions, agendas, and promotional materials (Barrett et al., 2019). For instance, an AI-powered system generates event invitations, including event highlights, and registration details. Moreover, generative AI assists in drafting post-event summaries and feedback surveys, streamlining the entire event management process. Specifically, platforms like Canva used by professionals in designing presentation PowerPoint and event flyers integrate AI-driven features that assist in creating visually appealing event invitations (Olatunde-Aiyedun & Hamma, 2023). Canva's design tools utilize AI algorithms to suggest layout options, font choices, and color palettes based on user preferences and the event theme.

Additionally, generative AI aids student affairs professionals in data analysis and reporting (et al., 2021). AI-driven tools assist professionals in generating reports on student engagement, attendance patterns, and feedback trends. Professionals in higher education commonly utilize Qualtrics, a widely used survey software. According to OpenAI (2022), Qualtrics incorporates an algorithm and statistical function that enables users to analyze survey responses and make well-informed decisions. These insights help assess the effectiveness of initiatives and tailor support services to meet students' evolving needs.

The contemporary use of AI technology in student affairs exhibits a shift towards efficiency in higher education. Professionals can extract information from a vast amount of data at a reduced time. Accessibility has been improved with the use of content transcriptions and administrative tasks simplified with the help of AI technologies. As technology continues to revolutionize higher education, professionals are starting to consider the potential impacts it may have on the institution and their careers. The next section of this paper will provide an overview of the uncertainty professionals face as technology advances in higher education.

The uncertainties of student affairs professionals

Even though the introduction of AI has brought about many opportunities for professionals, it also comes with uncertainties. Professionals are facing a dilemma as they weigh the potential benefits of AI against their concerns about its consequences (Bhbosale et al., 2020). These uncertainties cover a range of issues, including the ethical use of student data and the fear of job loss due to automation. As AI becomes more prevalent in higher education, professionals are dealing with questions about privacy, ethics, and the core principles of human-centered education. It highlights the importance of carefully and thoroughly examining these uncertainties in the AI-driven higher educational landscape.

Job displacement

The improvement in technology has significantly improved various processes in student affairs. However, it raises questions about the potential loss of jobs. Joamets and Chochia (2020) assert that the biggest concern among the public is that AI technologies may soon take over many jobs currently done by humans resulting in an increased in job displacement. According to SEO.AI (n.d.) in May 2023, there was a total of 3,900 job losses in the United States that were directly attributed to AI, accounting for 5% of all job losses during that month. A study conducted by Autor (2015) posits that technological advancement has historically led to job displacement. University websites commonly use AI-powered chatbots to quickly respond to frequently asked questions that were previously answered by humans. They are efficient in routine tasks such as providing information about enrollment, campus facilities, and academic programs.

Additionally, virtual advisors can help students choose courses based on their interests and career goals, reducing the line between human and machine interaction in education. The application of AI and machine learning can bring about a transformation in the type of work, making jobs more difficult and demanding advanced skills (Tiwari, 2023). As universities increasingly rely on AI for these tasks, concerns arise about the essence of human staff in roles that can be fulfilled by automated systems. This shift prompts a reassessment of the roles and responsibilities of student affairs professionals in the face of the technological revolution (Ulloa-Cazarez, 2017).

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However, it is important to approach this issue with careful consideration. While AI has the potential to automate repetitive tasks, the human qualities of empathy, understanding, and personalized guidance are fundamental in the field of student affairs (Ulloa-Cazarez, 2017). For instance, a chatbot can provide general information about academic deadlines, but it lacks the emotional intelligence to assist a distressed student dealing with personal challenges. Additionally, the implementation and management of AI systems require skilled professionals who can ensure ethical use, accuracy, and alignment with the values of the institution (Tiwari, 2023).

Therefore, instead of completely replacing jobs, AI is changing the landscape of student affairs. It emphasizes the significance of acquiring new skills, being adaptable, and focusing on the unique human attributes within the profession. Ulloa-Cazarez (2017) explained that professionals need to be lifelong learners and master what makes humans unique. Therefore, universities must strive to strike a delicate balance between maintaining the human-centered nature of education and embracing the technological advancements offered by AI.

Privacy and consent

AI in higher education raises concerns regarding student privacy and consent. As educational institutions adopt AI-driven technologies to enhance learning experiences, they often collect large amounts of data, including personal information, academic performance, and behavioral patterns of students (Tundrea, 2020). This data can be used to customize educational content, identify learning challenges, and provide personalized recommendations. However, the collection and analysis of sensitive data raise questions about how this information is stored, shared, and protected (Ocaña-Fernández & Valenzuela-Fernández, 2019).

The implications of AI technologies on student privacy are intense, as the mishandling of this data can result in serious breaches and violations of individuals' rights. AI can recognize one's identity by drawing conclusions from other connected devices (Tundrea, 2020). Through sophisticated machine learning algorithms, AI has the capability to predict sensitive details from deceptive data (Muñoz et al., 2022; Tundrea, 2020). Although data anonymization methods strive to safeguard personal information by eliminating direct identifiers, the risk of re-identification through AI-driven inference is a growing concern (Tundrea, 2020).

