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The Role Of Artificial Intelligence In English Literature Learning: A Study Among Undergratuate Students

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ABSTRACT

This study was an attempt to explore the role of artificial intelligence in second language learning at undergraduate level. Aim of the study was to show whether the use of artificial intelligence can enhance the language learning abilities of undergraduate students and how much it is important for language learning process. To fulfill this purpose, 200 undergraduate students (male and female) studying in Minhaj University, Lahore University, Riphah International University and Punjab University of Lahore region were selected as participants. An instrument use[1]d in this study was Questionnaire on the role of artificial intelligence in 2nd language learning at undergraduate students. After obtaining the raw data, SPSS software (version 22) was used to change the data into numerical interpretable information. Chi square test was used to check the association between perceptions scores of participants with the demographic variables. Furthermore, demographic variables were described in frequencies and percentages whereas age was described in mean ± standard deviation. The findings demonstrated that the perception of most of the participants (language learners) is that the use of artificial intelligence in language learning can improve the quality of student's learning at undergraduate level. It was highlighted from the results that language learners can be benefited from the application of artificial intelligence and computer-assisted technology as a tool in paving the way for the language learning process.

Keywords: *artificial intelligence role, computer-assisted technology, language learning, undergraduate language learners.*

Introduction

Gone are the days of library visits to search learning material from an Encyclopedia or books for university projects. Now the internet and computer based technology become the primary source of learning and information. Now the classrooms are up-to-dated with the availability of smart technology such as interactive whiteboards and computer-based learning become more commonplace in universities. Today the occupation of manufactured thinking in tutoring and student learning become a very tricky subject. While some fear that computerized reasoning will take control of the educational system, causing harm to students and educators, others are confident that synthetic intelligence will work in the educational system as a whole. Of course we are quite far from including robots in the review lobby; man-made awareness will progress

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into preparing very soon. Certain informative and learning tasks can be made more direct by the use of manufactured thinking.

Mechanical types of progress in the automated period require the ongoing age to change and agree with these changes. It is fundamental to Perceive these continuous headways. Man-made consciousness has been the subject of numerous academic investigations, including research into robots and visit bots. This study focused in on including Talk bots man-made knowledge recorded as a printed copy, making it especially captivating using cognitivism speculation by George Siemens. This study's chief goal was to secure the position of a man-made knowledge Chatbot and its moderate and in reverse impacts on student perspectives. Even more specifically, this study looked at 32 members who were fourth-semester English Writing understudies. These individuals have utilized simulated intelligence stages known as Chatbots, which are comparable to Talk GPT and other Chatbots. They were referenced to complete a previously coordinated web based survey. The findings demonstrated the importance of artificial intelligence chatbots in completing writing tasks. These stages go about as wellsprings of inspiration, help in figuring out complex subjects, and truly assist with remaking sentences. In addition, the outcome is increased short-term sufficiency for understudies in completing academic tasks. In other hand, there is moreover a basic propensity framing penchant.

The use of fabricated reasoning technology will primarily transform the traditional method of education into shrewd advancement. Various fields, including education, stand to gain greatly from synthetic reasoning innovation. Various researchers ensure that Mechanized thinking. As a result, the AI can effectively manage education. The latest progressions license creators to assist a PC with doing tangled endeavors. It prompts obtain updates developing encounters. Anyway, replacing the guide or teacher is incomprehensible. A.I is similarly saving the two understudies and teachers time to focus in on abilities to make like conversational commonality and confidence in granting across social orders.

Computer-based intelligence, or manufactured intelligence, is a rapidly growing field that is transforming writing and other fields. Intelligent machines systems are good for taking care of and inspecting a ton of data, which has gigantic consequences for the imaginative world. Fabricated reasoning can be used to make, stall, and interpret composing, which opens up new streets for dynamic investigation. We examine the integration of computer-based intelligence into English writing and its impact on the abstract in this examination paper. world. Synthetic mental ability is changing how we live, work, and help out each other. Its impact is being felt in a wide range of businesses, including entertainment, money, manufacturing, and medical care[7, 8]. One district where computerized reasoning is continuously being utilized is in the field of English composition. Computerized reasoning is being used to separate, interpret, likewise, even produce creative works. Although writing produced by artificial intelligence is not new, recent advancements in computer-based intelligence innovation made it possible to create works with more nuance and complexity. This paper examines the various ways man-made knowledge is being used in English composition and the impact it has on the field.

The audit discusses the use of artificial intelligence in abstract creation and analysis, in which artificial intelligence calculations are used to create or assist in the formation of artistic works and dissect their expressive components, subjects, and designs. Further, the writing survey investigates how computer-based intelligence is utilized in user commitment and artistic analysis. It also looks at the utilization of man-made intelligence in the understanding of writing, examining how simulated intelligence frameworks can examine and provide bits of knowledge into complex texts. It investigates how proposal frameworks and chatbots powered by simulated intelligence can improve user experiences and facilitate discussions about academic works. The review similarly addresses the ethical considerations related with man-

made brainpower made composition. It tends to stresses like authorized advancement, creation, inclination, and depiction in man-made consciousness delivered texts. The review underlines the need to figure out a congruity between creative movements and the protecting of human creative mind of some sort or another. In general, the writing survey provides a comprehensive understanding of the current state of research and information regarding artificial intelligence coordination.

