

**Awareness and Use of Artificial Intelligence Tools for Learning of English  
Language among Secondary School Students in Awka South LGA,  
Anambra State**

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**Abstract**

The study investigated the awareness and use of Artificial Intelligence (AI) tools for learning of English Language among secondary school students in Awka South Local Government Area of Anambra State. Two research questions guided the study. Descriptive survey research design was adopted. The population of the study comprised 3,350 SS2 students in the 19 secondary schools in Awka South LGA. The sample size for the study was 150 SS2 students drawn from five secondary schools out of the 19 secondary schools in Awka South LGA using simple random sampling technique. Questionnaires titled "Awareness of Artificial Intelligence Tools for Learning of English Language (AAITLEL)" and "Use of Artificial Intelligence Tools for Learning of English Language (UAITLEL)" were constructed by the researchers and used as instrument for data collection. The instrument was validated by three experts from the Department of Educational Foundations (Curriculum Studies and Measurement and Evaluation Units), Nnamdi Azikiwe University, Awka. The reliability of the instrument was obtained using Cronbach Alpha which yielded the coefficient values of 0.72 and 0.75 respectively. Data collected were analyzed using percentage and mean. The findings of the study revealed that secondary school students in Awka South LGA are aware of Artificial Intelligence tools for learning of English Language. It further revealed that the students utilized the AI tools for learning English Language to a low extent. It was recommended among others that secondary school administrators should organize workshops, seminars and orientation for students to enlighten them on how to utilize AI tools for effective learning of English Language.

**Keywords:** Artificial Intelligence, Artificial Intelligence Tools, English Language, Awareness and Use

**Introduction**

The growth of Information and Communication Technology (ICT) has made things easier for people. People can perform different works including making predictions, interpreting speech, translating languages, recognizing speech, and

even teaching and learning using numerous technological applications and software. One of such technologies is Artificial Intelligence (AI). Artificial Intelligence is an umbrella term that encompasses varieties of ICT applications and software in computers that has the capacity to human intelligence processes. Artificial intelligence therefore is the software or application in the computers or even in an android mobile phone that has the capacity to do things human beings could do. According to Cantos, Giler & Magayanes (2023), “Artificial intelligence is the science of producing intelligent machines, particularly intelligent computer programs.” Allam, Dempere, Akre & Flores (2024) posited that Artificial Intelligence is the demonstration of intelligence in computers. In the views of Mohammed & Watson (2019), Artificial intelligence is the skillful imitation of human behaviour or mind by tools and programs.

Due to the capacity of artificial intelligence to imitate human intelligence processes that are managed by computer systems, it can be used in different fields of life of people to perform different tasks. The field of education is not an exception. AI is an integral part of education system due to its capacity to enhance and improve teaching and learning approaches, personalize learning experiences, offer quick feedback and make education for students more efficient, interesting and enjoyable. Allam *et al.* (2023) emphasized that AI is being used in education to enhance teaching and learning processes. They further asserted that it has the power to transform the way people learn and develop their language skills.

English Language is the world’s most studied language. It is learned by both the native and non-native speakers. However, learning of English Language can be particularly challenging to non-native speakers, but today’s technology can offer many tools and devices that can help learners to learn new languages with ease. Artificial intelligence is one of the technologies that uses variety of tools to improve English Language learning. Such tools as speechify, ChatGPT, Yippity, Quillbot, Grammarly, GPTionary, Memrise, Babel, Google translate, Talkpal chat, Glossika, FluentU, Chatbots, Duolingo, Orai, Flowspeak etc can assist

learners in many areas such as improving speaking, reading and writing skills, building vocabulary, providing spelling and grammar corrections; offering feedback on pronunciation; facilitating real-time practice as well as facilitating self-paced learning and individualized instruction (Ganeesh & Rani, 2023). In the views of Kennedy & Cuttance (2018), other AI tools such as intelligent tutoring systems, language learning applications; speech recognition, data analysis tools, robotic process automation and virtual language assistants offer unique features and capabilities that can make learning more accessible to students, enhance and improve their learning experiences.

Furthermore, artificial intelligence tools can assist English Language learners to become more involved with the language, enhance their English Language proficiency and gain a deeper knowledge of the language more effectively. Li, Yang & Yang (2021) asserted that AI tools can provide students with personalised learning experiences, interactive and communicative learning processes that tailored to their individual learning needs and styles. Nevertheless, AI tools cannot perform these tasks for students in learning of English Language if they are not aware of them and their uses for effective learning.

