

Artificial Intelligence in English L2 Learning: Students' Perceptions and Challenges Implications for Digital Pedagogy and Language Education

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Abstract—This study investigated tertiary students perception, awareness, integration and challenges of using Artificial Intelligence (AI) in English Language reading and comprehension instruction. One hundred and twenty (120) university of Port Harcourt, Year II students in language studies gave response to a self-structured 30 item on Artificial Intelligence Perception and Awareness Questionnaire AIPAUQ. The instruments had reliability coefficient of 0.74 determined by using PPMC on data and was obtained using test-retest method. It was validated by two experts in language studies department of the University of Port Harcourt. 120 students were randomly selected for study. Findings of the study are that students have high awareness of the AI integration in English language comprehension and also perceive it as potent for effective interaction, individualized learning, dialoguing, and feedback in an engaged environment. However, the challenges of AI in L2 instruction include the lack of maturing of cognitive processes, academic dishonesty, high margin of plagiarism. It is recommended that tertiary institutions and government should make concerted efforts to make policies that will help students and teachers make good and acceptable use of AI in schools.

Keywords—Artificial Intelligence, L2 instruction, reading comprehension, students' perception, awareness

I. INTRODUCTION

The continuous advancement of Artificial Intelligence has offered immeasurable support to academics in the areas of teaching, assessment, possession and application of higher critical knowledge processing and satisfaction of various students' need in learning. Students are significantly influenced in terms of their engagement and academic performance due to the application of this technology in language instruction. Artificial Intelligence (AI) has made impact that spans the space of academics, providing adaptive and unique learning experiences and diverse applications.

According to Choi et al (2023) AI technologies such as chatnote, robots and intelligent tutoring systems

emphasize their roles in improved understanding and meaning in learning of diverse concepts in order to meet individualized programs in all areas of educational domain (Darkani 2023). Most faculty members who face difficulties in assessment, assignment, administrative processes, and teaching can have it simplified, hence contributing to vast gain in materials provision, time saving, at the unexpansive utility of AI.

Research interest is growing on AI and students' academic development despite the challenges and prospects in terms of adaptation to its technological privileges, reliance and integration. Vieriu & Petras (2025) is of the opinion that the integration of Artificial Intelligence in students' learning process has transformed the academic learning space to a rather exciting, rewarding and affording of opportunities with identifiable minimal challenges. These challenges includes the use of AI to enhance information processing and motivation of students, including those with impaired capabilities, software program learning deficiency and generally poor technology know how.

Artificial Intelligence are software programs designed to stimulate human cognitive processes such as decision making, inferential analysis, adapting information, remembering and understanding on detailed learning of topical issues fed into a machine that is capable within a short time to inform, handle problematic tasks and develop a machine-like algorithms through effective interaction with the learners (Font de Lavalle & Araya, 2023; Zhang & Chan, 2021; Poperici & Kerr, 2017; AI has revolutionized many sectors, mainly, operations are conducted and services delivered simply and accurately creating efficiency. AI technology in Education embraces, ICT or Computer studies aided by blended learning approach and other aspects of an umbrella of ICT involving use of cellular phones, computer and network hardware and software, video

conferencing and distance learning, broadcast media and all types of audios and video processing. Students have significant roles they play and are attributed to the extent of knowledge acquired in that they show active participation and responsibility in concept delivery, eliminate dependence on print texts in physical and possibly in asynchronous learning (Timie 2022). It facilitates acquisition of basic skills and concepts that are fundamental to students' need and improved higher order thinking skills and creativity. The challenges of integrating ICT across concepts and improving the quality of teaching and learning depends on teacher preparedness and accessibility, integration and instruction. Teachers bemoan non-inculcation of ICT values, adaptation and integration of relevant concepts in schools. Balanskat, Blantire and Kafala argue that teachers appear to acknowledge the value of ICT in schools, they continue to encounter obstacles during the processes of adapting these technologies into their reading and learning. Yifan (2024) addressing the growing interest in the AI in language instruction on L2 learner achievement stated that AI has the potential to transform language instruction in terms of two abilities including reading comprehension and writing skills. The quantitative analysis of response to AI applications in learning, showed a higher level of L2 learning motivation as well as enhancing students engagement and transformative effect. The finding, furthermore, stated that AI program impacted on improving outcomes, learner motivation, underscoring the significant positive impact of AI-driven educational technologies in language education. Similarly, Yifan (2024) is of the opinion that an AI-powered language learning approach contributed to the language learners motivation and learning achievement.

