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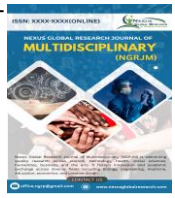

Exploring Artificial Intelligence in Primary School English Language Teaching: Implementations and Policies Required

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ABSTRACT

This paper examines the integration of Artificial Intelligence (AI) in Primary School English Language Teaching (ELT), with a focus on implementation strategies and policy frameworks for the Nigerian context. Building on research by Akintunde and Akuta (2021, 2022), and analyze how AI tools can address critical challenges in primary education, including large class sizes, varying proficiency levels, and teacher effectiveness gaps (Iwuagwu et al., 2017, 2018). It further outlines the benefits of AI in L2 learning and constraint of using AI in English language classroom, implementing AI in primary school English language classroom and educational policies required to promote the use of AI in English language primary schools. The study concludes that in order to safeguard the application of AI in education it should be lawful, complying with all applicable laws and regulations; it should be ethical, ensuring adherence to ethical principles and values; and it should be robust, both from a technical and social perspective, since, even with good intentions, AI systems can cause unintentional harm. The work recommends that AI usage should be ethical, ensuring adherence to ethical principles and values. This means that we develop, deploy and use AI systems in a way that adheres to the ethical principles of: respect for human autonomy, prevention of harm, fairness and explicability.

Keywords: Artificial Intelligence in Education, Primary English Language Teaching, Personalized Learning, Educational Policy Frameworks, Nigeria

INTRODUCTION

The digital age, marked by rapid advancements in Artificial Intelligence (AI) and big data processing, has transformed educational processes and pedagogy. These changes are especially critical in primary schools, where foundational language learning must bridge Mother Tongue instruction and English acquisition (Akintunde & Akuta, 2021), a challenge further compounded by systemic issues such as high dropout rates (Iwuagwu et al., 2018). Today's learners, predominantly from Generation Z, are digital natives who possess innate technological literacy (Al-Qaissi, 2010), while the upcoming Generation Alpha is characterized by constant connectivity and independent decision-making. Given these shifts, modern second language education must leverage technology, not only because digital tools are intrinsic to students' lives but also because learning environments now extend beyond traditional classrooms (Adilbayeva et al., 2022). Consequently, language teachers face the dual challenge of integrating technology effectively while addressing linguistic diversity, particularly the vital role of Mother Tongue in early education (Akintunde & Akuta, 2021). AI-powered tools could offer a promising solution by supporting personalized, inclusive approaches to English acquisition in primary schools. Also to keep up with their digitally savvy students and engage them in learning a second language, however, they must utilize modern technologies such as chatbots and virtual reality (Abdelrady & Akram, 2022). They must also determine which of these technologies could have an impact in their classrooms, assess their potential, and take advantage of all the benefits they offer. In addition, they should evaluate the

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potential hazards posed by these technologies. In addition, teachers must always consider the added value of the selected tools for the students' learning and their learning outcomes. This is not a simple task, as research into the practical applications of digital technologies with defined pedagogical goals has not yet produced conclusive results **(Woolf, 2022).** Results are surprisingly scarce. It should not be forgotten that, as the research emphasizes, instructors of second languages should promote not only their students' acquisition of knowledge (Adilbayeva, Mussanova, Mombekova & Suttibayev, 2022).

However, they should also strengthen the skills that appear to be essential for the 21st century, such as critical thinking, creativity, communication, and collaboration. In addition, teachers must have a positive attitude toward the use of these technologies in Second Language (SL) classrooms and possess the pertinent subject, technological, and pedagogical knowledge in order to motivate students to use these technologies for SL learning (Alemi, Meghdari, & Ghazisaedy, 2015). In the new era, artificial intelligence technology has made an important breakthrough in the field of education and teaching. At present, the accuracy of artificial intelligence speech recognition technology, which is in the leading position in the world, has reached a very high level (Abdelrady, & Akram, 2022). This speech recognition technology is widely used in all aspects of our life. In addition, language translation, speech synthesis, speech testing, speech conversion, voiceprint recognition and other artificial intelligence technologies are also closely related to language learning (Adilbayeva, Mussanova, Mombekova & Suttibayev, 2022). In modern society, machines can not only understand people's words, but also give full feedback to people's words. Artificial intelligence has brought new ideas and breakthroughs to human learning methods, but also challenges and opportunities to all aspects of teaching (Alemi, Meghdari, & Ghazisaedy, 2015). Artificial is the intelligence shown by machines, whereas Natural Intelligence (NI) displayed by humans and other animals. Any device that perceives its environment and takes actions that maximize its chance of successfully achieving its goals is attributed to have Artificial Intelligence (AI). As a whole, if a machine can initiate the cognitive functions of a human mind such as learning, communicating and problem solving, it is known as Artificial Intelligence (Alemi, Meghdari, & Ghazisaedy, 2015). The specialized areas of AI differ according to requirements. Natural Language processing skills of AI is significant in machine translation and communication, meanwhile, object recognition is important when developing automated vehicles, and similarly, problem-solving skills are essential when developing applications. Thus, different areas of AI can be developed to cater to various aspects of human life. Recent developments have focused on using AI in education to simplify classroom management and increase the productivity of teaching (Abdelrady & Akram, 2022). As time passes on, machines are becoming more and more complex, fast-processing and intelligent. Being exactly like humans deducting, inferring and making decisions is still away, however, some remarkable gains in the application of Artificial Intelligence (AI) techniques and machine learning have been recently recorded. As far as the Nigeria scenario in English as second language classroom is concerned, a typical class contains more than twenty students who are in different proficiency levels. The teacher is required to cater for all language needs of the students while keeping constant records on their development, drawbacks and attendance (Abdelrady & Akram, 2022).

