INTEGRATION OF ARTIFICIAL INTELLIGENCE CONCEPTS IN GUIDANCE SERVICES TO FACLITATE LEARNING IN SCHOOLS

Dr. Celina U. Mbachu[1], Dr. Nkem C. Okafor[2] and Ogbuoji Silvia N.[3]
[1]Department of Guidance and Counselling, School of Education
[1,2,3]Federal College of Education (Technical), Umunze
[2]Department of Psychology
[3]Department of Early Childhood Care and Primary Education

Abstract

*The paper examines integration of artificial intelligence concepts in guidance services to facilitate learning in schools. Guidance and counseling services in schools are aimed to equip students with the skills and knowledge useful to manage diverse issues they face in schools, such as coping with academic challenges, interpersonal relationship, resolving conflicts peacefully and even managing their emotions. With emerging trends in technology, school counselor should be appraised with the present realities in innovation such as digital technology tools, artificial intelligence as well as being able to apply them effectively in providing guidance services. The review covered artificial intelligence concept, the AI channels or modes of learning, the three key approaches to use AI to enhance teaching and learning, counsellors uses of AI in guidance services, challenges of Ai implementation. It was concluded that Artificial Intelligence as innovative strategy for learning needs to be implemented in schools to facilitate teaching and learning. Major suggestions made include that AI should be incorporated in teachers education programme for adequate training of teachers on AI knowledge, inclusion of Al education in educational curriculum courses by curriculum planners in secondary schools, schools to be equipped with Al facilities, Government and schools to make sure that there is regular power supply in schools for effective implementation of Al in schools , workshops and seminars should be organized for educators on Al concepts and government to equip guidance and counseling department / units for proper /*implementation of Al and other counseling programmes in schools.

Keywords: Artificial Intelligence. Concepts. Guidance Services. Facilitate. Learning.

Introduction

The desire of every student is to be fully equipped and well prepared to step into adult life in order to be useful for himself and the general society in which he **lives.** One of the ways to achieve this goal is to make sure that the right peg is placed on the right

whole through the provision of guidance services to students. Guidance and Counseling programme in school is one of the students' support services designed to support students in managing their academic, vocational, personal and social challenges. It is the process of helping an individual to discover his educational, vocational and psychological potentialities and thereby achieving optimal level of personal happiness and social life. Ezidimma (2015) define guidance as the process of helping the individual to understand himself and the world. The author stated that counseling is the process of establishing relationship to identify people's needs, design strategies and services to satisfy these needs and actively assist in carrying out plans and actions to help make formal decision, solve problems, develop self awareness and live healthier lives. Guidance and counseling is a formalized educational package aimed at assisting individuals to attain fullest of self development and self realization or identification of self-potentials, which helps them to get into appropriate profession or vocation and life style that would make them functional and successful to themselves and the society in which they live. (Nnadi, Uzokwe and Oguzie, 2020).

There are contemporary issues in educational system presently relating to effective methods of teaching and learning as regards to artificial intelligence (AI) and internet use which students need to be well grounded with on their knowledge and applications. Guidance services will help immensely to provide students with services needed to meet this innovation and emerging trends on technological advancement in teaching and learning methods. (EYO, 2014).

Artificial Intelligence (AI) Concepts

Artificial Intelligence refers to the development of computer system that can perform task typically required human intelligence

Bodisere (2025) viewed artificial intelligence (AI) as a branch of computer science focused on creating machines capable of performing tasks that typically require human intelligence, such as learning reasoning, problem solving and decision making. It is the capability of computational system to perform tasks typically associated with human intelligence such as learning, reasoning, problem solving, perception and decision making.

The learning AI Channels or Modes of Learning

(1) Learning: AI System can learn from data and improve performance.
(2) Problem Solving: AI System can analyze complex problem and provide solution.
(3) Reasoning: AI System can draw conclusion and make decision based on data and rules.
(4) Perception: AI System can interpret and understand data from sensors, images and other sources.