The major challenges facing the developing countries is the crippling approach to adapting technology. The collegial use of AI in the content development and classroom instruction is entirely new. Basically, most teachers are either technophobic or lack motivation towards inculcating tech-ideas. This grossly affects developing topical issues in subject specialties in order to boost expertise and pedagogy.

To transit to an AI technology use which has witnessed rapid advancement in developed countries is worrisome when the present state of lack of motivation and weak operational status on inculcating of AI ideas emanating from non-inclusive

ideas of the ICT in schools with respect to teaching and learning of English as a second language. The advocacy for exploring AI tools for language research in Nigeria is aimed at developing softwares that can ease difficulties in pronunciation and availability of learning resources. Abioye (2025) suggested that in view of numerous challenges for underrepresented languages, machine learning, computer literacy and programs and science knowledge, young innovators can acquire the necessary tools to make a significant impact. Okigbo (2025) asserted that in view of the global AI education push up in technical education, Nigeria Universities should no longer be reluctant to join the race for AI driven systems including AI tutors.

The advantage of AI in education include facilitating metacognition or personalized learning outcomes by evaluating students' strength and weaknesses in concepts taught, exposing their cognitive ability and make periodic assessment, Yifan (2024). It allows for learning at ones' convenience. In terms of teacher-student interactivity, AI can collect using the teacherBot for large amount of questions, and identify attendance using facial recognition software (Young, 2020). Holmes & Tutomy, 2022 remarked that AI has significant contributions to learning.

According to Darkani & Safa (2023), AI in Education (AIED) may contribute to students inadequacy in deep content knowledge mastery. Students may employ AI tools for submission of their assignments (use of essay mills and examination) hence students distort their perception of education license, consequently eroding students motivation to learn.

Students would undermine credibility and high institutional standard values of trustworthiness and honesty (Eke, 2023).

AI may result to dormancy in human reasoning capacity and skill utility. It could hamper the decision making and critical thinking attributes of a scholar making man to depend on results of information fed into a machine following a pattern of algorithm (Dakakini & Safa, 2023).

Moreso challenges may result since the AI platform can be logged into, not minding who and when particular information goes. It is therefore possible for the AI system to weaken human interaction leading to a worsening of interpersonal skills

(University of Buckingham interim Report, 2022). Students are willing to face the problem of discouragement or be alienated from their teachers since he/she could interact with mechanized teacher bots. Teachers and students glean a lot of understanding in the physical classroom dominated with affection and humour which evoke understanding and improve relationship. If teachers and students distance themselves, disassociation and disconnectedness of student's experiences and those of the instructions may result (Tao et al., 2019; Arken & Epstein, 2000).

Furthermore, in second language instruction, AI is disadvantaged in creating what Wogu et al., (2018) termed inequality. In evaluation of students outcome AI do not show equality in memorization and intelligence, due to differences in response to AI tools and learning outcome.

The perception of students' in tertiary institutions in L2 instruction using AI is therefore pertinent for the purpose of advocacy for integration, especially in teaching and learning of reading comprehension in English language.

II. STATEMENT OF THE PROBLEM

Artificial Intelligence is taking a central stage in application of technology in learning with students' diverse opinions and differences in adopting the technology, and making of adjustments in personalized learning. While some students are bereft of the engagements and processes of AI in assisting their learning difficulties and interactivity, supporting them in doing assignments and projects in schools, perhaps getting creative ideas on essays and techniques of writing; quite a large number of students' populace rely on the conventional lecture methods with students independently carrying out their research with minimal support of technology based resources and information. Nevertheless, some use the Google scholar, ask me, use of computer aided approaches, printed texts and the computer-aided instruction in language learning.

Furthermore, some faculties find it difficult to adopt the use of AI due to the associated hazards in classroom instruction. AI tend to favour a personalized program than a typical classroom instruction due to incidences of distraction and how instructors would carry out teaching, evaluation and

feedback. Secondly, it limits the facial teacher-student interactivity, undermining affective domain in assessment of students' learning process. The problem of funding for AI applications and collegial acceptability as a means of assessment are factual. It is therefore of importance to determine the level of awareness, challenges and to evaluate students perception of the use of AI in English as a second Language (L2) instruction.

Significance of the Study

The study will create awareness for institutions to encourage the need for the use of AI in schools, especially in teaching and learning of English language as a second language. It is hoped that the findings of this study would awaken the awareness, utility and inculcation of the ideas of AI by students and teachers in higher institutions of learning in the research area.

Educational authorities will therefore, formulate policies on the acceptable and good use of AI in instruction and evaluation of students academic achievement in language, whether of a school based program or distance learning program thereby subsidizing the financial difficulties, the students may be exposed to.