The Significance and Justifications for Employing AI

Employing AI applications for education is a current trend in the field of experimental research (Ge, Yin & Feng, 2018). Studies refer to the diversification of AI education applications, which include programmed learning and other open source high technology. The importance of AI applications in education is determined by their ability to suit the needs and abilities of the learners, to work according to their educational preferences, and to monitor the progress rate of each learner (Ghazi, 2015). These applications contain tracks that suit all learners despite differences among their levels, boost their learning motivation, and cope with students' low levels of attention. They provide feedback that indicates student achievement levels and points of weakness and strength in the scientific content. They ensure that the curriculum subjects are integrated, that the parts of each subject follow logically, and that the learner has mastered one section before moving on to a more advanced one. The scientific content can be introduced in the form of problems, which the students work out according to their self-study streams (Ghazi, 2015). Instructors monitor this process and provide guidance and feedback. AI tutoring systems can replace instructors as they have programmes that provide guidance automatically and enable learners to use self-study skills. AI moves education from a traditional form to an automated education or education through smart interactive machines. It employs natural language to produce new knowledge, and to boost supplementary educational tasks. AI applications can individualize tutoring and introduce varied educational models and streams in which languages are merged with fields of related knowledge (Ge, Yin & Feng, 2018). This aligns with findings on e-learning pedagogy in primary schools (Akintunde & Akuta, 2022), where adaptive tools show higher engagement. Crucially, AI can augment teachers' non-cognitive evaluative skills (Iwuagwu et al., 2017) by automating routine assessments (e.g., grammar drills, pronunciation checks), freeing educators to focus on fostering critical thinking, creativity, and personalized feedback which are the key 21st-century skills emphasized in Nigeria's primary education framework.

Thus, they offer students the chance to learn according to flexible streams that suit their different abilities and academic levels. AI and teaching English as a Second Language require training in and practicing language skills. Since the opportunity to practice these skills in real life situations are often not available, students' chances of mastering these skills are diminished. Therefore, it is necessary to switch from traditional strategies to communicative ones, and rely on digital tools to face difficulties in teaching/learning English (Ge, Yin & Feng, 2018). Teaching English as a second language is regarded as an essential in modern life. The main aim of teaching English is to develop communicative competence, which is achieved through knowing how to use language elements and vocabulary to develop the skills of listening, speaking, reading, and writing. It also includes how to use language to produce texts, and how to use it to understand reading passages (Abdelrady, & Akram, 2022). The process of language development is based on communication as a goal and as a process. Therefore, using both traditional and digital communication strategies in the teaching/learning processes and activities is necessary. Thus, it is necessary to use AI applications such as simulation and communication programmes as these simulate real life situations for conversation and communication in English, introduce practical training in language skills, and educational games based on language. Communication tools based on AI help design

situations for practicing the accurate pronunciation of letters and words through sound drills and visual media (Abdelrady, & Akram, 2022). Such tools provide exercises for describing and interpreting images and everyday situations, for listening, and for practicing guided pronunciation. They also allow learners to practice language skills and provide feedback for guidance. Some programmes have language drills that give training in communication through using language skills to guarantee that learners reach proficiency levels.

AI can be used to overcome many of the difficulties of teaching/learning English such as prescribes by Al-Qaissi (2010):

a. using Information Retrieval techniques to build the ability to comprehend reading passages;

b. employing Machine Translation to develop students' translation skills;

c. using Automatic Speech Recognition techniques to learn correct pronunciation;

d. using Text-to-Speech techniques for blind and visually impaired students;

e. using open digital language dictionaries to enrich the student's vocabulary;

f. using intelligent programmes to augment speaking skills for English learners;

g. employing a writing evaluation technique to teach paragraph and essay writing.