Impact of Using AI for English Literature Students

A direct meaning of computerized reasoning (man-made intelligence) expresses that it is the impersonation of human knowledge in machines that are customized to act and think like people. This definition encompasses any machine that possesses human-like abilities like learning and problem-solving. In this perspective, it is fascinating to recall that John McCarthy, the father of man-made consciousness, described man-made brainpower as "a science and designing to make smart machines, particularly shrewd PC programs" in 1990 (Minsky, 2006). The term man-made intellectual prowess (PC based knowledge) is used when a machine reenacts capacities that individuals cooperate with other human characters, for instance, learning and decisive reasoning (Moore, 2017). The extensively used significance of manufactured brainpower is that "the examination of the computations make it possible to see reason and act" (Winston, 1992). When machines can learn and make decisions in the same way that people do, this is called computerized reasoning. There are various sorts of computerized reasoning, for example, AI, in which machines, rather than being customized with guidelines on the most proficient method to think, can notice, examine, and gain from information and errors similarly that our cerebrums would be able. Training to learn a language has made significant leaps forward as a result of this innovation. Man-made intelligence is presently a fundamental part of our reality.

According to Netaya Lotze (2016), artificial intelligence (AI) with a written or oral interface will in the future simplify our lives. A couple of Partners like Siri (Apple) and Grandiose framework (Samsung) at this point license wireless capacities to be managed language affirmation and mix programming. Computer based intelligence isn't simply used to tell a cell phone to follow through with something, it can likewise be utilized to make more muddled highlights like web based games and intuitive toys with language interfaces and virtual mentors in e-learning conditions. It, in this manner, seems, by all accounts, to be ordinary to take advantage of creative advances in obscure vernacular learning. They can make learning accessible at any time and location. Applications for learning a subsequent language are being created by business and non-business establishments that follow (and join) totally unique specialized approaches. gence.

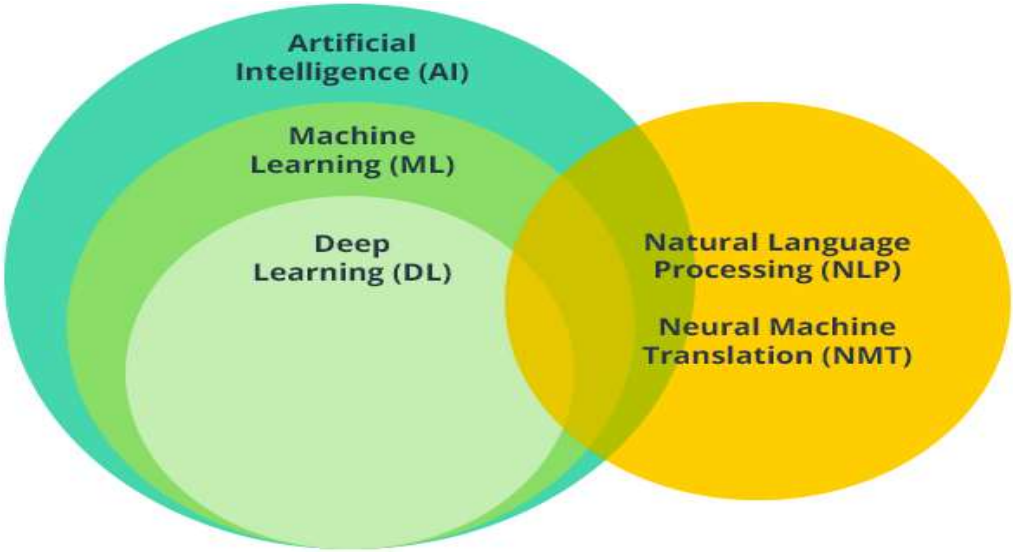

Figure1.1 The basic foundation stone of Artificial Intelligence

The Concept of Artificial Intelligence Technology

The term "man-made brainpower" refers to a computer program that creates an extensive field of study by impersonating intelligent human behavior and thought. Based on the advancement of new emerging disciplines, it encompasses software engineering, robotics, data hypothesis, neurophysiology, brain science, reasoning, etymology, and various shared infiltration disciplines. By synthetic thinking, the human visual, contact, hearing, feeling, and figuring carry on the reenactment, to grasp the machine of manufactured thinking, engage people to handle issues all through regular daily existence and work, to ensure the prosperity of people, work on the efficiency of people. As one

more sort of shrewd development, the improvement of man-made thinking is very speedy.