Awareness is the knowledge or understanding that something is happening or existing. According to Gafoor (2012), awareness is the common knowledge and understanding about something. In the context of this study, awareness of AI tools is paramount as it directly influences decisions related to their use. One of the ways secondary school students could be aware of AI tools is through enlightenment in form of orientation and using of internet for learning purposes. Meanwhile, awareness of AI tools may not yield any positive result if the students do not have knowledge of using them for effective learning. The more students are aware of AI tools and their usage, the more motivated and excited they become in learning with them. This is in line with the views of Akeaoglu & Lee (2016) that students' awareness of AI tools can impact their engagement, motivation and enthusiasm for using them as learning tools.

In today's world, technology advancement is bringing about changes in different fields of human endeavours. The two most interconnected technologies that impact people's life are internet and android mobile phones. It is expected of students to make use of their android mobile phones for personalised learning via internet using the search engines like Google, You.com, Yahoo, Google Bard, Baidu, Bing etc and change their notions of getting all information from the teacher. The researchers anticipate that students can become aware of the AI tools for learning of English Language if they are making use of the internet for learning purposes.

Several studies have been carried out on the awareness and use of Artificial Intelligence tools. For instance, Alimi, Buraimoh, Aladesusi & Omolafe (2021) carried out a study on the awareness, access and use of Artificial intelligence by undergraduate students in Kwara State. The findings of the study revealed that majority of the students are not aware of AI tools for learning. In similar vein, Ikwuka, Okoye, Olonikawu, Igbokwe, Offordile, Okoye, Udenwa & Ezejibuaku (2021) in their study assessed awareness and adoption of information and communication technology innovations among secondary school students in Anambra State, Nigeria. The findings of the study showed that secondary school students in Aguata L.G.A of Anambra State are aware of ICT innovations, and have accepted them for learning. Al Mukhallafi (2020) carried out research on using AI for developing English Language teaching and learning: An analytical study from university students' perspective in Saudi Arabia. The findings of the study revealed that AI tools were used for teaching and learning of English Language to a very low level. In addition, Ikwuka, Obumneke-Okeke, Okoye & Adigwe (2021) examined the extent of use of assistive technology to improve primary school pupils' English studies in Nigerian inclusive classroom. The findings of the study revealed that the use of assistive technology for reading among primary school pupils in inclusive English studies is to a low extent.

Despite the relevance of English Language globally, students' learning of English Language with AI tools still remain questionable. This is evidenced by the observation of the researchers that amidst the technology realities, some secondary school students are still waiting for their teachers to provide every information on English Language for them rather than them using computers and android mobile phones that have AI tools for effective learning of the subject in the school. Hence, the question is, are the students not aware of AI tools? If they are, to what extent are they using it for learning English Language? Based on this, the researchers sought to investigate the awareness and use of artificial intelligence tools for learning English Language among secondary school students in Awka South Local Government Area. It is in this view that the following research questions were raised:

1. What Artificial Intelligence tools for learning of English Language are secondary school students in Awka South local Government Area aware of?
2. To what extent are secondary school students using Artificial Intelligence tools for learning English Language in Awka South LGA?

### **Methods**

This study adopted survey research design. Two research questions guided the study. The population of the study according to Post-Primary School Service Commission (PPSSC), 2023 comprised 3,350 SS2 students in the 19 secondary schools in Awka South LGA. The sample size for the study was 150 SS2 students drawn from five secondary schools out of the 19 secondary schools in Awka South LGA using simple random sampling technique. Questionnaires titled "Awareness of Artificial Intelligence Tools for Learning of English Language (AAITLEL)" and "Use of Artificial Intelligence tools for Learning of English Language (UAITLEL)" were constructed by the researchers and used as instruments for data collection. The instruments were validated by three experts from the Department of Educational Foundations (Curriculum Studies and Measurement and Evaluation Units) in the Faculty of Education, Nnamdi

Azikiwe University, Awka. The reliability of the instrument was obtained using Cronbach Alpha which yielded the coefficient values of 0.72 and 0.75 respectively. The instruments were administered to the students on the spot with the help of five research assistants, each covering a school. Data collected were analyzed using percentage and mean. The cut-off for accepting percentage score for research question one was 50, with the decision rule that any percentage score from 50 and above was taken as “aware”, while percentages scores below 50 were taken as “not aware”. The cut-off point for accepting mean score for research question two was 2.50. The decision rule was that any weighted mean score from 2.50 and above was taken as high extent, while weighted mean scores below 2.50 were taken as low extent.