Established Benefits of AI in L2 Learning

Nobody can deny the ***benefits*** that AI-powered education (AIEd) "offers the possibility of learning in more personalized, flexible, inclusive, and engaging environment. It can provide teachers and learners with the tools that allow them to respond not only to what is being learnt, but also to how it is being learnt, and how the student feels. It can help learners develop the knowledge and skills that employers are seeking, and it can help teachers create more sophisticated learning environments than would otherwise be possible. For example, AIEd that can enable collaborative learning, a difficult task for one teacher to do alone, by making sure that the right group is formed for the task-at-hand, or by providing targeted support at just the right time" (Lotze, 2018, p. 11). Sharma, (2021) indicates that AI can be used to overcome many of the difficulties of teaching/learning English, such as: a. Using Information Retrieval techniques to build the ability to comprehend reading passages. b. Employing Machine Translation to develop students' translation skills. c. Using Automatic Speech Recognition techniques to learn correct pronunciation. d. Using Text-to-Speech techniques for blind and visually impaired students. e. Using open digital language dictionaries to enrich the student's vocabulary. f. Using intelligent programs to augment speaking skills for English learners. g. Employing a writing evaluation technique to teach paragraph and essay writing.

Applying AI in foreign language education provides learners with immediate and highly individualized support, which is a fundamental building stone for personalized learning as one of the ideal standards of contemporary pedagogy. In this aspect, AI-powered tools are ahead of human teachers who simply do not have capacity to continually analyze each and every learner's outputs, diagnose their individual learning needs, adapt the learning content accordingly and give learners well-grounded feedback in the span of several seconds-and that all in the class of twelve or more students (Akintunde, Okechalu & Chukwuemeka, 2025). Al-powered tools are, on the other hand, able to collect massive amounts of data on learner's learning progress, on their basis to model their personal learning curves and to adapt learning content accordingly. Moreover, they enhance learners' progress through the functionality of small consequential steps and immediate feedback. Therefore, these programs and

applications can be used by teachers as very effective supporting tools because they are able to free teachers from tiring, energy- and time-consuming activities such as grammar or pronunciation drills. Other expected benefits of ICALL include: learner's own pace of progress; instant feedback as a strong motivational factor; individualized repetition of topics and emphasizing activities where a learner has had weaker output; quick and objective assessment of learner's progress; better understanding of learner's learning preferences and strategies; predicting learner's future performance with a high probability; quick and objective assessment of teaching tools (texts, lectures, assignments, tests, etc.) (Akintunde, (2024).

Artificial intelligence provides a good learning environment for interactive second language learning. Through the connection and logical analysis of information such as graphics, sound and text in intelligent system, second language learning becomes more stereoscopic and visual. Students communicate with AI through man-machine interface, which not only increases the authenticity of the language environment, but also corrects the errors in the dialogue in time, so that students can learn English in a relaxed and pleasant atmosphere. AI can provide a real simulation dialogue platform for second language teaching and learning. Let students' better use and improve the comprehensive abilities of English words, spoken English and English writing. Not only that, the cultural and customs knowledge of different English-speaking countries collected in AI can be used to communicate and interact with students, but also can greatly enhance students' interest in English learning (Wang, 2019). Lehlou and Brigui (2021) explain that Chatterbots or Artificial Conversational Ethics is one example of AI in that human are able to communicate through a machine. It holds intelligent conversation using a keyword matching technique. For instance, if a human asks the Chatterbots, 'What is your name?' the AI then will reply accordingly to the question based on the records of answers in its database. Hence, the assessment of speech can be made possible with the use of AI.

Moreover, such new technologies have been applied in the Digital Game Based Language Learning and Teaching (DGBLLT). Digital games are considered as primary components within the field of Computer Assisted Language Learning (CALL) (Lotze, 2018), just like the traditional games are regarded as part of Second Language Acquisition (SLA) (Sharma, 2021). CALL software packages have so far provided small digital games such as hangman, puzzle and sentence production device to teach vocabulary and grammar in addition to various materials and activities to develop language skills. Furthermore, web and mobile versions of these kinds of stand-alone games are developed and some of them are integrated into foreign language learning process (Lehlou & Brigui, 2021).

Implementing AI in Language learning

Constraint of Using AI in English Language Classroom

On the other hand, the AI implementation in education in general and ESL/EFL in particular, has encountered a number of **challenges** that should be taken into consideration.

