



Artificial Intelligence(Ai) Language Instructional Process: A Critical Discourse Analysis Approach

Dr Philomena Ijeoma Olumba, Department of Igbo, Federal College of Education, Obudu, Cross River State – 08050756587, olumbaphilomenaijeoma@gmail.com and

Mrs Chinazom Chinyere Nwabueze, Department of Igbo, Federal College of Education, Obudu, Cross River State- 07030696726, azomnwankwo@gmail.com

Abstract

This study is on Artificial intelligence (AI) language instruction process. The problem of the study is to examine the relevance of Artificial intelligence (AI) to language instructional process using critical discourse analysis approach. The findings revealed that though Artificial intelligence (AI) is a strong force in the revitalization of language instructional process due to its numerous functions, but there is still need for human interaction in (AI) powered language instruction platforms. Recommendations for the actualization of enhanced and adequate Artificial intelligence (AI) language instructional process were made and all the concepts captured in the study were critically examined.

Key words: *Artificial Intelligence, Language, Instructional Processes and Critical Discourse Analysis*

Introduction

The linguistic knowledge of any language involves knowing the meaning of variants in particular situation, the rule of language structure, the organization and range of possible variants in the features, the ability to separate verbal from non-verbal features and the patterns of those features in specific situations of language use. The cultural knowledge involves the mastery of the patterns of transmission of skills and knowledge, the prevailing values and attitudes, things that constitute knowledge in the socio-cultural environment of the use of the language and knowledge of the social structure of the communication context or social group. In order to communicate appropriately and effectively, the user of a language must have competencies which constitute the broad range of a shared knowledge of communication: knowledge of interaction patterns, linguistic knowledge and cultural knowledge. The knowledge of interaction patterns of any language involves knowing the norms of interaction and interpretation which is the acceptable procedure and routine for speaking and the interpretation of speech as well as the strategies for achieving communicative interactive goals. It also involves an awareness of the salient features in communicative situations, awareness of the rules of language used in communication such as the selection and interpretation of linguistic forms such as words, phrases and sentences. The language instructional process in no measure plays great role in the teaching and learning of language due to its diverse nature. Therefore, this paper seeks to examine the relevance of artificial intelligence to language instruction process using critical discourse analysis approach.

Definition of operational terms

All the operational terms captured in this study shall be critically examined.

Artificial Intelligence (AI)

Concepts are defined according to people's view and as such, no concept has a universal acceptable definition. The concept, artificial intelligence has been given various definitions by scholars. Bundy(2017) sees artificial intelligence as computerised systems which exhibit behaviours commonly thought to require human intelligence or systems which can solve complex problems rationally or even take required actions to achieve their goals in a real-world situation. While Dimitrova, Mizoguchi, Boulay and Graesser (2006) define artificial intelligence as a branch of computer science which focuses on developing intelligent machines capable of thinking and acting as human beings. Again, Manikandan (2020) is of the view that artificial intelligence is a recreation of human intelligence procedures by machines, especially computer systems. Based on the definitions above, one can define artificial intelligence as the replica of human intelligence inform of machine, which are programmed to carry out human activities such as thinking, problem solving, decision making, teaching, analyse data, perception and others. These computer systems are developed to

carry out functions that require human intelligence. They have the ability to enhance language instructional process in many ways. These machines are trained to improve their performance over time and equally make decision through the use of data and algorithms. These human machines are seriously transforming various aspects of our lives ranging from language process, industrialization, health and others. Some examples of artificial intelligence applications are: Natural language processing, Robotics, Expert systems, Virtual assistants, Image and speech recognition, Games playing, Predictive analytics and others.

