



THE ROLE OF ARTIFICIAL INTELLIGENCE (AI) IN ENHANCING TEACHING PRACTICE

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Abstract

The Role of Artificial intelligence (AI) in enhancing teaching practice is a major discourse that is revolutionary in our contemporary digital age. Anchored on these fundamentals, the paper argues that throughout the world there are innovations taking place particularly in the field of artificial intelligence and recommends that these evolving break- through, be brought into the teaching practice program, because of its innumerable benefits. The researcher used expository technique as methodology, and was- guided by the constructivist's theory, emphasizing interactions and active learning to effectively interrogate, manipulate and improve the training of teachers in order to produce high quality teachers. Thus, the paper debunks all attempts to label AI as a wild goose chase. The findings presupposes that combining artificial intelligence with teaching practice will result in the production of knowledgeable teaching practice students that will greatly improve efficiency in the profession.

Keywords: Artificial Intelligence, Human Intelligence, Teaching Practice

Introduction

Artificial Intelligence (AI) which has come to stay is an innovation that has greatly improved digital technology and changing the dynamics of learning. Postulations from Biblical spheres, seers and theologians posit that these innovations, which are permeating all frontiers of human endeavors, had evolved from the endless efforts and search of man to produce tools, with which to till the earth.

Artificial Intelligence (AI) according to Egere has created unquestionable progress and significant advancements in healthcare, education, science and in many other facets of human progress and well-being, creating new jobs through high-tech and software's company. Technologically AI encompasses various technologies, including machine learning, neural networks, and language processing. In the academia majority of people will find AI tools useful in scholarship that are potentially designed to save time, resource and it is inclusive as its take care of the needs of a person with disabilities. According to an online source, AI refers to the simulation of human intelligence processes by machines, particularly computer systems including learning, reasoning and self-correction. While Artificial Intelligence can be used in various fields including healthcare, finance, autonomous vehicles, it can equally be used to enhance the teaching profession especially in the area of teaching practice which is a compulsory scheme for all intending teachers.

To make the abstract real, the teacher must be familiar with the resource gadgets in order to effectively utilize them. AI tools which offers appreciable information and interaction must be cultivated along with the educational objectives to provide wider range on reading materials, visual aids and auditory aids which are often beyond the reach of students. Thus, the students-teachers who are the harbingers of the education profession must familiarize themselves with all these innovative gadgets in order to interrogate the fundamentals in the education frontiers.

Intelligence

Intelligence according to an online source is "the ability to acquire and apply knowledge and skills". Sharma (2008), sees it as the capacity for abstraction, logic, understanding, self-

awareness, learning, emotional knowledge, reasoning, planning, creativity, critical thinking and problem solving. The word intelligence was derived from the Latin verb *intelligere*, which means to comprehend. The word *intelligere* stems from the Latin noun *intelligentia*. Hetherington (2014) avers that the word is closely-linked to the metaphysical and cosmological theories including the theories of immortality. Thus, for Ratzinger, The objectivity of science is much more in line with the idea of creation, AI fundamentally being- produced from activities of the logos. God's Spirit filled Word.

Concomitantly, Egere (2024), asserts that human intelligence involves an elastic use of cognitive abilities, a response to God's creative works and mandate to humanity, "Be fruitful and multiply, and fill the earth and subdue it," (Gen.1:28), and as encapsulated in Exodus 31:1-5, "See, I have called by name Bezalel, the son of Uri, son of Hur, of the tribe of Judah, and I have filled him with the spirit of God, with ability and intelligence, with knowledge, and all craftsmanship, to devise artistic designs, to work in gold, silver, bronze, in cutting stones for setting, and in carving wood, to work in every craft."

According to Naseri there are different types of intelligence namely; (1) human intelligence, to him the human person is both an animal and a spirit, who possesses a cognitive function as a higher animal, and with this cognitive function she or he is able to adapt to novel conditions and learn from experiences. (2) animal intelligence, (3) object intelligence (artificial intelligence) and even (4) plant intelligence although not all scientists agree on the latter postulation. Consequently, the reference to St. Francis of Assisi to objects like the moon, the stars as his brother is gradually coming to bear as inanimate objects are now displaying intelligence as in artificial intelligence. Intelligence is therefore a gift or talent crafted in the soul of a man in order to carry out his vocation.

Artificial Intelligence

This is a computer system- software machine developed to exhibit intelligent behavior. The essential idea in the concept of AI is the performance, by machines, of tasks that typically require human intelligence (Naseri, 2025).

Furthermore, he asserted that the traditional symbolic logical reasoning of the 1950s gave way for expert systems of the 1980s and 1990s wherein the original intent was to simulate human cognitive processes. Thus, the outcome was the production and development of ICT from the analog stage, firstly, managed by NITEL in Nigeria in the 1980s and from the introduction of mobile phones in 1990s managed by the Global System for Mobile Service (GSM) brought new opportunities. In an age of rapid scientific and technological advancement attributed to the interrogation of human, animal, plant and object nuances, artificial intelligence without any prejudice stands out.