Along with external factors which are lack of material equipment, insufficient technical support, inflexible curriculum, time stress. These gaps mirror historical ICT integration failures (Igbokwe & Igbokwe, 2013). The COVID-19 pandemic further exposed these disparities, despite revealing potential in visual teaching assets (Iwuagwu et al., 2022). However, this reluctance to apply CALL is determined by many internal factors, such as: lack of information and ICT skills, lack of experience

with ICT as a learner, lack of motivation, struggle to integrate ICT with teacher's existing learning style and practices, feeling like being out of their comfortable zone, fear of losing a dominant position in the classroom, fear of a weakening control over students, as well as losing students' respect.

Despite the immense potential of AI in language learning, there have been concerns regarding insufficient privacy, information, and teacher preparation. Foremost, as data collection is essential to AI development, there is a need to reinforce privacy policies and informed consent practices. Also, to address the lack of evidence verifying the language learning effectiveness of AI, efforts should be made to acquire information on the pedagogical effects and learner perceptions of AI-based language learning tools. With this information, teachers can gain a deeper awareness of available AI-based tools which will enable them to facilitate the use of these tools effectively and appropriately. OECD (2022) raises a number of challenges for applying AI in education: A first challenge concerns creating and maintaining trust in AI systems. Transparency and accountability of AI systems in education are important aspects of this challenge, especially given the critical role of education in people's subsequent employment and life opportunities. A second challenge consists of ensuring the use of AI systems to serve human-centered values in protecting and securing (personal) data. Kengam (2020) adds that despite of the huge opportunities AI offers there might also be some potential risks with it. AI is likely to become either the best or the worst thing that might happen to humanity. AI could support teaching and learning but new ethical implications and risks emerge with the development of AI applications in higher education.

If the usage of AI in education increases, there might be chance that personal interactions get decreased and students get technology addicted and sometimes this may hurt the learners instead of helping them. The faculty members, student counsellors, teaching assistants, and administrative staff might get feared that the Intelligent Tutor System which is application of AI might replace them.

AI system requires a huge amount of data including information of students and staff which is confidential and it heads to serious privacy issues. When compared to the cost of installation, maintenance and repair AI is highly expensive. Only the heavily funded educational organizations can allow themselves to enjoy such high technology.

Implementing AI in Primary School English Language Classroom

In order to implement AI in language learning a number of Tools and policies have to be in place. In this section tools available for implementing AI in the ESL/EFL contexts are delineated. Woo and Choi (2021) synthesized information on AI tools that were developed between 2017 and 2020. A majority of these tools utilized machine learning and natural language processing, and were used to identify errors, provide feedback, and assess language abilities. They reported a number of tools based on AI and the impact of these tools on language leaning (Woo & Choi, 2021).

The main aim of teaching English is to develop communicative competence, which is achieved through knowing how to use language elements and vocabulary to develop the skills of listening, speaking, reading, and writing. It also includes how to use language to produce texts, and how to use it to understand reading passages Thus, it is necessary to use AI applications such as simulation and communication programs to simulate real life situations for conversation and communication in English, introduce practical training in language skills, and educational games based on language. Communication tools based on AI help design

situations for practicing the accurate pronunciation of letters and words through sound drills and visual media. Such tools provide exercises for describing and interpreting images and everyday situations, for listening, and for practicing guided pronunciation. They also allow learners to practice language skills and provide feedback for guidance. Some programs have language drills that give training in communication through using language skills to guarantee that learners reach proficiency levels (Barnes, 2016).

In response to the question, 'What types of AI tools have been developed for various target language skill areas?', Woo and Choi (2021), Chew and Chua (2020), Lee and Cho (2020) and Kao (2020) provided an overview of the tools that have been developed for each of the skill areas (speaking, listening, writing, pronunciation, grammar, vocabulary, and reading) with the type of tool (e.g., robots, mobile applications, and virtual assistants) and AI technology.

Speaking and Listening are made better by the help of Al tools that include a. Intelligent personal assistants like Alexa by examining comprehensibility, usability, and improvements in listening comprehension, speaking proficiency, and willingness , b. programmable robots were used in group conversations , c. neural network (NN)-based dialogue system was used for free conversation practice and d. An NN-based multimodal dialog system was also developed to holistically assess spoken language in terms of delivery, content, vocabulary, and grammar.

With these tools, the learners became more confident, willing, and less anxious about speaking in English. The learners also demonstrated gains in listening and speaking in terms of pragmatics, cohesion, word concreteness, and use of grammatical patterns. Regarding perceptions, the learners indicated that the tools were easy to use, authentic, comprehensible, and useful for language learning (Lee & Cho, 2020).