III. AIM AND OBJECTIVES OF THE STUDY

The aim of the study is to evaluate tertiary students perception of, awareness, usage and challenges of Artificial Intelligence (AI) on English Language reading and comprehension instruction.

Specifically the study will achieve the following objectives:

1. Determine students level of awareness of the potentials of AI for L2 instruction in tertiary schools.
2. Evaluate the usage of AI in teaching and learning of topical issues in L2 instruction.
3. Determine student's perception of the use of AI in academics, especially in an L2 reading instruction classroom
4. Determine the challenges of applying AI in English Language instruction in schools

Research Questions

The following research questions were stated to guide the study.

1. What is the level of awareness of students about the potent of AI in English Language (L2) comprehension?

2. How does tertiary students use AI in learning topical issues in English Language reading and comprehension instruction?
3. What is the tertiary students' perception on the use of Artificial Intelligence in academics in an ESL classroom instruction?
4. What are the challenges of applying AI in English Language instruction in schools

IV. METHODOLOGY

The study was conducted at the University of Port Harcourt, Nigeria on students perception, awareness, challenges and use of Artificial Intelligence on English Language instruction as a second language. The participants consisted of randomly selected 120 students in year II in the Department of English Studies. It adopted a descriptive survey study using the Artificial Intelligence Perception and Awareness Questionnaire (AIPAQ). The self-structural codes

reflect meaningful patterns with respect to the universality of design. Construct validity was carried out using two experts in language studies The instrument had reliability coefficient of 0.74 obtained using pearson moment correlation coefficient formula (PMCC). Students response were evaluated using Analysis of Variance (ANOVA), inferential statistics and mean score values, in order to test the stated hypotheses and descriptively answer the research questions.respectively. The descriptive design allowed for administration of AIPAQ,retrieval, collation of data, analysis and generalization based on tested hypotheses(Kpolovie,2011).modified likert value of HLA=SA=4,ALA=A=3,LLA=D=2,UNA=SD=1marks,where HLA means high level of awareness.SA means Strongly Agree,ALA means a level of awareness,A means agree,LLA low level of awareness,UNA means unaware and SD means strongly disagree

V. APPENDIX I

Artificial Intelligence Perception and Awareness Questionnaire

S/N	Questionnaire Item	HLA	ALA	LLA	UNA	<u>X</u>
	Awareness					
	What is your level of awareness of:					
1.	Use of Artificial Intelligence in L2 English Language instruction and application in comprehension?					
2.	AI assisted language learning applications have demonstrated a significant role in enhancing L2 learners over all language learning achievement.					
3.	Students' motivation is on the increase due to AI platform significant improvement of students' language learning.					
4.	AI eliminates difficulty faced by students in factual assemblance, spelling and summary during L2 instruction.					
5.	Students written essays and comprehension is immensely improved using AI platform.					
6.	AI powered language learning tools revolutionize (EP?) classrooms by creating a personalized and adaptive learning environment (Yifan, 2024).					
7.	AI tools serve as tutor/ tutee and a learning tool/partner or policy making advisor (Hwang et al., 2020).					
8.	Learning in L2 comprehension can be tailored towards meeting objectives and course need.					
9.	Comprehension in L2 instruction require critical thinking, knowledge of pupils, efficient spelling and meaningful understanding of the passage. These processes are easily catered for by an AI platform for personalized instruction					
10.	Rosetta Stone is an AI Application that allow for interactive learning through lessons, exercises, quizzes in over 30 languages.?					

11.	AI provides students with more ease of learning since they practice their language skills, repeat tasks such as specific expressions or ideas and ask Teacher Bot questions at ease unlike what they can do with their actual teachers (Gao, 2021)					
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S/N	Usage	SA	A	D	SD	<u>X</u>	Decision
1.	AI can be used in L2 comprehension since it allows for tutor-learner interactivity, personalized feedback and accidence as well as guidance throughout their learning without the intervention of their instructors.						
2.	AI increases individualized learning involving cramming, dialoguing, reading and comprehension exercises.						
3.	Students can respond to their teaching needs in language instruction using AI especially in use of AI chat bots which eliminates phobia and enhance students' autonomy in learning						
4.	AI accuracy and speed in tutor-student teaching and learning is not only exciting but rewarding especially in reading comprehension.						
5.	AI improves students motivation and make significant impact in language education.						
6.	AI produces outcomes, as in the results of quizzes and essays.						
7.	Variety of interactive exercises like grammar drills, reading passages are averse in AI grammar talk and useful in teaching and learning of comprehension.						
8.	AI platforms have interactive exercise along with dynamic language games and instant feedback, which fosters an engaging environment that captivates learning focus and enhanced their enjoyment of the learning process (Yifan, 2024)						
9.	English Language comprehension learners are engrossed in improved engagement period due to fascinating AI software language learning program.						
10.	AI had improved students social emotional learning in terms of skill acquisition, establishment of healthy relationships with their peers and teachers, as to work together effectively.						
	Challenges						
9.	Inculcation of AI software ideals denature mental processes, such as human interactivity which are capable of rustification of human mental activity.						
10.	AI has problems of data privacy risk which may lead to piracy, offload of reliable facts among users.						
11.	Students who engage in comprehension in L2 are likely to face problems of accuracy, cognitive deficiency with ethical implications.						
12.	There is a deep reliance on critical thinking skills in human when AI is relied on.						