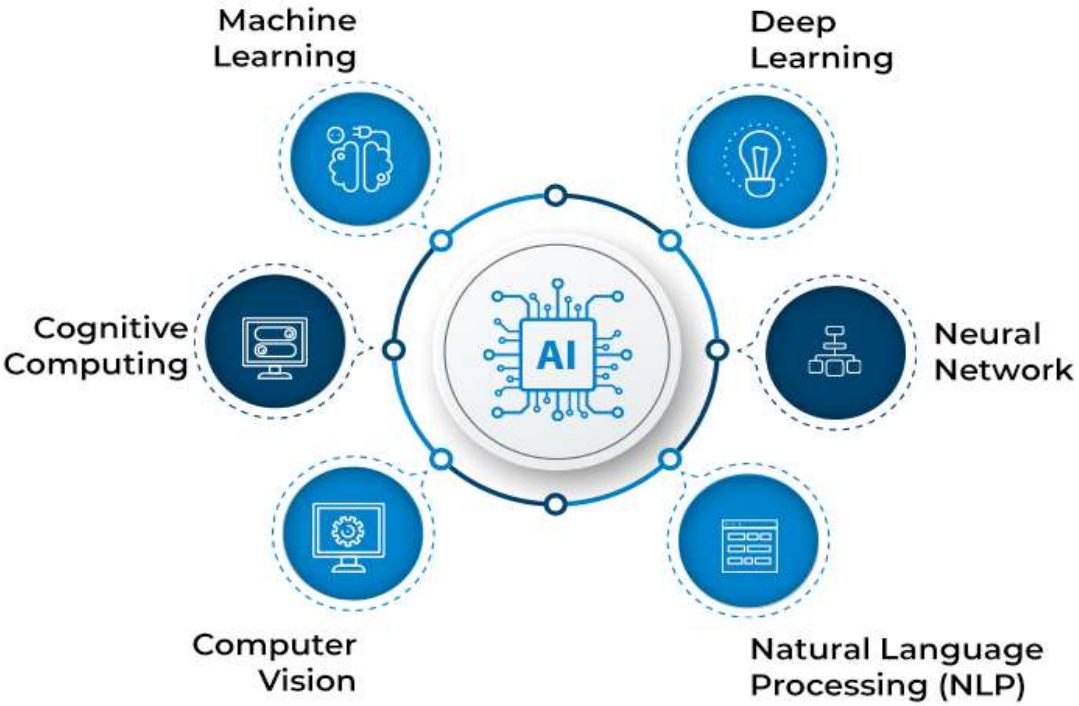

Figure1.2 Key Components of AI

Man-made thinking recreates people's working and living environment by including the PC structure for the contrasting programming, with the ultimate objective of completing clever, automated system action. The technique engaged with conveying and the applying man-made thinking includes various disciplines, among which, the PC network advancement is the most critical. The progression of PC network development relies upon the electronic thinking advancement. Man-created cognizance can interact the association the board to overhaul network the chiefs environment to achieve lower costs, further foster adequacy, and so on. The way people approach everyday life, work, and education is changing as a result of the fourth Modern Upheaval's rapid innovation and advanced application development. According to Manns (2017), this upheaval is a result of the extensive network of billions of people with cell phones that provide exceptional access to information and information, as well as the combination and advancement of emerging advances in man-made consciousness, mechanization, and mechanical technology.

English as a Literature Subject in Pakistani Academics

Independence from the English pioneer abuse was a huge achievement all through the whole presence of colonization. Various past territories of Britain raised issue to the continued with usage of English language and composing. As shown by Ngugi the language issue is an indispensable key to the decolonization process. Regardless, the ways of managing the continued with usage of The provinces' English was not uniform, but it was numerous and clear. contrasts between them. For example, even in the white explorer states, the use of their own abstract works in the English language instructive program is overpowered with issues. A piece of the issues have to do with the public person, by which the composed works of the white pioneer areas, various of whose texts explore requests of characters that are indisputable

from the English or English person, ought to be displayed in school and school, but are not found in the instructive arrangement. The situation innon traveler states isn't 29 of South Asian Investigations 412 through and through various. It could truly be more grounded, indeed. Achebe (1975, 19), for model has declared that „art for art‟s sake‟ is just another piece of circulated air through canine shit‟ . Achebe acknowledges that there is a real association among composing and preparing as envisioned in a greater setting. Ngugi (1986) of course prescribed not to incorporate English composition and gave inclination to various international works of literature as part of the educational plan. As Pakistan is moreover a past condition of the English Domain and major changes in the instructive arrangement should have been tended to. In any case, one feels that approach changes are postponed in Pakistani enlightening setting to perceive more different social issues of our local heritage and custom and to execute program of progress. In separation, there is no such thing as the foundation of education. English composition has its establishments in a puzzling catch of social relations of which it transforms into an huge part. In various ways it has a relationship with bodies, for instance, the state, with issues of direction, the social classes, personality, monetary structure , administrative issues or all the more all depiction. Additionally, Imaginative preparation should be researched concerning how it speaks with complex districts, for instance, the unique get-togethers and social classes in the public eye. Thus, with respect to the overwhelming social class in the overall population and its alliance with that social power, tutoring can play out a greater work: tutoring can be liberating, essential, moderate, or shut, it may be defiant or suppressive it can in like manner be emancipatory. Public instruction has the potential to be both, liberating or rebellious That is important to note in this political context. As a social power English tutoring constantly serves the interests of solid social affairs in the public field. For the fantastic clarification that the genuine state is for the most part a representative of solid classes, and it includes typical discernment that the tutoring through English writing thusly it basically conveys the characteristics and interests of the predominant classes through bestows.

The Role of AI in Language Learning

AI-powered language apps are more convenient, personalized, and effective. Often integrated into eLearning courses, apps give learners remote access to content and can play an active role in the process. Just as the rise of online education revolutionized the language learning process, developments in AI technology promise a new turning point. Studying a language with AI is becoming increasingly common, as AI enables various useful features in apps and programs.

Tools of Artificial Intelligence in the English Language Learning Classroom

The progression of reasonable verbalization is a nonstop test to both ELT and EFL students and instructors across all language levels. There are a couple of headways open that can help the two teachers and students in such way. Speech can be deciphered, elocution can be checked, and voice commands can be answered. In case we mentally dare to all aspects of the time in past for one moment, we quickly comprehend that we are at this point living in a reality that was fundamental for science fiction movies a surprisingly long time back. Expecting the students add English to the summary of vernaculars in their PDA settings then the language settings ought to be enabled in

English so the structure can understand and translate the student's talk (Ribeiro, 2020).