In addition, adopting AI in educational settings raises concerns about how knowledge is acquired. According to Ocaña-Fernández and Valenzuela-Fernández (2019), human-centered education not only focuses on sharing information but also on developing critical thinking, problem-solving skills, and ethical reasoning. Ulloa-Cazarez (2017) stated that while AI systems are capable of processing large amounts of data, they may not promote the deep and thoughtful learning experiences that human educators strive for. The danger is that students may become passive recipients of information instead of active participants in their education. It is imperative to strike a balance between using AI as a tool to enhance education and preserving the core principles of human-centered learning. Professionals are faced with the challenge of integrating AI in a way that complements and enhances the human touch rather than completely replacing it. This ensures that students continually receive a comprehensive, empowering, and human-centered educational experience.

What is different and what is the same?

Understanding the impact of AI in higher education and the role of professionals is important to distinguish between what has stayed the same and what has changed compared to traditional technology. Comparing conventional technology with advanced AI applications can better help us understand the evolving nature of student support services.

Personalized student support

Professionals consistently adopt technology to provide quick and personalized support to students. Historically, academic advisors used early database systems to keep track of student records, allowing them to provide personalized guidance based on individual progress and needs (Haenlein & Kaplan, 2019). Student Information Systems (SIS) like Banner, PeopleSoft, and Jenzabar were widely used by professionals before the widespread introduction of AI (Alamri et al., 2021). The SIS platforms allow

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professionals to access and update student records and manage course enrollment. Another system that is widely used by professionals in higher education is the Learning Management System (LMS). LMSs like Blackboard and Canvas are widely used for course management such as grades and assignment submissions (Garcia et al., 2021).

Haenlein and Kaplan (2019) further stated that in situations where institutions lacked advanced database systems, professionals used email and spreadsheets to keep track of student records. Email is used for communication, while spreadsheets such as Microsoft Excel or Google Sheets are used to manually monitor student progress. With the integration of AI, personalized support has become highly advanced.

AI-driven systems now analyze data points such as academic performance, extracurricular activities, social interactions, and personal challenges to create detailed student profiles (Alamri et al., 2021; Muñoz et al., 2022). AI-driven SIS like Ellucian offers a more advanced version of these services, providing personalized academic roadmaps and timely alerts for students and advisors (Alamri et al., 2021). Additionally, Klotzman (2020) mentions that AI algorithms analyze students' academic performance and preferences, generating course recommendations through platforms like Degree Planner ensures that students receive personalized academic guidance.

One major difference is the extent and accuracy of personalized support that AI now makes possible. Instead of giving general advice, AI can provide customized guidance to each student, addressing their unique academic difficulties, mental health issues, or career goals (Muñoz et al., 2022). For example, AI systems can analyze student's past academic records and online activities to anticipate potential challenges. If a student shows signs of falling behind, the system can automatically suggest relevant resources and study materials, or connect them with appropriate support services (Tundrea, 2020). This individualized approach, based on AI's analytical abilities, ensures that students receive specific assistance exactly when they need it, creating a nurturing learning environment. However, professionals must admit that a system malfunction or a wrongful assessment is likely to affect the entire learning experience.

Additionally, AI-driven personalized support is different from traditional support mechanisms in that it is proactive rather than reactive. In the past, support systems would only respond to issues after they had already arisen (Haenlein & Kaplan, 2019). However, Ocaña-Fernández and Valenzuela-Fernández (2019) assert that AI can predict potential problems before they become serious. For instance, an AI system can analyze a student's behavior and identify patterns that indicate high levels of stress. It can then notify advisors or counselors, who can intervene early and offer assistance and resources to the student. This shift from reactive to proactive support is a major improvement, as it helps to improve the overall student experience and create a more supportive campus environment.

Data-informed decision

In the past, professionals relied on basic data to understand student needs and track academic progress (Haenlein & Kaplan, 2019; Rudoph, 2023). Professionals utilized basic forms of data, such as survey results and academic performance records, to gain insights into student behavior and needs. However, with the integration of AI, this approach has undergone a significant transformation. AI algorithms can now process large amounts of data and extract valuable insights at a high speed. This evolution enables institutions to make more nuanced decisions based on complex patterns, which greatly contributes to student success initiatives.

AI enables institutions to employ predictive analytics, allowing them to anticipate potential challenges faced by students and implement proactive intervention strategies (Georgia State University, n.d.). This shift not only represents a quantitative increase in data volume but also a qualitative improvement in the precision and effectiveness of decision-making processes. It emphasizes the ongoing significance of utilizing data to navigate the complexities of student affairs in higher education.