13.	Although AI offers significant benefit such as enhanced academic outcomes, the learner has over 80% scaffold using the platform, which is dangerous, bereft of critical thinking.						
14.	Decision of learners, logical thinking evidenced through interpretation, analysis and interference which makes learning meaningful, are completely replaced by AI.						
15.	Faculties and academics would suffer inconsistency in enrolment, teacher-student relationship and engagement if AI powered learning modes and software is generalized for instruction on English as second languages L2.						
16.	AI introduction to the teaching of English can be a very serious challenge if checks and balances are not put in place, it could lead to erosions of students' motivation and cause laziness.						
17.	Academic dishonesty which involves misconduct in work, exams, assignments outcomes of L2 learners.						
18.	AI would increase the careless use of plagiarism and cheating in L2 comprehension, if softwares of Microsoft Cartana, Quillbot, Assistant Poe and Grammarly are consistently used by learners.						

VI. RESULTS AND DISCUSSION

Research Question 1: What is the level of awareness of tertiary students on the potent of Artificial Intelligence (AI) in English Language (L2) comprehension?

Table 1.0: Testing students AI application on L2 reading comprehension

S/N	Questionnaire item	4 HLA	3 ALA	2 LLA	1 UNA	$\bar{x}$	Decision
1.		60(240)	25(75)	15(30)	20(20)	3.04	HLA
2.		43(72)	18(54)	48(96)	11(11)	2.77	ALA
3.		103(42)	13(39)	4(8)	0(0)	3.82	HLA
4.		58(232)	20(80)	22(44)	20(20)	3.13	HLA
5.		28(12)	12(36)	48(96)	32(32)	2.30	ALA
6.		62(248)	15(45)	20(49)	22(22)	2.96	ALA
7.		20(50)	60(180)	30(60)	10(10)	2.70	ALA
8.		22(83)	31(93)	50(100)	17(17)	2.48	LLA
9.		100(40)	14(42)	6(12)	0(0)	2.78	HLA
10.		8(32)	20(60)	40(80)	52(52)	1.87	HLA
11.		60(240)	25(75)	20(40)	15(15)	3.08	

Criterion Mean = 2.50

Mean ($\bar{x}$) of mean criterion = 2.90

Table 1 revealed that tertiary students have high level of awareness on use of AI applications in reading compression ($\bar{x}$: 3.04 > 2.50) and has demonstrated significant role in enhancing L2 learners overall language learning advancement ($\bar{x}$: 2.77 > 2.50).

The motivational assessment of students is on the increase due AI to use hence a significant improvement on learning of language ($\bar{x}$: 3.82 > 2.50).

However, they are aware up to a high level that AI eliminates difficulty faced by students in factual assemblance, spelling and summary during L2

language () the problem of writing essays and comprehension has been immensely improved using AI platform. Students have an average awareness about this. Students are highly aware that AI powered software on language learning tools have revolutionized the English as a foreign language classrooms by creating a personalized and adaptive learning environment. Tertiary students are averagely aware that AI allow for interaction between the tutor and tutee while advances on policy are discussed. ($\bar{x}$: $2.48 < 2.50$).

AI capability of meeting learning objectives set for a L2 comprehension as well as meeting the course need according to the learners to an average level of awareness. Comprehension in L2 instruction require critical thinking, knowledge of parts of speech efficient spelling skills, meaningful understanding of the passages as cognitive processes but rammed completely AI platform for personalized instruction ($\bar{x}$: $3.78 > 2.50$), to a high level and the use of AI

(Rosette Stone) for interactive learning through lessons, exercises. Quizzes in over 30 languages is an added advantage of the scope of applications of AI in interactive learning, students however, had low level of awareness of the package.