According to Naseri, AI originated from the works of John McCarthy's workshop in 1956 at Dartmouth University in Hannover, New Hampshire, where they had resolve to scientifically produce machines, which would be called intelligent, like the way human do. According to Egere, John McCarthy coined **the phrase artificial intelligence at the Alan Turing and John Von Neuman** championed computer science and information theory conference in the Dartmouth conference in 1956. Therefore, at best they remain digital entities, sometimes called robots, as they cannot have a hybrid since they cannot produce a soul. These robots are capable of treating a patient in the hospital. Teaching students in the classrooms and replacing men in the farm and maybe not distant from now, drive the Dangote trucks. AI is a kind of auto complete tool contingent on the availability of a large volume data fed in, it is thus the representation of the works and actions carried out by computer engineers and scientists.

According to Wikipedia, an example of AI tool is CHATGPT machine. CHATGPT is not an acronym; it stands for "Chat Genrative Pre-trained Transformer". It answers questions and provide information on a wide range of topics. This machine can be applicable in multiple areas like education, entertainment, and business. Google lens is another. This AI tools allows users to take photos. In order to identify object taking their picture is important as students can get information about plants animal or things by photographing and uploading their images. This tool will be very vital for students-teachers who are required to present their teaching aids with

state of the art skills.

According to Russell and Norvig (2010) AI can be categorized into two main types, Narrow or weak AI and General or strong AI. The former is design to perform a specific task, such as facial recognition, language translation while General AI performs any intellectual task that a human can, such as reasoning, problem solving, and learning. AI has the capacity to revolutionize education as it has done in other spheres of various strata of human development.

Differences between AI and Human Intelligence

Naseri posits that intelligence in human does not necessarily imply the same, when used of humans and when used of machines. Intelligence in human is a faculty that pertains to the person in his or his entirety: it is intrinsically linked to the spiritual nature of the human person, endowed with soul, intellect and free will. In AI, intelligence are understood functionally, often with the assumption that the activities characteristic of the human mind can be broken down into digitized steps that machines can only replicate. The intelligence of a machine revolves around its ability to perform specific intellectual tasks, but it is bereft of the full breadth of human experience like abstraction, emotions, creativity and the aesthetic, moral and religious sensibilities, as well as the totality of the expressions characteristic of the human mind. (Naseri, 2025).

Some Important Terminologies of AI Technology.

Algorithms.....	Set of rules to be- followed in the calculation or other problem solving operations, especially by a computer
Chat.....	refers to the conversational nature of the model
Generative.....	refers to the model's ability to generate text.
Pre-trained	signifies the model has been trained on a large data set before fine

- tuning for specific tasks
- Transformer**..... refers to the underlying architecture used in the model, which is designed for processing sequential data.
- Machine learning**- Is the use of algorithms and data to create autonomous or semi-autonomous machines.
- Deep learning**..... combines algorithms into neural networks

Benefits of AI Tools to the Teaching Profession

The revolutions of the digital space is offering us unique lens through which the nuances of feminisms are being evaluated and adopted such as the robot siri, , Sophia, germinoid, asimo, aiko that are seemingly female. The extraordinary power of these machines has raised the status of man to a god and as if this is not enough, further advancement is changing artificial general intelligence (AGI) to artificial super intelligence which are seemingly crossing the threshold of divinity. While the combination of AI with virtual and augmented reality is creating immersive learning experiences (Chen et al, 2020)

Concomitantly, one great way AI machines can be of use in the teaching practice process is in the way of communication. Many of our students-teachers who have problem of reading and are poor in pronunciation can substitute AI Machines that can talk very well, pronounce very well and read passages efficiently with accuracy for the benefits of both learner and teacher. Again, AI machines is not restricted to book learning alone it is a smart tool for test taking.

Another way AI can be of great benefits is in the area of companionship, which aiko- AI is basically produced to do. Other AI applications promote youth engagement, peer group interactions, improve sense of community building, transparency, confidence building etc. All of which are essential fundamental for the formation of the student teacher.

Teaching

Teaching is a process of giving instruction to impart knowledge, facts, skills, attitudes, interest and aptitude by a knowledgeable person and more experienced person to one who is less

knowledgeable. A teacher is a professional who uses his wealth of experience, competence and knowledge of content to instruct a less experienced person. The teacher is the fulcrum in which learning revolves because he has an in-depth knowledge about his field and the needs of the learner (Okubotimibi et al, 2019). Bello (1981) posits that teachers, next to students, are the most crucial inputs in the field of learning. While Jean Jacques Rousseau laments that man was in chains for lack of good teachers.

Practice

Practice is a strategy in teaching through which those who are novice and who desire to acquire the skill of the profession learn by doing. There is no amount of theory, unless accompanied by practice that can enable a learner to gain mastery of knowledge or skills. That is why the saying practice makes perfect is apt and is one of the most crucial teaching principle.