Writing has been enhanced, thanks to the tools included machine translators, software for free-form writing such tools should incorporate findings on visual teaching (Iwuagwu et al., 2022), using interactive elements suited to primary learners, and a blended course with automated feedback on self-correcting tasks. There were also specialized systems focused on citations and referencing, and classifying sentences into rhetoric categories.

With these tools, the learners were able to reduce plagiarism, increase editing/revising time, and correct rhetorical function, lexical, and grammatical errors. After using a feedback system, the learners also demonstrated significant improvements in their essay drafts in terms of the organization, structure, coherence, supporting ideas, and conclusion.

Furthermore, regarding perceptions, the learners stated that these tools were effective, easy to use, and useful/helpful for language learning (Wang, 2019).

Pronunciation has been promoted due to the use of **Deep learning algorithms.** Pronunciation diagnosis, training, and evaluation systems were developed using the attention mechanism and various types of NN (e.g., convolutional, long- short term memory). For instance, a multimodal system illustrating speech features, and an interactive tool generating personalized voice models have recently been developed.

These tools helped the learners improve their fluency, comprehensibility, tone, and pronunciation accuracy. With regard to perceptions, the learners described these tools as interesting, easy to use, and helpful for fluency, intonation, and tone training (Kao, 2020). **Grammar** utilized a number of AI tools that reduced many challenges learners faced in this respect. Tools included games, applications,

immersive environments, and intelligent systems that utilized NN, ML, and NLP. For example, to create customized study plans, NN modeling was used to predict grammatical challenges that learners may encounter based on their first language.

For the applications and systems, word segmentation, syntactic parsing, and the finite state transducer in NLP were used to generate feedback.

By using these tools, the learners were able to use English articles more accurately and experience a greater sense of immersion, presence, and realism while learning. In regard to perceptions, the learners viewed these tools as effective, efficient, accurate, enjoyable, satisfactory, and easy to use (Lee and Cho, 2020).

Vocabulary: AI tools for vocabulary included systems, platforms, robots, games, and mobile applications that have been developed using ML (e.g., conditional random field models) and NLP. For instance, in an ICALL platform, part-of-speech (POS) annotation and syntactic parsing in NLP were used to visually enhance targeted vocabulary items by automatically generating multiple-choice gaps.

After using these tools, the learners demonstrated gains in emotion, word use, and semantic knowledge of phrasal verbs. In regard to perceptions, the learners generally viewed these tools as interesting, easy to use, useful, and helpful for language learning (Li, Chang, and Wu, 2020).

Reading: Machine learning was used to diagnose reading problems and push appropriate resources. Additionally, an ML model was developed to identify pedagogical factors distinguishing high-achieving from low-achieving readers to improve ESL reading instruction (Chew & Chua, 2020).

Based on the reviewed studies, it is clear that various AI tools targeting the speaking, listening, writing, pronunciation, grammar, vocabulary, and reading areas have been developed. After using these tools, learners have demonstrated improvements in their language skills/knowledge and perceived these tools to be useful for language learning.

For this implementation to effectively influence the teaching profession, we need to prepare teachers for this new environment.

Preparing teachers for ICALL is a subset of CALL teacher training which has been addressed by multiple publications and research articles. If the general aim of CALL teacher training is "to equip current and future language teachers with the knowledge and skills, both technical and pedagogical, to incorporate technology effectively into their classes" (Hubbard, 2008, p. 180), The aim of ICALL teacher training is, parallelly, to inform current and future language teachers about latest AI-powered educational tools, and provide them with the knowledge and skills needed for effective integration of these AI tools into their classes. If teachers have an appropriate training for using AI technologies and positive AI-related experience, they will be more likely to implement ICALL in their own classrooms. A fundamental condition of success is to help them feel well prepared and confident to act in AI technology-enhanced environments. A number of previous researches (Abdelhalim, 2016) have revealed that foreign language teachers generally support CALL and welcome modern technologies in their classrooms, however, some (and probably most of them) are reluctant to use ICT extensively.

Educational Policies Required to Promote the Use of AI in English Language Primary Schools

A number of **policies, requirements, and recommendations** -based on the research done by the Congressional Research Service (2021) European Commission (2019), Madiega (2019) and

OECD (2022) should be taken into account in order to establish a robust application of the AI in education.

Trustworthy AI has three components, which should be met throughout the system's entire life cycle.

1. it should be lawful, complying with all applicable laws and regulations;

2 it should be robust, both from a technical and social perspective, since, even with good intentions, AI systems can cause unintentional harm. (OECD, 2022 P.10)

In general, the report recommends that the development, deployment and use of AI systems meets the seven key requirements for Trustworthy AI: (1) human agency and oversight, (2) technical robustness and safety, (3) privacy and data governance, (4) transparency, (5) diversity, non-discrimination and fairness, (6) environmental and societal well- being and (7) accountability.