In second language reading comprehension, students had high level of awareness in the efficacy of AI to ease learning practice skills like repeat tasks such as specific expressions or idiomatic expression through Teaching Bot questioning at ease than they would have, facing a physical teacher ($\bar{x}$: $3.08 > 2.50$). The level of awareness of tertiary students on the potential of Artificial Intelligence (AI) in English Language (L2) comprehension is high ($\bar{x}$: $2.91 > 2.50$).

Research Question 2

How do tertiary students use Artificial Intelligence (AI) in learning topical issues in English Language comprehension instruction?

Table 2.0 use of Artificial Intelligence for learning topical issues in L2 instruction

S/N	Questionnaire item	SA	A	D	SD	$\bar{x}$	Decision
1.		70(200)	20(60)	15(30)	15(15)	3.20	Strongly Agreed
2.		52(208)	30(90)	18(36)	20(20)	2.95	Strongly Agreed
3.		50(200)	30(90)	30(60)	40(10)	3.00	Strongly Agreed
4.		20(80)	50(200)	45(80)	10(10)	3.08	Strongly Agreed
5.		65(260)	25(75)	10(20)	20(20)	3.12	Strongly Agreed
6.		50(200)	50(60)	10(20)	10(10)	3.16	Strongly Agreed
7.		60(280)	20(80)	50(100)	20(20)	3.33	Agreed
8.		30(120)	20(80)	50(100)	20(20)	2.67	Agreed
9.		70(280)	40(150)	0(0)	10(10)	3.67	Strongly Agreed
10.		40(160)	40(120)	20(40)	20(20)	2.83	Strongly Agreed

Table 2.0 indicates that tertiary students strongly agreed that AI can be used for L2 comprehension instruction since it allows for tutor tutee interactivity personalized feedback and assistance as well as guidance throughout their learning without the intervention of their instructors.

In reading comprehension, reading dialoguing, scamming and vocabulary meanings are a necessity. The tertiary students individualized learning involving scamming, dialoguing, reading comprehension passages ($\bar{x}$: $2.95 > 2.50$).

Carrying out response to reading needs in language instruction into AI chatbots eliminated phobia and enhanced students autonomy in learning to an acceptable level ($\bar{x}$: $3.00 > 2.50$).

It was strongly agreed, more so that AI accuracy and speed in tutor-student teaching and learning is not only exciting but rewarding especially in reading comprehension ($\bar{x}$: $3.08 > 2.50$). Furthermore, AI improves students motivation and make significant impact on language education, the respondents strongly agreed that most Artificial Intelligence do not preclude reading through cognitive medians but produces outcomes as a results of quizzes, essays gaining time through use of machines ($\bar{x}$: $3.12 > 3.16$). The use of variety of interactive exercises, grammar drills, reading passages and response exercises are averse in AI grammar talk and useful in teaching and learning of L2 comprehension ($\bar{x}$: $3.33 > 2.50$).

Respondents agreed with Yifan (2024) that AI platforms provides interactive exercises along with dynamic language games and instant feedback fastening an engagement environment that captivated learner focus and enhanced their enjoyment of the learning process ($\bar{x}$: 2.67 > 2.50). Respondents agreed strongly that English language comprehension learners are engrossed on improved engagement period due to fascinating AI software language learning program ($\bar{x}$: 3.67 > 2.50).

Tertiary students strongly agreed, ($\bar{x}$: 2.83 > 2.50) that AI has improved their social and emotional

learning in terms of skill acquisition, establishment of healthy relationships with peers and teachers, as to work together effectively.

The respondents strongly agreed that AI is useful in English language (L2) comprehension in terms of interactivity, individualized learning, dialoguing, reading, fast feedback, engaged environment and improved students social and emotional learning and acquisition of skills ($\bar{x}$: 3.07 > 2.50) Research Question 3

What are the challenges on application of Artificial Intelligence (AI) in English Language an L2 instruction?