## **Results**

**Research Question 1:** What Artificial Intelligence tools for learning of English Language are secondary school students in Awka South Local Government Area aware of?

**Table 1: Percentages of the Artificial Intelligence Tools for learning English language that secondary school students in Awka South LGA.**

S/N	I am aware of the following AI tools for learning English language	Frequency	Percentage (%)
1	Chatbot	94	63
2	Duolingo	83	55
3	Quillbot	110	73
4	Grammarly	130	87
5	Google’s speech-to-text API	8	05
6	Memrise	55	37
7	Babbel	73	49
8	Google translate	98	65
9	Talkpal chat	87	58
10	Glossika	57	38
	<b>Average %</b>		<b>53%</b>

Data in Table 1 indicate that students are aware of Chatbot (63%), Duolingo (55%), Quillbot (73%), Grammarly (87%), Google translate (65%) and Talkpal chat (58%). However, they are not aware of items such as Google’s speech-to-

text API (5%), Memrise (37%), Babbel (49%) and Glossika (38%). The average percentage of 53% indicated that the respondents are in agreement that they are aware of AI tools for learning English Language.

### **Research Question 2**

To what extent are secondary school students using Artificial Intelligence for learning English Language in Awka South LGA?

**Table 2: Mean Scores of Respondents on Extent to which secondary school students utilize Artificial Intelligence Tools for learning English language in Awka South LGA**

S/N	I use the following AI tools for learning English Language to	Mean	Remark
1	Chatbot	3.07	HE
2	Duolingo	2.10	LE
3	Quillbot	3.03	HE
4	Grammarly	2.26	LE
5	Google's speech-to-text API	1.96	LE
6	Memrise	1.94	LE
7	Babbel	2.00	LE
8	Google translate	3.00	HE
9	Talkpal chat	1.85	LE
10	Glossika	2.02	LE
	<b>Mean of Means</b>	<b>2.3</b>	<b>LE</b>

Data in Table 2 indicate that the mean of Artificial Intelligence tools students use for learning English Language are Chatbot (3.07), Quillbot (3.3) and Google translate (3.00). However, AI tools such as Duolingo (2.10), Grammarly (2.26), Google's speech-to-text API (1.96), Memrise (1.94), Babbel (2.00), Talkpal chat (1.85) and Glossika (2.20) are AI tools that are not used by secondary school students for learning English language. The mean of means of 2.3 indicated that the respondents use the AI tools for learning English Language to a low extent.



## **Discussion**

The findings of the study showed that the majority of secondary school students are aware of Artificial Intelligence tools such as Chatbot, Duolingo, Quillbot, Grammarly, Google translate and Talkpal chat for learning of English Language. This finding is in agreement with the findings of Ikwuka, Okoye, Olonikawu, Igbokwe, Offordile, Okoye, Udenwa & Ezejibuaku (2021) which revealed that secondary school students in Aguata LGA of Anambra State are aware of ICT innovations. The reality of this agreement could be traced to the wide spread and ubiquitous of ICT tools particularly android mobile phones which the majority of secondary schools students are aware of and have access to as well. On the other hand, the finding disagreed with the findings of Alimi, Buraimoh, Aladesusi & Omolafe (2021) that the majority of the students are not aware of AI tools for learning.

Furthermore, the findings of the study showed that students use Artificial Intelligence tools for learning English language to a low extent. This finding is in line with the findings of Ikwuka, Obumneke-Okeke, Okoye & Adigwe (2021) which showed that the use of assistive technology for reading among primary school pupils in inclusive English studies is to a low extent. The low level usage of AI tools among secondary school students for learning of English Language is understandable given that they are not conversant with using ICT tools for learning the subject in the school.

## **Conclusion**

Based on the findings of the study, it was concluded that secondary school students in Awka South Local Government Area are aware of the Artificial Intelligence tools for learning English Language. It was further concluded that they use the Artificial Intelligence tools for learning English Language to a low extent.

## **Recommendations**

Based on the findings of the study, the following recommendations were made:

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1. Government of Anambra State should continue to ensure that AI tools are made available and accessible in all the secondary schools with strict compliance to their use for learning English Language in particular and other subjects in general.
2. Secondary school authorities in collaboration with ICT teachers should organize orientation for students on the importance and use of Artificial Intelligence tools for learning English language.
3. Secondary school English Language teachers and other subject teachers should endeavour to be given students assignments to do using Artificial Intelligence tools for acquaintance and effectiveness.

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