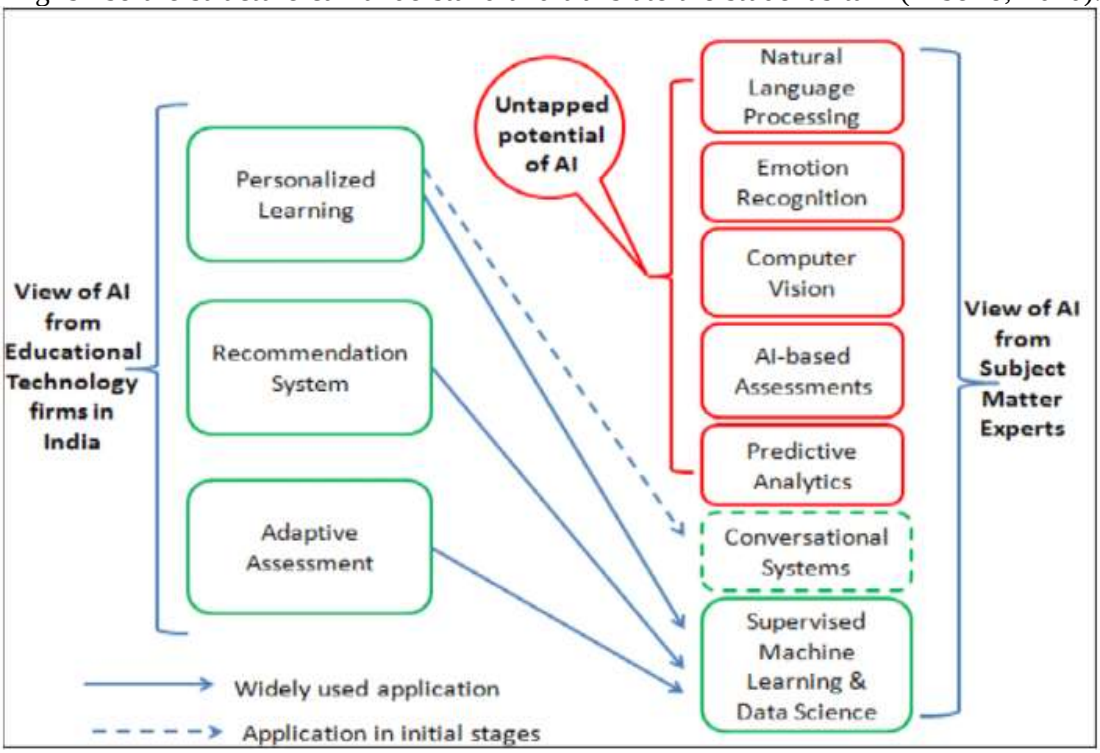

Figure 1.3 Artificial Intelligence Model in the education system

Different ideas that can be used in language learning classroom are follows:

Google Docs Speech Recognition

Google Docs, a well-known text processor, recently added the ability to alter discourse. Before system was simply sort out the clear requests, yet as of now the voice affirmation feature has introduced and created, which is correct now a free, flexible gadget that can help the students in conversational activities. This is a way to deal with surveying the lucidness of students talk, as well as giving direct analysis to the instructor is in like manner able

Interacting with Google Assistant

By the usage of "Google Right hand", language understudies can represent the fundamental requests, for instance, 'What's the weather patterns like in … ?', 'What time is it in. … ?' The best way to assess a student's elocution's coherence is in this manner. In response to an inquiry made by the instructor, understudies can alternate posing the remote helper questions. Encourage them to take notes, and at the conclusion of the activity, request that they discuss their findings with classmates from other groups.

Using Google Maps to Practice Directions in English

Different instruments with consolidated PC based insight are not only strong for practicing a student's rhetoric. Google Guides is course and arranging application that offers satellite view and imagery. Anyone can attempt to use this well-known application, which is also accessible on the majority of mobile phones, in the language learning

homeroom during the presentation of various courses. After demonstrating the essential instructions, such as "turn right/left," "go across the road," "close to," "go on," "inverse to," and so on, a list of nearby puts is displayed on the board. Coordinate the students in pairs and guarantee there's something like one student whose phone has Google Guides presented. The idea is to have students investigate how to travel from their area to each of the recorded locations in turn. By having the choice to see the aide, they will be more sure while encouraging their classmate how to show up at the best spot. (Intellias, 2023).

Language bots

Most of the peoples believes to fully comprehend the particularities of a language. It must be engaged with the native speakers. Though, AI models repeat real speech or conversations with quickly increasing correctness. “Language learning chat-bot can retort to messages with adapted, relevant material. Language initiators can be used a chat-bot to drill the discussions without any anxiety what they perhaps feel while talking to any person” (Intellias, 2023).

Machine translation

Artificial Intelligence technologies like Neural Machine Translation (NMP) improves the quality of translation and assist to the foreign languages. A method known as Machine Translation considered as a bad model (machine translates text, not context) supports to the students to sort out and fix the mistakes in machine-translated writing. Eventually, this lets students to acquire further about languages and increase their comprehension, vocabulary and writing.

GPT-3

It is claimed to be a biggest model of AI language that ever trained in 2020, GPT-3 by Open Artificial Intelligence is backed by approximately 175 billion parameters (Intellias, 2023).This application can ask be a rockstar in assisting students as it creates to be a human-like value of text. Further, it engages with its users to be like a native speaker of specific language.

In the integration of GPT-3 into applications or chatbots, anyone can creates collaborative and personalized learning involvements. Adaptive drills, quizzes, and casual simulations — all are swathed in a language learning procedures under the assistance of GPT-3.

The tool can simulate the conversation, permitting language speakers or learners to have practice the dialogues and responses. Such types of practices can help to improve the oral communication skills. Moreover, it enhances the capability to comprehend and retort in real-life situations.

BLOOM

BLOOM (BigScience Large Open-science Open-access Multilingual Language Model) is the major open-source Artificial Intelligence Model. It is one of the latest model, considered in AI list. The tool is based on multilingualism, and it operating with the 46 natural languages and 13 programming languages.

The BLOOM model is premeditated by more than 1000 researchers, belongs to more than 70 countries of the world. It has 176 billion parameters. Learners can achieve different tasks with the tool, picking from its selection of languages.

BLOOM can deliver information about traditional nuances, idiomatic expressions in any target language. To understand these aspects, it is crucial for integration and effective communication into any language community (Intellias, 2023).