Table 3.0: Challenges in application of AI in L2 instruction in tertiary institutions

S/N	Questionnaire item	SA	A	D	SD	$\bar{x}$	Decision
1.		80(320)	20(60)	10(20)	30(30)	3.42	Strongly Agreed
2.		50(200)	20(60)	30(60)	20(20)	2.83	Strongly Agreed
3.		40(160)	30(90)	30(60)	20(20)	2.75	Strongly Agreed
4.		70(280)	20(60)	20(40)	10(10)	3.25	Strongly Agreed
5.		50(200)	50(150)	10(20)	10(10)	3.17	Strongly Agreed
6.		50(200)	50(150)	20(40)	0(0)	3.25	Strongly Agreed
7.		50(200)	60(180)	0(0)	10(10)	3.25	Strongly Agreed
8.		65(260)	15(45)	20(40)	20(20)	3.04	Strongly Agreed
9.		32(128)	28(84)	40(80)	20(20)	2.60	Agreed
10.		80(320)	20(60)	10(20)	10(10)	3.42	Strongly Agreed

Table 3.0 indicated that the respondents strongly agreed that inculcation of AI software ideals could denature human mental processes since information are retrieved from the computer, media slang mental activity ($\bar{x}$: 2.83 > 2.50).

Table 3.0 revealed that respondents strongly agreed one of the challenges to a high degree ($\bar{x}$: 3.42 > 2.50) of AI in education is that it would increase the margin of plagiarism and cheating in L2 comprehension if its softwares of Microsoft Cartana, Qullbot, Assistant Poe and Grammarly. They strongly agreed that ($\bar{x}$: 2.83 > 2.50) application of AI in academics lead to students misconduct, academic dishonesty in project work, assignments, examination, and may not reflect the originality of the work.

The respondents strongly agreed that students who engage in comprehension in L2 are likely to face problems of accuracy cognitive dissonance which has ethical implications ($\bar{x}$: 2.75 > 2.50).

Furthermore, the respondents strongly agreed that AI in education would lead to deep reliance on AI hence deterring critical thinking skills in human. Although AI offers significant benefit such as enhanced academic outcomes, the learner has over 80%

scaffolding hence memory enhancement question, critical thinking are likely to be negatively affected ($\bar{x}$: 3.25 > 2.50).

They strongly agreed that AI poses a challenge ($\bar{x}$: 3.25 > 2.50) on learners in ability to demonstrate reposition of ideas, evidences of analytic process and meaningful learning if AI applications are relied upon.

A lot of tertiary students in different faculties would resort to individualized learning rather than face to face instruction, student-teacher interactivity will reduce and less or no engagement in language classroom if AI powered learning modes and software is generalized for instruction ($\bar{x}$: 3.25 > 2.50).

Moreso, students motivation to learning may erode and laziness of students towards their academics may result if checks and balances are not carried out in the application of AI in classrooms ($\bar{x}$: 3.24 > 2.50).

The respondents agreed that AI have problems of data privacy risk which may lead to piracy, offload of reliable facts among users ($\bar{x}$: 2.83 > 2.50).

Respondents strongly agreed that the challenges of AI in classroom application for teaching L2 comprehension include denature of mental processes, data privacy risk, cognitive dissonance, deep reliance of AI bereft of critical thinking, inconsistency of enrolment in schools, academic dishonesty teaching

to high margin of plagiarism, among others ($\bar{x}$: 3.09 > 2.50).

Research Question 4

What is the tertiary students' perception on the use of Artificial Intelligence in ESL classroom instruction?

Table 4.0: Perception of tertiary students on AI in EFL classroom

S/N	Questionnaire item	SA	A	D	SD	$\bar{x}$	
1.	Tertiary students perceive that AI application is a product of advance technology in learning and have not been integrated in academics especially for ESL instruction in this institution	80(220)	20(60)	10(20)	10(0)	3.42	Strongly Agreed
2.	Tertiary students perceive that application of AI limits aspects of intellectual property and discourage their levels of performance	30(120)	20(40)	20(20)	2		Strongly Agreed
3.	AI application are at public domain and academic knowledge in education and attract university punitive measure if used for projects, assignments	80(320)	10(30)	30(60)	20(20)	3.58	Strongly Agreed
4.	They perceive that in the Nigerian universities, instructors may not be ready to engage on AI because students might misuse it.	50(200)	50(150)	10(20)	10(10)	3.17	Strongly Agreed
5.	They perceive the lack of societal well being offered through personalized human interaction as a threat of AI technology (University of Buckingham Interim Report, 2021) despite the progress in academics.	30(240)	60(180)	30(0)	0(0)	4.00	Strongly Agreed
6.	The tertiary students perceive that AI systems in education may worsen their interpersonal skills and render them impotent at individual level (Airen & Epstein, 2000)	80(320)	40(120)	0(30)	0(0)	3.67	Strongly Agreed
7.	Tertiary students perceive that an extension use of AI would create ethical problems such as exposing data involving students performance, vulnerabilities biometric information or even their behavioural habits Tao et al., (2019)	20(80)	40(120)	30(60)	20(20)	2.33	Disagreed
8.	Students difficulties on language education, may deepen since AI is white and likely reflects anthropomorphized traits, ideals and values (Thind, 2023).	80(320)	30(60)	0(0)	10(10)	3.14	Strongly Agreed
9.	Language gaps of disparity in learners between those who have access those who have not, to the new form of technology application of AI	70(280)	30(0)	10(20)	10(10)	3.33	Strongly Agreed
10.	Students perceive a specific inequality in terms of skills sets required in	20(80)	30(90)	50(100)	20(20)	2.41	Disagreed