Language

Language is one of the most intimate attributes of any human being. It plays an important role in man's actions and thoughts. It is constantly employed in the dealings of human beings in the society. In line with this, Jones (2022) asserts that language influences social behaviour, perception, attitude, interaction, stereotyping and others. Language reflects the belief and practices of a community as well as the individual characteristics of the inhabitants of that community. Language rules are conventions. This is because, language is a rule-based system of signs which human beings as members of the community and participants of the cultures that hold in that community express themselves. Kalu (2015) posits that language touches every aspects of human's life in the society and its meaning can only be understood when it is considered in relation to the society. In other words, language is a very important instrument for expressing attitudes, feelings as well as dispositions in the society. Language is an instrument for social control. This is why language and social interaction complement each other. Language is central to social interaction in every society. In line with this, Hara(2021) asserts that language is a linguistic tool which shapes, moulds and represents societal realities. Language plays a vital role in the transmission of cultural knowledge.

Instructional process

Ibe (2019) sees instructional process as the leverage point for instructional improvement which incorporates all the effort and strategies put in place to enhance academic activities. While Obi (2017) is of the view that it ranges from coordination, direction and structures put together in order to improve teaching and learning. Dick and Carey (2008) sees instructional process as teaching and learning activities which start with the definition of what learners should know and ends with the evaluation of what the learners actually know. Okoro (2021) is of the view that instructional process has different procedures such as: planning, selection of adequate instructional technique, implementation and evaluation. Therefore, instructional process involves systematic planning and adequate delivery of learning experiences in order to achieve the desired learning objective. It equally involves active interaction among the learning environment, the teacher and the learner. Summarily, instructional process centres on executing, delivery of instruction and the actualization of the desired goal.

Theoretical Framework

Critical discourse analysis theory was propounded by Fairclough Norman in 1995. This theory has its root in the critical theory of language which sees language as a social practice. This theory can also be called critical linguistics or linguistics criticism. It studies the way inequality, dominance, gender, social power are rejected, resisted and even reproduced through text and talk in the political and social setting. Fairclough's (1995) model of CDA consists of three inter-related processes of analysis which are tied to three inter-related dimensions of discourse. The three dimensions are;

- a. The object of analysis. (This includes visual and verbal texts).
- b. The processes through which the object is produced and received. (This includes speaking, inviting, designing, reading, listening and viewing) which are carried out by human beings.
- c. The socio-historical conditions which govern these processes.

This theory is interested in power abuse that breaches the law, democracy, rules, equity, and justice by those who control power.

Artificial Intelligence and Language Instructional Process

Using critical discourse analysis approach which analyzes the object (visual and verbal texts) and the process through which the object is produced and received, artificial intelligence and language instruction process shall be critically examined. The world has immensely become a global village that the use of Artificial Intelligence (AI) for language instruction process has now become a reality. The adoption of (AI) will enhance the effective delivery of language curriculum. It will rebrand what and how the language instructors teach and learners learn. All these are based on the fact that Artificial intelligence (AI) has the potential to help in the development of intensive and attractive language content, personal study, good teaching organization, adequate class control/management and others.

Artificial intelligence(AI) being a machine that produce highly specialized tasks more than human beings will help instructors to observe learners pattern of learning. This therefore will guide the instructors to find out the learner's area of strength and weaknesses and then work on these areas for better results.

Again, with the use of Artificial intelligence(AI), language instruction can be personalized. This is because, it will help to optimize the instructional techniques for enhanced language instruction process, provides avenue for solving various language instruction issues, attends to various learners needs.

Also, using Artificial intelligence(AI) for language instruction creates room for immediate results and recommendations, which help the learners to improve their

experiences. This is because, better interactive learning environment which encourages real-life conversations are provided.

More so, Artificial intelligence(AI) provides numerous instructional resources and aids for language instruction. Like, recommending relevant materials such as: books, journals, magazines, video and others based on the learners' interest and level of proficiency.

In addition, Artificial intelligence(AI) language instruction platform creates rooms for interactive elements which promote and enhance language instruction and also help learners to improve their listening and speaking skills. Through (AI) instruction platforms, learners are exposed to numerous ranges of instructional resources which help learners to explore and practice various language skills through which they gain experiences.