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Student well-being

In the historical context of student affairs, the promotion of student well-being involved using various technological tools, although they were simpler compared to today's advanced AI systems (Haenlein & Kaplan, 2019). Telephone hotlines, online forums, and email services were early forms of technology used to provide support. These platforms allowed students to connect with counselors or mentors, address concerns, and seek guidance. Similarly, Stone et al. (2022) contend that in the contemporary era of AI, the goal of promoting student well-being remains the same - creating a supportive environment for students. However, the methods have evolved.

Current AI-powered platforms, such as chatbots, replicate and enhance human interaction (Barus & Surijati, 2022). They engage with students in real time, offering immediate responses to queries, providing mental health resources, or even conducting regular check-ins. The continuous integration of technology into the support structure reflects the historical objective: ensuring that students feel heard, valued, and supported throughout their academic journey (Barrett et al., 2019). The continuous thread between the past and present lies in the fundamental goal of promoting mental and emotional well-being (Stone et al., 2022).

Professionals are discovering new and creative ways to use technology and AI in analyzing data, which is fundamentally changing the landscape (Garcia et al, 2021). Learning management systems, such as Canvas and Moodle, have become platforms for integrating AI, where advanced algorithms examine how students engage with course materials (Campus Alert, n.d.; Garcia et al., 2021). These systems carefully analyze students' interactions, track their progress, and identify potential areas of difficulty. According to Campus Alert (n.d.), Georgia State University has successfully implemented predictive analytics by mining historical data and studying student behavior to identify those who may be at risk. With the help of these AI systems, educators can quickly intervene and provide personalized support, leading to improved student retention rates.

SUGGESTIONS AND CONCLUSION

Even though intelligent learning and research are happening everywhere and educational researchers from all around the globe are studying how AI can transform education, traditional teaching and learning in universities, based on face-to-face or in-person methods is still the primary environment. Findings from these studies show that the trend towards the use of AI in higher education has significantly increased. Scholars are conducting different types of research to understand how AI can make learning even better.

Scholars have conducted systematic reviews to focus on a specific subject domain. For example, an empirical study conducted by Muñoz et al. (2023) examined the impact of AI on student engagement in higher education. Their findings revealed that AI-powered tools, such as intelligent tutoring systems and virtual reality simulations, have shown promising results in enhancing student engagement levels. AI tools according to the authors, provide personalized learning experiences, adapt to individual students' needs, and offer immediate feedback, which leads to improved learning outcomes. Similarly, a study conducted by Garcia et al. (2021) explored the use of AI in improving assessment practices in higher education. The researchers found that AI-based assessment methods, such as automated essay scoring and computerized adaptive testing, not only save time for instructors but also provide more objective and consistent evaluations.

AI is unable to understand feelings, motivations, and the subtle aspects of human interaction. AI operates solely on algorithms, data, and predefined patterns without genuine emotions (Huang et al., 2021). The absence of emotional intelligence means that AI cannot offer the human touch and empathetic understanding that is necessary in student affairs. Therefore, professionals in higher education should concentrate on improving emotional and interpersonal skills. These skills encompass active listening, interpreting non-verbal cues, and providing empathetic support. By emphasizing the human-centric aspects of their role, professionals can adopt a balanced approach where AI

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complements their abilities instead of replacing them.

The impact of AI extends beyond technology and into various sectors of society (Bhbosale et al., 2020). For instance, AI has transformed how we communicate and connect with others through social media platforms. It will continue to be a valuable tool for assisting employees in their daily tasks for a considerable period. As a result, professionals need to receive retraining to effectively handle and supervise AI. Even though it might be costly, the benefits of investing in retraining employees to effectively handle and supervise AI may outweigh the costs (Tiwari, 2023). It has the potential to significantly improve productivity by automating repetitive tasks, enabling employees to focus on more complex and strategic work.

In conclusion, the paper used a document analysis approach without collecting data, which proved to be a significant limitation. Furthermore, it could have been more focused by studying a specific institution or country. Despite these challenges, the study yielded valuable insights that can benefit student affairs professionals, higher education institutions, and college students in their decision-making processes when utilizing AI. Just as it is beneficial for students to no longer write their theses by hand or with a typewriter and for professionals to calculate enrollments no longer manually, AI tools can enhance productivity. Features like spell check, grammar support, and auto-completion in Microsoft Word have become the norm. Advanced machine learning-based translation programs, NLP-based services like Grammarly, and algorithmic support from Google Scholar for navigating scholarly literature have improved linguistic quality. Therefore, it is equally important to effectively incorporate AI into student affairs.

AI is not just a concept; it is a digital revolution that is reshaping how professionals work and learn. Instead of pondering the impact of AI on higher education and student affairs, professionals should shift their attention toward discovering innovative and efficient methods to enhance learning through AI. Professionals should explore the appropriate timing for implementing AI in their work. For instance, professionals should decide when physical interaction is appropriate for students versus machine-based interaction.

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