



Application of Artificial Intelligence in School Counseling

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Abstract

Artificial Intelligence (AI) is rapidly transforming various sectors, including education. In the realm of counseling, AI offers the potential to transform the way students receive support. This study, application of artificial intelligence in school counseling identified virtual counselors, emotional intelligence assessment and academic and career guidance as some of application of AI in guidance and counseling in schools. Benefits of AI in counseling, such as improved accessibility, early intervention, and data-driven insights were also identified. It also looked at ethical considerations, privacy concerns, and the importance of human-centered approaches. The concludes that integration of Artificial Intelligence (AI) into the field of counseling will presents a significant opportunity to revolutionize student support services in schools. It was thus, suggested that educational institutions should invest in the provision of AI infrastructure, which include data storage, processing power, and cybersecurity measures to facilitate the application AI in school counseling. By addressing these issues, AI can be used to enhance student well-being and academic success.

Keywords: Guidance and Counseling, Application of Artificial Intelligence, Student Support

Introduction

Artificial intelligence (AI) is rapidly transforming various sectors in cyberspace, including information access, processing, and delivery. This significant technological innovation has the potential to change the way of life, potentially replacing human roles in some jobs. Freberg (2024) advanced that the rapid advancement of technology, particularly AI is transforming traditional counseling practices in education. By using AI, educational institutions can provide

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personalized support to students, addressing their unique needs and promoting their overall well-being (Freberg, 2024).

Artificial Intelligence (AI) is a computer science field that aims to create intelligent machines capable of performing tasks requiring human intelligence, such as learning, reasoning, problem-solving, and decision-making, by simulating human cognitive processes (Teachflow, 2023). Freberg (2024) define artificial intelligence as a field of computer science where machines to perform cognitive functions like thinking, learning, language use, and problem-solving. It allows machines to refine their processes and output based on a goal, similar to how humans learn to perfect a golf swing or master a new language. The machine and human brain share similarities, with the latter being faster and potentially less biased in reasoning due to the symbiotic relationship between computer science and cognitive science. AI refers to the ability of computers or machines to execute tasks that would normally require human thought (Ririn, 2024). While AI seeks to replicate cognitive functions in machines, guidance and counseling focuses on supporting and developing these very human cognitive abilities in individuals.

Guidance and counseling according to Bobga Tita-Nghamun Johnson (2016) is a cognitive educational service (inside or outside the school system) that assist people understand themselves, provided the clients reveals accurate, reliable, and valid information about themselves and their environment. According to Oviogbodu (2015) guidance and counselling can be defined as a number of procedures in assisting an individual to resolve his problems. Therefore, guidance and counseling in education is a process that helps students to develop their educational, psychological, and vocational potential (National Open University of Nigeria, 2022). The goal is to help students achieve a level of personal happiness and social usefulness.

Artificial Intelligence (AI) in School Counseling

AI in counseling has come to stay, transforming guidance counselors into tech-savvy mentors capable of providing personalized advice with data-driven precision, transforming the counseling experience for students (Pawar, 2024). AI can be applied in guidance and counseling in the following ways:

1. **Virtual therapists and chatbots:** Olawade, Wada, Odetayo, David-Olawade, Asaolu, and Eberhard (2024) posit that virtual therapists and AI-powered chatbots are revolutionizing mental health resources, offering 24/7 support to individuals with mental health issues. They further put forward that these digital entities address a critical gap in mental healthcare, enabling individuals to seek help whenever needed. Olawade et al., (2024) also advanced that crisis hotlines are using AI-powered chatbots to engage in empathetic conversations, offer coping strategies, and connect users with human therapists or crisis helplines. These chatbots can also be programmed to notice signals of distress and escalate concerns to human counselors as needed (Freberg, 2024).
2. **Create a Video to Promote Your Career and College Guidance Office:** AI can also be used to market educational services. Institutions can create professional-quality movies using only plain text to promote the benefits and successes of their career and college advice offices. These movies are quick, inexpensive, and simple to create, which expands the mediums you can use to engage your pupils (Pawar, 2025).
3. **Emotional Intelligence Assessment:** AI tools can analyze students' written or spoken responses to assess their emotional well-being and identify potential areas of concern. This can help counselors prioritize their interventions and provide targeted support (Teachflow, 2023).

4. **Academic and Career Guidance:** Kulugh, Aondover, and Faki (2025) posit that AI systems can assess students' academic records, interests, and professional objectives to provide tailored advice on course choices, college applications, and career paths. This allows students to make informed decisions about their educational and career paths (Pawar, 2024)

The Importance of AI in School Counseling

Teachflow (2023, Para. 13) identified the following as the importance of AI in school counseling:

1. **Accessibility:** AI can bridge the gap between students and counseling services by providing accessible support anytime, anywhere. This is particularly beneficial for students in remote areas or those who face barriers to traditional counseling services.
2. **Early Intervention:** AI tools can identify early warning signs of emotional distress or mental health issues in students. This enables counselors to intervene promptly and provide the necessary support, potentially preventing more significant challenges in the future.
3. **Personalization:** AI-powered systems can tailor counseling interventions to individual student needs. By analyzing data and patterns, AI can provide personalized recommendations and resources, ensuring that each student receives appropriate support.
4. **Scalability:** With the increasing demand for counseling services in schools, AI can help alleviate the strain on limited counseling resources. AI tools can handle multiple student interactions simultaneously, allowing counselors to reach a larger number of students effectively.
5. **Data-Driven Insights:** AI can analyze large datasets to identify trends and inform evidence-based decision-making.
6. **Reduced Stigma:** AI-powered tools can provide a non-judgmental and confidential space for students to seek help.