Furthermore, Artificial intelligence (AI) can be used to administer tasks and enhance classroom management. Through (AI) platform (chat bots) learners obtain information on course topics, outlines and other necessary support needed for language instructions.

Also, through (AI) platform, learners' attendance, attitude towards language instructions and performance can be ascertained and through these, learners can be given adequate and deserved attention in order to improve retention levels, prevent lack of interest and curb dropout rates.

Problems of using Artificial intelligence (AI) language instruction process

In spite the various advantages of employing Artificial intelligence (AI) in language instruction process, there are problems associated with the use of (AI) in language instruction. Some of these problems shall be critically enumerated.

It is true that Artificial intelligence language instruction provides support and feedback, but there is lack of human interaction in the (AI) language powered platforms. This therefore cannot quantify the real natural insight human instructors can give during language instruction processes.

Again, there is the problem of discrimination and bias in (AI) instruction platform. They only work on data they are trained on. So, anything outside the installed language data will create problem because learners' performance will not be adequately assessed.

Also, in Artificial intelligence (AI) language instruction platform, there is lack of security and privacy. This because data analysed by the platform such as viable information, performance test, attitude test and others relating to language instruction issues can be hacked and leaked to the public thereby intruding into peoples' privacy.

Furthermore, using (AI) platform in language instruction process is very expensive because maintenance will not be easy. This therefore will discourage many institutions from engaging in it during teaching and learning processes.

In addition, another problem in the use of this (AI) language instruction process is the issue of job displacement. This is

because (AI) machine can replace human language instructors and this will not be good for the desired quality language education and instructions needed in our institutions.

Conclusion and recommendation

Although Artificial intelligence (AI) appears to be a strong force in the revitalization of language instruction process based on the fact that it takes care of numerous learners needs and equally creates room for enhanced language instruction results. Yet, there is need for the actualization of adequate and enhanced (AI) language instruction process. Based on this, the study recommends the following:

- a) Researches should be conducted regularly in the use of Artificial intelligence in language instruction processes in order to improve the language implementation strategy and decision making processes.
- b) There should be a balance between Artificial intelligence (AI) driven language instruction and human interaction in order to arrive at a balanced, well-formed and comprehensive language instruction process.
- c) Transparent and data protective Artificial intelligence (AI) should be used by language instructors for transparency and protection of learners' data.
- d) There should be collaboration among language instructors, researchers, policy makers and Artificial intelligence (AI) developers in order to build harmless tools suitable for language instruction processes.
- e) There should be technical support for the planning of language instruction processes in order to enhance effective language instruction techniques.

References

- Bundy, A. (2017). Preparing for the future of artificial intelligence. *AI and society* 32(2), 285- 287.
- Dick, W. & Carey, L. (2008). *The systematic design of instruction*. Boston: Alyn and Bacom.
- Fairclough, N. (1995). *Critical discourse analysis*. London: Longman.
- Hara, O. (2021). *Introduction to language study*. Aba: Empire Press
- HariPriya, S. & Manikandan, L. C. (2020). A study on artificial intelligence technologies and applications: Engineering and Information. *International Journal of Scientific Research in Computer Science and Technology*, 336-344.
- Ibeh, M. (2019). *Teaching and learning strategies*. Aba: Enyimba Press.
- Jones, M. (2022). *An overview of the use of language*. Owerri: Golden Press.

Kalu, O. U. (2015). *The analysis of language*. Owerri: Bloom Publishers.

Obi, E. (2017). *Instructional design and process*. Okigwe: Diamond Press.

Okoro, U. (2021). *Handbook on language instruction*. Okigwe: Tony Press.

Vania, D., Riichiro, M., Benedict , D. & Art, G. (2009). *Artificial intelligence in education: Building learning system that care from Knowledge representation to affective modeling*. Amsterdam: IOS Press.

Article inflow

Received: 5th October, 2025

Accepted: 30th November, 2025

Published 31st December, 2025