The Three key Approaches to use AI to Enhance Teaching and Learning

These are: (a) AI generated content (b) AI analysis and (C) AI interaction.

(A) AI Generated Content: Educators and students can utilize AI to create lectures, convert documents into slideshows, generate images that enhance learning elements, develop simple apps for feedback or answering questions, produce audio and even create podcast on course content (podcast-digital audio content often featuring discussions, interviews or story telling)

Shannon, Nikki and Kevin (2025). The use of AI has the potential to enrich learning by creating multimodal channels of learning and these include:

a) Visuospatial Delivery: Visuospatial delivery of content for example, may benefit AI generated visuals such as infographics, charts or concept maps, images, videos, diagrams that clarify abstract ideas.
b) Auditory Delivery: Auditory delivery may include AI produced podcast, sound, music, voiceovers or presentations that support students comprehension.
c) Language Based Delivery Approach or Textual: This may include AI-generated articles, written text, captions, summaries or reports that deepen understanding through written materials

(B) AI Analysis: AI analysis is defined as using AI to evaluate students generated items and/or resources such as journal articles, data or codes of ethics. This method allows students to explore and reflect on content, appealing to various delivery methods through dynamic feedback and exploration. For example, a visuospatial approach may provide insight from data visualizations and AI-generated feedback (Gligorea, Cioca, Oancea, Gorski, and Tudorach, 2023).

(C) AI interaction: An interactive approach to using AI allows application of theoretical knowledge in practical contexts, prompting deeper comprehension and skill development. AI powered simulations (interactions) such as visual clinical sessions or AI Chabot's (conversation or voice interaction), supports experimental learning by allowing students to practice skills in real-world-like scenarios and active engagement in a risk-free environment (Bayly-Castareda, Ramire-Montoya, Morita – Alexander, 2024). Instructors can generate case scenarios and simulated clients and even ask the AI model to generate questions and prompts on its own creation.

AI in Guidance Services

Guidance and Counselling programme aim to equip students with skills and knowledge useful to managing diverse issues they face such as coping with academic challenges, resolving conflicts peacefully and managing their emotion as well as acquiring new skills of technological advancement. It is the duty of the professional school counsellor to equip the students with the concepts and knowledge of AI to enhance students learning in schools through the use of appropriate curriculum and effective instructional methods. As AI is a new innovation in educational system, the school counsellor is expected to be well-grounded with the AI technological know how to be applied in teaching and learning. Pantsar (2025) advised that counsellor educators looking forward to use AI for assessment should also be aware of its current limitations because generative AI had significant weakness in reasoning and symbolic processing.

Counsellor's Use of AI in Counselling Services Include:

(1) The AI activities are organized into three categories, Viz AI – Generated content, AI-analysis and AI-interactions. These three categories ensure that AI integration remains practical, flexible and aligned with ethical and educational priorities. Building on this foundation, it is necessary that counsellors should develop AI navigation skills, strategies for preparing students and teachers to engage with AI, and a structured method of designing AI related activities and assignments to facilitate and enhance learning in schools.

(2) With advancements in AI uses, Oyebisi, Anyama and Ahimie, (2024) noted that AI technologies such as predictive, analytic and machine learning can analyze vast amounts of data to identify patterns, predict students' behaviours

and outcomes. It also provide personalized insights, aiding in accurate diagnosis and tailored treatment plans. Now the counsellor using his professional capabilities should proactively address potential issues before they escalate as concerned behaviours, also provide interventions tailored to individual students needs.

(3) AI can assist to identify students at risk of academic failure, mental health issues or social challenges (Johnson, Smith and Anderson, 2023). There is need that school counsellor should develop target support plans that address these specific concerns and problems.

(4) AI powered tools like chatbot (programme simulating conversation through voice interaction) and virtual counselling platforms offer innovative ways to engage students seeking information or assistance thereby reducing the burden on human counsellors and ensure that help is always available. The integration of AI in school counselling calls for the need for counselors to make sure that the ethical consideration of counselling is maintained especially as regards the client privacy. The sensitive information and data of the client are safeguarded to protect against unauthorized access and misuse.