The Role of AI In Pakistani Context

English is the prevailing language in Pakistan, learning it as a subsequent language presents various difficulties. Despite the fact that students who have a place with a general public where English assumes a part of uninvolved language be very harmful, those students are not dealing with difficulty in learning English because they have a place with the English environmental factors. Additionally, due to this condition, students fell in misgiving and modesty. Practically all more elevated level English schedules in Pakistan utilize English as the mechanism of guidance. Students must now speak English in this situation. Students could learn English actually if appreciate and don't take pressure. Man-made cognizance expects a basic part for learning English as an ensuing language. In this situation, English language educators have a huge commitment to urge understudies to use computer based intelligence for fruitful learning. The goal of this study is to learn more about how artificial intelligence affects undergraduate English as a second language learning in Pakistan. As of now in this old age, man-made cognizance considers a key part used for learning any ensuing language.

It represents the importance of language learning through artificial intelligence technology among undergraduate students in Pakistan. So, it is very important because students study the learning material in English language during their whole study process, their syllabus and curriculum also designed in English language. So, now it becomes very important to learn English as a 2nd language by the use of modern technology such as artificial intelligence (AI). It is also very significant because it can help teachers, students and researchers to be aware of teaching and learning tools of artificial intelligence (AI). It also may provide information and guidance for curriculum planners and learners that how the world changing towards modern technology and how we can change our educational standards on the basis of these technologies. Students don’t learn effectively by the use of traditional methods of teaching and learning, they can improve their learning abilities by using modern methods of teaching and learning. In this regard, artificial intelligence based technology plays an important role for uplift the student’s ability in language learning. Sometime Learners are not interested to learn through conventional methods of teaching. Intelligent Computer Assisted Language Learning (ICALL) may be helpful in language teaching and learning. The most important and user friendly AI based techniques can be a great assistance to teachers and learners to make the teaching of English language more interesting, interactive, dynamic and enjoyable. It seems in future this Artificial Intelligence will change the entire outlook of the whole education system (Gawate, 2019).

Objectives of the Study

The objectives of study were,

- To investigate the impact of artificial intelligence among learners of 2nd language at undergraduate level.
- To search out how artificial intelligence reduce the gap among teachers and students in language learning.

Hypothesis

Artificial intelligence based technology helps students in language learning at undergraduate level.

Research Questions

- What kind of role artificial intelligence plays to enhance the learner's performance in 2nd language learning?
- To what extent artificial intelligence technology influence the attitude of student towards learning English as a second language.

Statement of the Problem

The motivation of students towards language learning through the use of computer based artificial intelligence (AI) technology plays an important role to improve educational system of country. Artificial intelligence technology motivates the students positively to learn English as a 2nd language that can improve the learning skills of the students. It also increases the listening, speaking, writing and reading skills of the students. Artificial intelligence effectively improves the ability of English language learners to communicate in English and also improve the quality of English classroom teaching. Nowadays without the use of artificial intelligence based computer technology it can be difficult for students to learn language properly. So artificial intelligence is integral part to learn language affectively.

Delimitation of the Study

There is limited research work done on this topic "The role of artificial intelligence in 2nd language learning". According to the topic, the population consisted of the whole teachers and learners of the Punjab, Pakistan, but it is delimited to public and private universities of Lahore city. In view of the limited resources, the study further delimited of 4 private universities of Lahore region, i.e. Minhaj University, University of the Punjab, Lahore and Riphah International University Lahore. The suggested 200 learners were conscripted through convenient sampling technique.

Research Type

This research has been conducted on the basis of Quantitative approach. Quantitative research dealt with the statistics and numbers and expressed in numbers and graphs. It used to confirm the different theories and assumptions used in the research.

Sources of Data Collection

For data collection, a questionnaire, consisted of 20 questions was used. In this regard, students' privacy was ensured of the selected sample.

METHODOLOGY

Since the study was carried out to analyze the impact of artificial intelligence in English language learning among 2nd language learners in language classroom at undergraduate level in Pakistan, for this purpose the public and private sector universities were visited to collect the data. The quantitative approach was used for the research purpose because it made easier to gather information from the sample of 200 participants through a questionnaire, consisting of 20 items (questions) formed for data collection.

Target Population

Population means a group containing elements of anything a researcher wants to study, such as objects, events, organizations, countries, species, organisms, etc. The target population is the total group of individuals from which the sample might be drawn. The participants from four universities (Minhaj University, Punjab University, Riphah International University & Lahore University) were selected as the target population for the this research.

Sampling

A random sample of 200 students was selected from 4 universities, i.e. Minhaj University, Punjab University, Lahore University & Riphah University considering it necessary for the collection of data from undergraduate students. The selected sample consisted of male and female students. The diverse number of respondents from both the genders was taken to avoid gender discrimination as well as to obtain the gender based differences upon the research issue. A sample size of 200 respondents was purposed to analyze the research data through MS Excel tool. Following is the sample of this study has been selected randomly from four universities as follows:

Minhaj University	**PU, Lahore**	**Lahore University**	**Riphah University**	**Total Sample**
No of students	No of students	No of students	No of students	Total Number of students
50	50	50	50	200

Sampling Technique

The data were collected through standardized and researcher's developed scale through random sampling technique. A sample of 200 participants was selected from 4 universities of Lahore region, i.e. Minhaj University, Punjab University, Lahore University and Riphah International University. The selected sample consisted of both female and male participants. It was randomly selected, and analyzed the research data through column charts for showing the results.

Research Instrument

The different tools are used for the collection of data but questionnaire considered as the most useful tool because it saves the time of researcher to collect the data. A lot of the population can be handled in very short time to collect the data. A questionnaire always provides an authentic information regarding research and it is also easy to respond. The researcher developed 20 questions to get the response of the samples. Five point Likert scale was used to collect the answers of the respondents.