Ethical Implications of Artificial Intelligence in Guidance and Counseling

1. **Data Privacy:** AI systems frequently depend on the gathering and examination of vast volumes of personal data, such as behavioral, learning, and student information (Claned, 2024). This data must be protected from unauthorized access, misuse, and breaches. Olafare (2023) also opined that data privacy is an issue of concern in the application of AI in education.
2. **Data Security:** Ensuring the security of sensitive student data is crucial to prevent cyber attacks and data breaches (Claned, 2024). Robust security measures must be implemented to safeguard sensitive student data (Olafare, 2023). It was stressed that one of the foremost challenges in the integration of AI in education revolves around privacy concerns. As AI systems collect and analyze vast amounts of student data, including performance metrics, learning patterns, and behavioral data, the potential for privacy breaches becomes a critical issue (Butt, Davelis, Abbod, Eghan, & Agbo, 2022; Ayeni, Al Hamad, Chisom, Osawaru, & Adewusi, 2024).
3. **Algorithmic Bias:** AI algorithms can perpetuate existing biases and discrimination if they are trained on biased data. This can lead to unfair treatment of certain groups of students (Claned, 2024). United Nations Educational, Scientific and Cultural Organization (2023) advanced that Generative AI tools in education raise ethical concerns from five perspectives: hidden bias and discrimination, human connection, intellectual development, psychological impact, and access and equity. Access to technology and educational resources may exacerbate inequities, while AI systems may reduce human-to-human interaction and social-emotional aspects of learning. Long-term impact on intellectual development, cognitive development, emotional well-being, and manipulation needs to be investigated.

Potential Challenges Facing Artificial Intelligence in Guidance and Counseling

Teachflow (2023) identified the following as some of the challenges facing AI in guidance and counseling:

1. **Ethical Considerations:** Integration of AI into counseling and therapy will raise ethical concerns regarding privacy, data security, and informed consent. Establishing robust guidelines and regulations is crucial for responsible use.
2. **Human Connection and Emotional Support:** AI cannot replace the human connection and emotional support provided by counselors and therapists. Balancing AI-driven interventions with human interaction is essential for maintaining therapeutic relationships.
3. **Bias and Fairness:** AI algorithms can be susceptible to biases in the data they are trained on, potentially leading to unjust or discriminatory outcomes. Continuous monitoring and auditing of AI systems and diverse datasets are necessary to mitigate bias and ensure fairness. Privacy and algorithmic bias are significant concerns in career counseling, as AI algorithms could perpetuate stereotypes or miss out on niche talents.
4. **Technical Challenges:** AI implementation may face technical challenges, such as system reliability, performance issues, and compatibility with existing infrastructure, require robust technical support and training.

The Future of Counseling

As AI technology continues to advance, it is expected to see even more innovative applications in the field of counseling. By embracing AI as a tool, educational institutions can empower students to reach their full potential and create a more supportive and inclusive learning environment.

Conclusion

The integration of Artificial Intelligence (AI) into the field of counseling presents a significant opportunity to revolutionize student support services. By harnessing the power of AI, educational institutions can provide tailored, efficient, and accessible support to students, addressing their unique needs and promoting overall well-being. AI-powered counseling systems offer a range of benefits, including early intervention, personalized support, and data-driven insights. These systems can analyze vast amounts of student data to identify patterns, predict potential issues, and provide timely interventions. Furthermore, AI-powered chatbots can offer 24/7 support, address common student concerns and provide guidance on a variety of topics.

However, it is crucial to acknowledge the ethical implications of AI in counseling. Privacy and security must be prioritized to protect sensitive student data. Additionally, AI should be viewed as a tool to augment, not replace, human counselors. A human touch remains essential for building rapport, providing empathy, and addressing complex issues.

Suggestions

To fully realize the potential of AI in counseling, the following suggestions were outlined:

1. Government and private school owners should invest in AI Infrastructure by providing computers, stable internet service and constant power supply to enable school counselors to effectively apply AI in their routine practices.
2. Government and private individuals in collaboration education financing agencies should provide training to counselors on how to effectively use AI tools and interpret AI-generated insights in order to enhance counseling practices.

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3. Government and private individuals should collaborate with AI specialists to create AI-powered counseling tools that will promote local content in Nigeria which will enhance AI-powered counseling services in Nigeria schools.

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