(5) AI generated content provides opportunity for educators to enhance in-class activities as well as independent practices. AI-generated resources provide suggestion for discussions or group projects and/or tailor suggestions for independent reflection and self-placed study. The school professional counsellor should ensure that AI generated content are available in schools for educators (teachers) and students to enhance in-class activities and independent practices for effective learning.

(6) The flexibility that generative AI provides make it an invaluable tool for creative teaching, group discussion and independent reflection (Bayly Castaneda, Ramirez Monotoy and Morita-Alexander, 2024). The success of these approaches relies significantly on the counsellor's ability to create meaningful and well-structured AI instructions. Thoughtfully designed prompts clear learning objectives, and careful planning are crucial for ensuring that AI-enhanced learning promotes engagement, understanding and growth for all students.

(7) AI can serve as an early-stage tool to support the development counselling micro-skills, including the use of behaviours. For example, AI platforms could provide immediate, structured feedback on role play transcript, helping students identify missed opportunities for empathy or immediacy before engaging in more formal evaluations with counsellor.

(8) Structured AI prompts can aid students in cultivating reflective practice skills, encouraging them to assess their own counselling session critically and thoughtfully. For example, AI generated reflection questions could prompt students to consider theoretical integration, client responsiveness, and counsellor bias following mock or real sessions, fostering habits essential for ongoing professional development.

Benefits of AI

1) Improve Engagement: AI can help to increase students' engagement and motivation.

2) Enhance Understanding: It can help leaners better understand complex concepts in learning/studying.

3) Increase Retention: AI can help improve knowledge retention and recall through its uses in learning.
4) Professionalization: Training in AI programme will help in producing professionals who will specialize in its areas.
5) Easy Presentation of Information: Using multimedia elements of AI will help to enhance presentation of data/information as well as help to cater for different learning styles and prefaces.

Challenges of AI Implementation

(1) Most of educators have not been adequately trained in the concepts of AI. Even most of the counsellors have not been developed technical literacy and critical evaluation skills on the implementation of AI. With adequate training, counsellors may adopt these technologies without fully understanding their ethical limitation risks.
(2) Time constraints, ethics reviews and technology anxiety among educators and students may contribute barriers for the use of AI and its implementations (Chan, 2023)
(3) Poor power supply and network issues can disrupt effective implementation of AI in schools.
(4) Educators may encounter technical difficulties, ethical concerns, and uncertainty about best practices of AI which may hinder effective implementation of AI.

Conclusion

Integration of artificial intelligence concepts in guidance services will help to offer opportunities to facilitate learning in schools. The good knowledge of AI activities organized into three categories of content creation, analysis and interaction will enable the school counsellors and teachers to systematically and purposefully introduce AI to be in line with the educational curriculum as well as specify the better teaching methods to achieve the goals of learning in schools. Ethical considerations and students' preparations emphasized as these elements ensure AI services as a tool to enhance learning and not replacing human expertise. Artificial Intelligence as innovative strategy for learning needs to be implemented in schools with the aim of facilitating effective guidance services also to enhance students' learning.

Recommendations

The paper therefore make the following recommendations:
Artificial Intelligence education should be incorporated in teacher education programme for adequate training of educators on the knowledge of AI.

1) There is need for the inclusion of AI education in our educational curriculum course by the curriculum planners at least in secondary school level for students to have adequate knowledge of AI.
2) All schools including secondary school levels should be well equipped with AI facilities for the effective implementation of AI in schools.
3) Government and school managers should make sure that there are regular power supply in schools for effective implementation of AI.
4) Since most of the educators including school counsellors have not been adequately trained on the concept of AI, there is need to organize workshops and seminars for them to be adequately trained t.

8) Government should adequately equip guidance and counselling departments/units in schools for the proper implementation of AI and other counselling programmes in schools.

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