Data Collection

The participants of the current study, i.e., artificial intelligence in 2nd language learning (n = 200) have been approached by the researcher personally. However, permission has been taken by the heads of departments which were located in Lahore city (Pakistan). The ethical issues were taken into consideration throughout the study. In this research, a random sampling technique was applied for data collection.

Data Analysis

Once the data was collected successfully, the next stage was to analyze the data by using SPSS software. In every research, data investigation is a passionate part. At all kind of error may guide towards incorrect outcomes. As a result it's extremely critical and significant on the way

to examine the collected data through good method. The data in the present study were analyzed though SPSS to avoid such kind of errors .

DATA ANALYSIS

Demographic Characteristics of the Study Participants

A total of 200 undergraduate students participated in this study. Table1 describes the demographic characteristics of the study participants. In terms of gender, 55.5 % (n = 111) participants were females, whereas 44.5% (n = 89) were males. The mean age + SD of the study participants was 22.17 ± 1.30 years. There were the equal number of participants from each university; Minhaj University 25% (n=50), Lahore University 25% (n=50), Riphah University 25% (n=50), and Punjab University 25% (n=50). Furthermore, all the participants (n=200) were the students of BS program.

Table 1: Demographic Characteristics of the Study Participants (n=200)

Demographic Characteristics	**Frequency**	**Percentage**
Gender		
Male	89	44.5
Female	111	55.5
Age		
20-22	128	64.0
23-25	72	36.0
Mean ±SD	22.17 ± 1.30	
Institution		
Minhaj University	50	25.0
Lahore University	50	25.0
Riphah University	50	25.0
Punjab University	50	25.0
Program		
BS	200	100.0

Role of Artificial Intelligence in 2nd Language Learning

This section describes the scores related to the role of artificial intelligence in 2nd language learning (Table 2). The questionnaire was consist of twenty items and students marked their responses on a five-point Likert scale from 1= strongly disagree to 5= strongly agree. Regarding the item 1: use of artificial intelligence can enhance the learning abilities in language learning, majority of the participants 70% (n=140) were agree and 21% (n=42) were strongly agree with the statement. However, 5% (n=10) did agree, while, 4% (n=8) selected a neutral response with the statement. For the item 2: application of artificial intelligence technology can play an important role in language classroom, 58% (n=116) of the participants were agree and

31.5% (n=63) were strongly agree with the statement. However, 7% (n=14) were strongly disagree, while 3.5% (n=7) picked a neutral response with the statement.

Regarding the item 3: artificial intelligence is a best tool for learning English as a foreign language, majority of the participants 67.5% (n=135) were agree and 21.5% (n=43) were strongly agree with the statement. However, 8.5% (n=17) were disagree, while 2.5% (n=5) selected a neutral response with the statement. Regarding the item 4: artificial intelligence based technology can replace textbooks, 37% (n=74) of the participants were disagree and 9.5% (n=19) were strongly disagree with the statement, and 15% (n=30) selected a neutral response. However, 31.5% (n=63) were agree and 7% (n=14) were strongly agree with the statement.

Concerning the item 5: it is easy to use Artificial Intelligence technology for language learning at undergraduate level, about half of the participants 52.5% (n=105) were agree, 13% (n=26) were strongly agree, and 10% (n=20) chosen a neutral response. However, 24% (n=49) were disagree with the statement.

In item 6: Artificial Intelligence technology can improve the quality of students learning at undergraduate level, 45.5% (n=150) of the participants were agree, 19.5% (n=39) were strongly agree with the statement, and 8.5% (n=17) selected a neutral response. However, 20% (n=40) were disagree and 6.5% (n=13) were strongly disagree with the statement. Concerning the item 7: use of Artificial Intelligence will become the integral part of language learning process in future, about half of the participants 53.5% (n=107) were agree, 18% (n=36) were strongly agree with the statement. However, 15.5% (n=31) were disagree with the statement, while 13% (n=26) chosen a neutral response for the statement. Relating to the item 8: it is very interesting to use Artificial Intelligence for language learning, majority of the participants 75% (n=150) were agree, 17.5% (n=35) were strongly agree with the statement. Moreover, 6% (n=12) picked a neutral response, and only 1.5% (n=3) were disagree with the statement.

Regarding the item 9: using Artificial Intelligence could speed up learner's language learning, more than half of the participants 58.5% (n=117) were agree, 17.5% (n=35) were strongly agree with the statement. However, 10.5% (n=21) were disagree, and 13.7% (n=27) chosen a neutral response for the statement. Concerning the item 10: students at undergraduate level are competent to use Artificial Intelligence-based materials for learning language, 43.5% (n=87) of the participants were agree, 11% (n=22) were strongly agree, and 12% (n=24) selected a neutral response. However, 27% (n=54) were disagree and 6.5% (n=13) were strongly disagree with the statement.

Regarding the item 11: Creating language learning activities based on Artificial Intelligence are useful, more than two third of the participants 69.5% (n=139) were agree, 17% (n=34) were strongly agree with the statement. However, 4% (n=8) were disagree, and 9.5% (n=19) chosen a neutral response for the statement. Concerning the item 12: Artificial Intelligence technology can replace the role of teacher in language classroom, about two third 66% (n=132) of the participants were agree, 22.5% (n=45) were strongly agree, and 4.5% (n=9) selected a neutral response. However, only 7% (n=14) were disagree with the statement.

About the item 13: artificial intelligence technology has become a necessary tool for language learning, 77% (n=154) of the participants were agree, 20% (n=40) were strongly agree, and 2.5% (n=5) selected a neutral response. However, only 0.5% (n=1) were disagree with the statement. Regarding the item 14: Language teachers encourage their students to use Artificial Intelligence technology in developing their language skills, majority of the participants 63%

(n=126) were agree, 21% (n=42) were strongly agree, and 7.5% (n=15) picked a neutral response. However, only 8.5% (n=17) were disagree with the statement.