3AI applications and tools should prioritize safety. Technology-related risks must be counteracted by risk mitigation strategies, which should be integrated into AI decision-making.

4Promote transparency .Introduction of any AI technology must be sufficiently transparent that it can be criticized, by the public or by internal review mechanisms.

5Safeguard privacy by taking the necessary measures to prevent leakage of identifiable information.

6 Institute regular challenge and review. This may be necessary due to software erosion, changes in context over time and changes in the AI technology itself as it continues to learn from new data.

The contexts in which the AI technology will be used specific requirements are due:

Assess whether the AI technology is necessary and appropriate in each educational setting. For example, whether the AI technology offers advantages over what is currently offered and fills a gap, compare the risks and benefits of the AI technology with those of current technology and ensure the necessary infrastructure for use of the AI technology. Ensuring Trustworthy AI is not about ticking boxes, but about continuously identifying and implementing requirements, evaluating solutions, ensuring improved outcomes throughout the AI system's lifecycle.

- Foster research and innovation to help assess AI systems and to further the achievement of the requirements; disseminate results and open questions to the wider public, and systematically train a new generation of experts in AI ethics.
- Communicate, in a clear and proactive manner, information to stakeholders about the AI system's capabilities and limitations, enabling realistic expectation setting, and about the manner in which the requirements are implemented.

Policy Guidance on AI for Children (2021), recommend that governments, policymakers and businesses that develop, implement or use AI systems meet the nine requirements for child-centered AI, listed in no order of prioritization:

- Support children's development and well-being, Let AI help me develop to my full potential.
- Ensure inclusion of and for children, include me and those around me. This requires emulating planned acculturation models (Iwuagwu et al., 2022) to respect linguistic diversity. Gender-sensitive training (Akuta, 2021) must also address implicit biases in AI-powered language tools, ensuring equitable participation for both male and female students in oral exercises and collaborative activities.

- Prioritize fairness and non-discrimination for children, AI must be for all children.
- Protect children's data and privacy ensure safety for children, ensure my privacy in an AI world.
- Provide transparency, explainability, and accountability for children, I need to know how AI impacts me. You need to be accountable for that Ensure safety for all children, I need to be safe in the AI world.
- Empower governments and businesses with knowledge of AI and children's rights, you must know what my rights are and uphold them.
- Prepare children for present and future developments in AI, if I am well prepared now, I can contribute to responsible AI for the future.
- Create an enabling environment, make it possible for all to contribute to child centered AI

In a guidance for **policy makers** published by UNESCO (2021) a Seven-point recommendations for implementing AI in education were presented:

- A system-wide vision and strategic priorities.
- Overarching principle for AI and education policies. Adopt a humanistic approach as an overarching principle for AI and education policies.
- Interdisciplinary planning and inter-sectoral governance Mobilize multistakeholder expertise to inform policy planning and build the capacities of policy-makers. Set up inter-sectorial governance and coordination mechanics.
- Policies and regulations for equitable, inclusive, and ethical use of AI. Set out cross-cutting strategic objectives, and plan regulations and programs to ensure the equitable and inclusive use of AI in education.
- Master plans for using AI in education management, teaching, learning, and assessment. Leverage AI to boost and upgrade education management and delivery. Cultivate; learner-centered use of AI to enhance learning and assessment. Pilot testing, monitoring and evaluation, and building an evidence base. Build a trusted evidence base to support the use of AI in education. Strengthen research and evaluation in the field of AI and education.
- Fostering local AI innovations for education. Promote the local development of AI technologies for education.

In a seminal work, Jackson, (2021) established a number of school policies and recommendations to delineate areas that require educator attention around AI so they are empowered to develop recommendations that support literacy on AI that work within their contexts. In this context, they define literacy as general competency around how AI works, the types of data it collects, and how that data can be used. By doing so, they provided useful guidance to build additional knowledge and skills, including the ethical and unbiased decisions by educators in selecting and using AI systems and technologies in classroom environments

Conclusions:

In a word, the application of artificial intelligence in language teaching is still in the primary stage, but it has shown great potential. AI tools will be more useful in adaptive and individualized learning which satisfies the needs of the students. AI helps the teachers to know the understanding capacity of the students on their lectures and enable them to provide the relevant hints for students. It acts as a tutor for the students and helps them to learn. Artificial intelligence driven programmes offer helpful feedback for both students and teachers. AI helps teachers monitor performance while addressing non-cognitive evaluation gaps (Iwuagwu et al., 2017), particularly in overcrowded classrooms (Iwuagwu et al., 2018) and enable them improve the instruction that they provide for the students. AI systems in schools have

changed the way students find and interact with integrated technology. This has an effect to change teachers as facilitators by providing students interactive learning experience. Students can learn by the trial and error method without fear as AI supports in their learning and provide assistant for their improvement. Artificial intelligence systems acquired-data will change the way the schools find, teach and support students. If goes beyond the reach, it may even replace teachers in certain instance. It has become a learning companion that assists students in their learning process. The role that Artificial intelligence application plays in education is remarkable in this technological world and it is expected to advance learning experience more and more in the near future. Like peace education curricula (Igbokwe & Igbokwe, 2010), AI integration must align with national primary education goals to achieve lasting impact. AI tools are inherently engaging and intrinsically motivating players to learn and progress accordingly, and increase their self-efficacy, which in turn may increase students' academic achievements. The teacher needs to choose the most effective AI applications for language learning based on each user's requirements and time constraints in order to motivate them accurately. In order to safeguard the application of AI in education it should be lawful, complying with all applicable laws and regulations; it should be ethical, ensuring adherence to ethical principles and values; and it should be robust, both from a technical and social perspective, since, even with good intentions, AI systems can cause unintentional harm.

Recommendations

AI usage should be ethical, ensuring adherence to ethical principles and values. This means that we develop, deploy and use AI systems in a way that adheres to the ethical principles of: respect for human autonomy, prevention of harm, fairness and explicability.

English language teachers' plan should include the basics, objectives, content, processors, and evaluation methods for the employment of AI applications in the field of English education.

Along the same vein, employing AI applications will help develop language communication skills through intelligent dialog boxes. For Language development processors, language teachers should engage a variety of intelligent sources, windows for dialogs and discussion, intelligent tools for communication, programmes that generate texts for reading, and programmes that extract information from reading passages. Such props will develop reading comprehension skills.

In addition, AI should be employed to develop teaching strategies and evaluation methods by individualizing self-study processes, and simulating through smart and expert systems.

Language teachers should attempts to explore the possibilities of using Artificial intelligence in the English as a second Language classroom in Nigeria to increase the productivity of the class and reduce the amount of responsibilities of the ESL teacher.

REFERENCES

Abdelrady, A. D. & Akram, E. R (2022). Using AI Language Teaching System to Innovate Language Learning of Under-Resourced Students" Program. Progressive Evaluation Report, Tomorrow Advancing Life, Beijing Normal University.

Adilbayeva, A. S., Mussanova, U. I., Mombekova I. I., & Suttibayev, I. I. (2022). Artificial Intelligence in EFL

Classrooms: Friend or Foe? LEARN Journal: *Language Education and Acquisition Research Network* (ISSN: 2630-0672 (Print) ISSN: 2672-9431 (Online)

Akintunde, A. F., & Akuta, F. O. (2021). The significance of Mother Tongue in Early Chidhood Education. Sapientia Foundation Journal of Education. *Science and Gender Studies.(3)*, *1*, 21-29.

Akintunde, A. F., & Akuta, F. O. (2022). E-learning Pedagogy in the English Language Primary School Classroom: Emerging Issues and Trends. *International Journal of Educational Research and Library Science, 11*(8).

Akintunde, A. F. (2024). Exploring some artificial intelligence technologies that can be applied to learning in English as a Second Language Classroom. *Multidisciplinary Journal of Arts and Language Education* 5(1), 166-176.

Akintunde, A. F., Okechalu, E. Chukwuemeka, E. J. (2025). Exploring the potential of Artificial Intelligence Driven assessment tools for ESL classroom: Opportunities and challenges. *Global Scientific and Academic Research Journal of Education.and Literature*. 3(3). 45-53.

Akuta, F.O. (2021). Impact of gender and qualification on teachers' effectiveness in teaching basic science and technology in primary schools in Federal Capital Territory, Abuja. *Sapientia Foundation Journal of Education, Sciences and Gender Studies (SFJESGS), 3*(4) 247 – 261.

Alemi, S. O., Meghdari, P., & Ghazisaedy, I. S. (2015). *Games for language learning* (2nd ed.).Cambridge et al.: CUP.

Al-Qaissi, A. (2010). Systematic review of research on artificial intelligence applications in higher education-where are the educators? International *Journal of Educational Technology in Higher Education, 16,* 39(2019), doi: 10.1186/s41239-019-0171-0.

Barnes, D.C., Collier, J. E., Howe, V. and Hoffman, K. D. (2016). Multiple paths to customer delight: the impact of effort, expertise and tangibles on joy and surprise. *Journal of Services Marketing*, 30(3), 277-289.