Teaching Practice

Teaching practice refers to the practical application of teaching skills and methods in a real classroom setting. The teaching practice exercise is one of the structures in a teacher education program. During the exercise, students are post to various schools of their choice for a semester or a year as the case may be to have experience of the practical aspect of the profession. While the duration of the scheme depends on the institutions or better put varies from institution to institutions what matters is that it is a basic and inevitable part, for the professional preparation and certification of teachers that bridges the gap between theory and practice. Kolawole C.O.O Et al (2016) posit that teaching practice is the opportunity given to the students-teachers to practically- demonstrate the content knowledge they have acquired in their institutions. Teaching practice because of its fundamental nature of the exercise is a compulsory scheme that students-teachers must participate in before they graduate.

Importance of teaching practice

1. It enables students-teachers to develop the requisite pedagogical skills through observation of professional teachers in action in real school setting. In addition, it gives the

student- teacher the privilege of being further-guided by a subject teacher.

2. It provide the necessary exposure useful for the elimination of stage freight and gives the trainees how to apply theoretical knowledge within the short periods of their instruction.
3. It enables the student-teacher to have a classroom teaching experience through real world experience
4. It gives the students-teachers an opportunity to interrogate the profession, helps him/her to improve in effectiveness, boost self-confidence and prepares him/her ahead of future challenges.
5. It provide an opportunity for self-reflection and constructive feedback from mentors, pupils and peer group.

Shortcoming of the Programme

1. The financial plights of students are not necessarily considered.
2. Some supervisors do not go at all and may be the first to collect their allowances.
3. Wrong timing of the exercise
4. Sometimes there is a disconnect between theory and practice
5. The host school may not be conducive and may be where things are done haphazardly
6. Inappropriate strategies by students- teachers to earn marks.
7. Supervisors may favour their relations.

The Roles of AI in Enhancing Teaching Practice

The need to have artificial intelligence to assist in many aspects of the teaching calls for urgent attention. As has been observed, Teacher education focuses on effective instruction, strategies and various methodologies requiring the integration of technology. According to Kolawole (2015), it is teachers more than any other factor that determine what learners can achieve in the teaching and learning situation. Therefore, when students-teachers who are still in the developmental stage of the profession use AI tools, they can greatly benefit from them.

From experience, many people are finding the WhatsApp app to be very helpful because of its ingenious way of facilitating information and enhancing community. There are plethora of AI that are suitable for the teaching practice some of

which include the Google lens, AI- powered chatbox, virtual assistants and social media platforms where interaction and learning becomes fun. Rather than just depending on ones' understanding artificial intelligence that support or complement knowledge are essential interaction component for students-teachers to engage learning process from various angles. This is in line with the constructivist theory nuances that connect new ideas and information of the past to knowledge. AI-powered Chabot's is the research engine that enables one to find exactly what one is looking for. Therefore, the increasing use of AI tools is a step in the right direction. Though challenges that students-teachers can have in the integration of AI is that most of them lack the digital literacy and adaptive teaching skills.

Modern educators use AI tools to track student progress, and support diverse learning needs. According to Hattie and Timperley (2007) AI-powered communication tools such as ALEKS, utilize knowledge models to identify learning gaps while Umoh (2025) posits they help each person to receive and share tailored and structured messages and information according to their specific needs and abilities, which equally take care of the needs of the disable. Thus, AI tools helps create inclusive environments for students with special needs, through tools like automatic transcription.

Conclusion

The paper looks at the role of artificial intelligence in enhancing the teaching practice programme. It posits that it is a unique innovation that should get urgent attention. AI which can serve as support for instructional, evaluative and pedagogical teaching is a great progression from the traditional analogue of the 20th century which involve the use of blackboard and chalk to the modern Global System of Mobile Network that has made e-learning possible. Further still, it is the emerging new algorithms of AI-this and AI-that, thought of as the pinnacle of human creativity as its effects are being felt every passing day and is drastically transforming all the strata of human endeavor. The impact of this innovation if brought to bear can enhance the teaching-practice program that is not only at the core of all the teaching learning but an effective tool for

bridging the gap between ideals and realities.

Suggestions

1. The government should integrate AI tools in the curriculum for the prompt understanding of all AI-powered gadgets.
2. Give compulsory and adequate training on Computer Studies to students-teachers and engage them on how to use AI Tools.
3. The federal and state government should provide enough funds for the training of teachers.
4. Give students-teachers allowances for the time spent on practical training.
5. Supervisors should have workshops before embarking on any teaching practice programmes.
6. There should be something similar to the Hippocratic-oath for teachers not to molest students and collect money from them which should be read at the end of the workshop.
7. Issue Certificate to teachers at the end of the work- shops, and to the students-teachers at the end of the teaching practice program. This can further determine the validity of membership of the profession.
8. In-service trainings are required to update the teachers

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