Concerning the item 15: Educational institutions regard Artificial Intelligence technology as a significant part of teaching and learning programs, more than half of the participants 52.5% (n=105) were agree, 19.5% (n=39) were strongly agree, and 8.5% (n=17) selected a neutral response. However, 15% (n=30) were disagree and 4.5% (n=9) were strongly disagree with the statement. Similarly, regarding the item 16: Language teachers can easily implement the Artificial Intelligence technology in classroom, more than half of the participants 54.5% (n=109) were agree, 10.5% (n=21) were strongly agree, and 6.5% (n=13) picked a neutral response. However, 28% (n=56) were disagree and 0.5% (n=1) were strongly disagree with the statement.

Concerning the item 17: Teachers and students are much familiar about the use of Artificial Intelligence technology for language learning, 38.5% (n=77) of the participants were agree, 6% (n=12) were strongly agree, and 7.5% (n=15) selected a neutral response. However, majority of the participants 45.5% (n=89) were disagree and 3.5% (n=7) were strongly disagree with the statement. Regarding the item 18: Students are motivated to learn English as a foreign language by the use of artificial intelligence technology, more than half of the participants 55% (n=110) were agree, 38.5% (n=77) were strongly agree, and 5% (n=10) picked a neutral response. However, only 1.5% (n=3) were disagree with the statement.

Regarding the item 19: Language learners are more interested in Artificial Intelligence-assisted language learning classes, near about two third of the participants 64% (n=128) were agree, about one third 33% (n=66) were strongly agree, and 2.5% (n=5) showed a neutral response. However, only 0.5% (n=1) were disagree with the statement. Regarding the item 20: Artificial Intelligence provides a comfortable environment for students to learn language, majority of the participants 73.5% (n=147) were agree, 23% (n=46) were strongly agree, and 2.5% (n=5) selected a neutral response. However, only 1% (n=2) were disagree with the statement.

Table 2. Scores of Artificial Intelligence in 2nd Language Learning

Scale	**Frequency**	**Percentage**
1. **Use of Artificial Intelligence can enhance the learning abilities in language learning**		
Strongly disagree	0	0
Disagree	10	5.0
Neutral	8	4.0
Agree	140	70.0
Strongly agree	42	21.0
2. Application of Artificial Intelligence Technology can play an important role in language classroom		
Strongly disagree	0	0
Disagree	14	7.0
Neutral	7	3.5
Agree	116	58.0
Strongly Agree	63	31.5
3. **Artificial Intelligence is a best tool for learning English as a foreign language**		
Strongly disagree	0	0
Disagree	17	8.5
Neutral	5	2.5

Agree	135	67.5
Strongly Agree	43	21.5
4. **Artificial Intelligence based technology can replace textbooks**		
Strongly Disagree	19	9.5
Disagree	74	37.0
Neutral	30	15.0
Agree	63	31.5
Strongly Agree	14	7.0
5. **It is easy to use Artificial Intelligence technology for language learning at undergraduate level**		
Strongly disagree	0	0
Disagree	49	24.5
Neutral	20	10.0
Agree	105	52.5
Strongly Agree	26	13.0
6. **Artificial Intelligence technology can improve the quality of students learning at undergraduate level**		
Strongly disagree	0	0
Disagree	14	7.0
Neutral	9	4.5
Agree	132	66.0
Strongly Agree	45	22.5
7. **Use of Artificial Intelligence will become the integral part of language learning process in future**		
Strongly disagree	0	0
Disagree	31	15.5
Neutral	26	13.0
Agree	107	53.5
Strongly Agree	36	18.0
8. **It is very interesting to use Artificial Intelligence for language learning**		
Strongly disagree	0	0
Disagree	3	1.5
Neutral	12	6.0
Agree	150	75.0
Strongly Agree	35	17.5
9. **Using Artificial Intelligence could speed up learner's language learning**		
Strongly Disagree	0	0
Disagree	21	10.5
Neutral	27	13.5
Agree	117	58.5
Strongly Agree	35	17.5
10. **Students at undergraduate level are competent to use Artificial Intelligence-based materials for learning language**		
Strongly Disagree	13	6.5
Disagree	54	27.0
Neutral	24	12.0
Agree	87	43.5
Strongly Agree	22	11.0

11. **Creating language learning activities based on Artificial Intelligence are useful**		
Strongly disagree	0	0
Disagree	8	4.0
Neutral	19	9.5
Agree	139	69.5
Strongly Agree	34	17.0
12. **Artificial Intelligence technology can replace the role of teacher in language classroom**		
Strongly disagree	13	6.5
Disagree	40	20.0
Neutral	17	8.5
Agree	91	45.5
Strongly Agree	39	19.5
13. **Artificial Intelligence technology has become a necessary tool for language learning**		
Strongly Disagree	0	0
Disagree	1	.5
Neutral	5	2.5
Agree	154	77.0
Strongly Agree	40	20.0
14. **Language teachers encourage their students to use Artificial Intelligence technology in developing their language skills**		
Strongly Disagree	0	0
Disagree	17	8.5
Neutral	15	7.5
Agree	126	63.0
Strongly Agree	42	21.0
15. **Educational institutions regard Artificial Intelligence technology as a significant part of teaching and learning programs**		
Strongly Disagree	9	4.5
Disagree	30	15.0
Neutral	17	8.5
Agree	105	52.5
Strongly Agree	39	19.5
16. **Language teachers can easily implement the Artificial Intelligence technology in classroom**		
Strongly Disagree	1	.5
Disagree	56	28.0
Neutral	13	6.5
Agree	109	54.5
Strongly Agree	21	10.5
17. **Teachers and students are much familiar about the use of Artificial Intelligence technology for language learning**		
Strongly Disagree	7	3.5
Disagree	89	44.5
Neutral	15	7.5
Agree	77	38.5
Strongly Agree	12	6.0