Chew, E., & Chua, X. (2020). Robotic Chinese language tutor: Personalising progress assessment and feedback or taking over your job? *On the Horizon,* 28(3), 113-124. https://doi.org/10.1108/0TH-04-2020-0015

Congressional Research Service. (2021). Artificial Intelligence: Background, Selected Issues, and Policy Considerations. https: //crsreports .congress. gov R46795

European Commission. (2019). Ethics Guidelines for Trustworthy AI., High-level expert group on artificial intelligence | Shaping Europe's digital future (europa.eu)

Ge, R. Yin, T., & Feng, (2018). Our policies, their text: German language students' strategies with and beliefs about web-based machine translation. *Teaching German,* 46(2), 230-250. doi: 10.1111/tger.10143

Ghazi, Y. S. (2015). Artificial Intelligence: The Attitude of the Public and Representatives of Various Industries. *Journal of Risk and* Financial Management, 14*(8), 339.*
https://doi.org/10.14705/rpnet.2017.eurocall2017.705

Hubbard, P. (2008). CALL and the future of language teacher education. *CALICO Journal,* 25, 175-188

Igbokwe, F.O. & Igbokwe, F.O. (2013). Developing Peace Education Curriculum in Nigeria for Primary Education. *Abuja International Journal of Education, 1*(1), 366 – 378.

Igbokwe, F.O. & Igbokwe, F.O. (2013). The Impact of ICT Integration on Teaching and Learning in Classrooms. Federal Ministry of Education Journal of Education Equality Assurance Evaluators. 37-45

Iwuagwu, G. C., Iwuagwu, F. O., & Akuta, F. O. (2018). Assessment of dropout rates among Senior Secondary School Science Students in FCT from 2011-2016. *Journal of the Nigeria Council of Educational psychologist, 12 (1); 15*, *26*.

Iwuagwu, G. C., Iwuagwu, F. O., & Akuta, F. O. (2017). Assessment of teachers' level of acquisition of non-cognitive evaluative skills among primary school teachers. *Journal of Educational Research and Development, 11 (1)*, 37-42.

Jackson, T. (2021). Machine translation in the German classroom: Detection, reaction, prevention. *Teaching German, 42*(2), 178-189. doi: 10.1111/j.1756-1221.2009.00052.x

Kao, C. (2020). The effect of a digital game-based learning task on the acquisition of the English Article System. *System,* 95, 102373. https: //doi.org/ 10.1016/j.system.2020.102373

Kengam, J. (2020). Artificial Intelligence in Education. *Research gate.* DOI: 10.13140/RG.2.2.16375.65445

Lee, K., & Cho, Y. (2020). A chatbot for a dialogue-based second language learning system. EUROCALL, 151-156.

Lehlou, F., & Brigui, H. (2021). Artificial Intelligence in Teaching and Learning Languages. . Research gate. DOI: 10.13140/RG.2.2.35349.0432.

Li, K. Chang, M., & Wu, K. (2020). Developing a task-based dialogue system for English language Learning. *Education Science 10(11) 306.*

Lotze, N. (2018). Goodbye to classroom teaching? Artificial intelligence in language learning. Translation: Chris Cave. Copyright: Goethe-Institute. V., Redaktion Magazin Sprache.Retrieved from:https://www.goethe.de/en/spr/mag/dsk/21290629.html?for ceDesktop=1.

Madiega, T. (2019). EU guidelines on ethics in artificial intelligence: Context and implementation. EPRS | European Parliamentary Research Service.

OECD. (2022). Recommendation of the Council on Artificial
Intelligence, OECD/LEGAL/0449 at http://legalinstruments.oecd.org

Policy Guidance on AI for Children (2021). Preparing teachers for the application of AI-powered technologies in foreign language education. Journal of Language and Cultural Education, *7(3), 135*-153.

Sharma, R. (2021). Applications of Artificial Intelligence in Education, Educational matters@ETMA.-https://etma-india.in/wp-content/uploads/2021/08/ETMA-eMagazine July-August-2021 .pdf

UNESCO (2021). Artificial intelligence and professional roles. *Business Information Review* 34(1), 37-41. DOI: 10.1177/0266382117692621

Wang, P. (2019). On defining artificial intelligence. *Journal of Artificial General Intellige-nce,*10(2),1-37.

Woo, H., & Choi, H. (2021). AI Language learning Tools reprint submitted to JDCS Oct. 29, 202.

Woolf, B., (2013). AI Grand Challenges for Education. Ai Magazine 34(4):66- 84.DOI: 10.1609/aimag.v34i4.2490