operationalizing the use of AI technologies.						
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Table 4 revealed that tertiary students perceive that AI applications is a product of advance technology in learning and have not been legally integrated in academics especially for EFL instruction in the institution ($\bar{x}$:3.42 > 2.50). Intellectual property law, plagiarism, piracy, doctoring of academic records and much more. However, students perceived that extensive application of AI would limit aspects of intellectual property law and discourage checks to students' performance ($\bar{x}$:2.75 > 2.50).

The students perceive that AI is at public utility and would deter academic know how in education, and attract university punitive measure if used for projects and assignments ($\bar{x}$:3.58 > 2.50).

Furthermore, it was also perceived that Nigerian instructors may not be check to engage on AI software with students because they might misuse it ($\bar{x}$:3.17 > 2.50).

Tertiary students perceive that lack of societal well being offered through personalized human interaction is a threat of AI technology in agreement with the report of the research findings in University of Buckingham interim report (2021). They strongly agreed that AI systems in education may worsen students interpersonal skills and render them impotent at individual levels in classroom instruction, according to the view of Arken & Epstein (2000).

Moreso, tertiary students disagreed on the perception that an extensive use of AI would create ethical problems such as exposing student's achievement, vulnerabilities and biometric information or even their behavioural habits as posited Tao et al (2019).

Students' difficulties in language education may deepen since AI is white and reflects anthropomorphized traits, ideals and values (Thind, 2023); $\bar{x}$: 3.25 > 2.50.

They perceive that gaps of disparity in learners between those who have access and their counterparts who have not access as they view forms of AI applications ($\bar{x}$:3.33 > 2.50).

Students disagree in their perception that a rift such as inequality in terms of skill sets required in the operationalizing the use of AI technologies ($\bar{x}$:3.41 > 2.50).

VII. DISCUSSION OF FINDINGS

Artificial Intelligence according to the test of hypothesis revealed that tertiary students awareness

on AI is significant in the research area. This agrees with the descriptive analysis that revealed students high level of awareness on AI language learning applications on enhancing students L2 achievement and is capable of eliminating tertiary students difficulties of factual assemblance, spelling and summary and ability of revolutionizing the EFL classroom and personalized program using its applications. This agrees with Vieru&Petrus (2015) and Yang(2023) on the awareness of the potency of AI to transform students learning space to a rather exciting and rewarding in handling diverse concepts and meet individualized program. Tertiary students have the perception that AI can be utilized for learning in EFL classroom. The respondents agreed with Timie (2022)that it has eliminated dependence on other ICT materials and dependence on print texts and periodicals. Yifan(2023)emphasized that the use of AI powered learning approach has contributed to the language learners motivation and learning environment, despite the position of disconnection ,association and loss of interpersonal skill acquisition created by AI platforms usage, according to Tao et al.(2019),Arken&Epstein,2000: among others. The challenges to use of AI innovative technology in learning reading comprehension was significant at 0.05 significance level and agreed with some empirical studies that inculcation of the ideals of AI in school instruction depends largely on the preparedness of teachers who faced obstacles of integration it into the process of teaching and learning.

VIII. SUMMARY OF FINDINGS

The findings of the study descriptively, are;

- 1) The level of awareness of the potency of AI in English Language (L2) instruction is at a high level
- 2) The tertiary students strongly agreed that the AI is useful in English language reading comprehension in terms of effective interactivity,individualized learning, dialoguing, reading and writing, feedback and engaged environment (3.14>2.50)
- 3) The challenges faced by tertiary students on AI integration and usage in learning include classroom application in learningL2 reading comprehension include denature of mental processes, cognitive dissonance, academic dishonesty, high margin of plagiarism(3.09>2.50) Conclusion

The application of AI powered systems in language L2 instruction limit aspects of intellectual property law, lack of personalized human interaction and inter personal skills despite their significant high level of awareness of its potent to revolutionized L2 instruction. Use of teacher BOT, Rossetta stones and other software on language learning is significant among tertiary students, despite the surmountable challenges.

IX. RECOMMENDATIONS

Based on the findings of this study, it is recommended that tertiary institutions adopt AI Software for second language comprehension instruction. secondly, there is an advancement in use of technology in education, the government should enact policy to integrate AI in language communication and instruction in tertiary institutions for effective ethical use as avoiding it in the classroom is a license for unethical use.

REFERENCES

- [1] Abioye, I. (2025). Why young people should explore AI tools for language research. *Vanguard Newspaper*, July 13, p.14.
- [2] Al-Alwant, A. (2015). *Barriers to integrating information technology in Saudi-Arabia Education*. Doctoral Dissertation, the University of Kansas-Kansas.
- [3] Arken, R.M., & Epstein, R.G. (2000). Ethical guidelines in AI in education: Starting a Conversation *International Journal of Artificial Intelligence in Education*, 11(2000) 163-176.
- [4] Balanskat, A., Blemuts, R.C., & Kefala, S. (2006). *A review of studies of ICT impact on schools in Europe*: European Sihatnet has been mentioned (Al-Alwani, 2005).
- [5] The Buckingham Journal of Education (2021) 2(1) Buckingham JE
- [6] Choi, J.J., Lee, M.S., Ho, J.Y.Y., Kwok, C.Y.W. (2023). Chatting and cheating: The impacts of chat GPT and other artificial intelligence language modes on nurse education. *Nurse Education Today*, (125).
- [7] Darkani, D., & Safa, N. (2023). Reading patterns scamming and the control F/seanhicon: How students really don't read. *International Research in Education*, 11(1), RP128-150.
- [8] Eke, D.O. (2023). Chat GPT and the rise of generative AI: threat to academic integrity? *Journal of Responsible Technology*, 13(1).
- [9] Fort de laval, R.R., & Araya, F.G. (2023). Exploring the benefits and challenges of AI-language learning tools. *International Journal of Social Sciences and Humanities Invention*, 10(1), 7569-7576.
- [10] Gao, X. (2021). Role of SS network technology and artificial intelligence for research and reform in English situational teaching in higher vocational colleges. *Journal of Intelligent and Fuzzy Systems*, 40(2) 3643-3654.
- [11] Ghavifekr, & Kunjappan, T., Ramasamy, L & Anthony, A. (2021). Teaching and learning with ICT tools: Issues and challenges from teachers' perception. *Malaysian Online Journal of Educational Technology* Vol. 4, (2) 38-57.
- [12] Holmes, W., & Tuomi, I. (2022). State of the art and practice in AI in education. *European Journal of Education* 57(1)542-570.
- [13] Okigbo, A.D. (2025). Why Nigeria needs an AI policy for its universities – before its too late. *Vanguard*, July, 13 p26.
- [14] Popenici, S.A.D., & Kerr, S. (2017). Exploring the impact of artificial intelligence on teaching and learning in higher education. *Research and Practice in Technology Enhanced Learning*, 12(22).
- [15] Tao, H.B., Diaz, V.R., & Guerra, V.M. (2023). *Artificial Intelligence in education: Challenge and disadvantages for the teacher*.
- [16] The Buckingham Journal of Education (2021) 2(1) Buckingham JE
- [17] Thind, J. (2023). *Artificial impartiality: The insidious role of AI in reinforcing white supremacy in Canada*. Master thesis; University of Manitoba, Manitoba-Canada.
- [18] Timie, V.L. (2022). ICT in education. Available <http://www.eprmers.org>
- [19] Vieriu, A., & Petras, G. (2025). The impact of Artificial Intelligence (AI) on students' academic development. *Education Science*, 16(3), 342-353.
- [20] Wogu, I.A.P., Mistra, S., Olu-Owolabi, E.F., Assibong, P.A., Udoh, O.D. (2018). *Artificial Intelligence, artificial teachers and the fate of learners in the 21st century education*.
- [21] Yifan, Z. (2024). Artificial Intelligence in language instruction: Impact on English language learning achievement and L2 motivational self-system in Y. Wang & M.S

Cardemas (Eds). *Proceedings of the XXIIInd international call research conference* 321-326, Castledum.

- [22] Yong, Q. (2020). Application of artificial intelligence to higher vocational English teaching in the information eminent. *Journal of Physics Conference Series* 1533(3).
- [23] Younas, M., Ali, S., Mahmood, T., Nasumi, R.A., Khashansid, M.A. & Akter, S. (2024). Students' awareness and perception regarding the usage of AI in Education at Government College University, Failsalabad. *Journal of Social Sciences Advancement* Doi: <https://doi.org/10.52223>.