18. **Students are motivated to learn English as a foreign language by the use of artificial intelligence technology**		
Strongly Disagree	0	0
Disagree	3	1.5
Neutral	10	5.0
Agree	110	55.0
Strongly Agree	77	38.5
19. **Language learners are more interested in Artificial Intelligence-assisted language learning classes**		
Strongly Disagree	0	0
Disagree	1	.5
Neutral	5	2.5
Agree	128	64.0
Strongly Agree	66	33.0
20. **Artificial Intelligence provides a comfortable environment for students to learn language**		
Strongly Disagree	0	0
Disagree	2	1.0
Neutral	5	2.5
Agree	147	73.5
Strongly Agree	46	23.0

Association between the Scores of Artificial Intelligence and the Demographic Variables

This section describes the association between the scores of artificial intelligence and the demographic variables. The chi square test was applied to check the association between the variables, and p value <0.05 was considered as significant (Table: 3).

When the association of the scores of artificial intelligence with gender was checked the item numbers 10, 12, 13, and 14 showed a significant association as the p value < 0.05. However, when the association was checked for the public and private sector institutions, the results showed the significant association in all the items except the item 19.

Table: 3 Association between the Scores of Artificial Intelligence and the Demographic Variables

Items	**Gender**		**χ^2 value**	**P value**	**Institution**		**χ^2 value**	**P value**
	Male	**Female**			**Public**	**Private**		
1. Application of Artificial Intelligence Technology can play an important role in language classroom.	89	111	5.982	0.112	50	150	19.37	0.022
2. Use of Artificial Intelligence can enhance the learning abilities in language learning.	89	111	7.827	0.050	50	150	42.857	0.00

3. Artificial Intelligence based technology can replace textbooks	89	111	3.912	0.418	50	150	100.523	0.00
4. Artificial Intelligence is a best tool for learning English as a foreign language.	89	111	2.634	0.451	50	150	38.997	0.00
5. It is easy to use Artificial Intelligence technology for language learning at undergraduate level.	89	111	1.653	0.467	50	150	49.596	0.00
6. Artificial Intelligence technology can improve the quality of students learning at undergraduate level	89	111	2.678	0.44	50	150	20.850	0.013
7. Use of Artificial Intelligence will become the integral part of language learning process in future	89	111	5.208	0.157	50	150	60.031	0.00
8. It is very interesting to use Artificial Intelligence for language learning.	89	111	4.840	0.184	50	150	56.697	0.00
9. Using Artificial Intelligence could speed up learner's language learning	89	111	3.666	0.300	50	150	61.768	0.00
10. Students at undergraduate level are competent to use Artificial Intelligence-based materials for learning language.	89	111	10.39	0.034	50	150	104.41	0.00
11. Creating language learning activities based on Artificial Intelligence are useful.	89	111	4.783	0.188	50	150	47.115	0.00

12. Artificial Intelligence technology can replace the role of teacher in language classroom	89	111	9.578	0.048	50	150	114.624	0.00
13. Artificial Intelligence technology has become a necessary tool for language learning.	89	111	15.97	0.001	50	150	33.094	0.00
14. Language teachers encourage their students to use Artificial Intelligence technology in developing their language skills.	89	111	11.34	0.010	50	150	58.565	0.00
15. Educational institutions regard Artificial Intelligence technology as a significant part of teaching and learning programs.	89	111	7.153	0.128	50	150	49.791	0.00
16. Language teachers can easily implement the Artificial Intelligence technology in classroom.	89	111	3.741	0.442	50	150	24.043	0.020
17. Teachers and students are much familiar about the use of Artificial Intelligence technology for language learning	89	111	2.850	0.583	50	150	73.042	0.00
18. Students are motivated to learn English as a foreign language by the use of artificial intelligence technology	89	111	3.685	0.298	50	150	44.23	0.00

19. Language learners are more interested in Artificial Intelligence-assisted language learning classes	89	111	4.182	0.243	50	150	14.298	0.112
20. Artificial Intelligence provides a comfortable environment for students to learn language.	89	111	3.705	0.295	50	150	32.560	0.00

Majority of the students showed that they are agree or strongly agree with the statements of the questionnaire. Moreover, a significant association was found between the scores of role of artificial intelligence with the gender in few items. However, findings revealed the significant association between the scores with the public and private sector institution in all the items except one.

Findings of the Study

Data from this study showed that about a huge piece of obscure vernacular understudies felt that synthetic insight (Modernized thinking) can lay out a rich environment to them and essentially all of them insisted that it is a significant gadget for helping the understudies with achieving their future language learning targets. The most of 2nd language learners believed that artificial intelligence based technology and computer-assisted language instructions are useful for language learning. The data reveled that most of language learners recognized that the functions provided by artificial intelligence are very important for language learning.

In straightforward words, the vast majority of the language students had deep convictions that cutting edge innovation like man-made brainpower based innovation and PC helped innovation into language directions has turned into an undeniable propensity in learning English as a subsequent language. Aftereffect of this study shows that the interest of the understudies towards the utilization of computerized reasoning in language learning is positive and high. A large portion of the language students affirm that computerized reasoning give an agreeable climate to learning English as a subsequent language. Additionally, these language learners are enthusiastic about utilizing technology based on artificial intelligence to enhance their English language proficiency. To be sure, present day innovation, for example, man-made brainpower and PC helped innovation previously become the piece of our everyday existence I this computerized period.

So this innovation can assume a significant part in language learning. The PC helped language programs and man-made reasoning based assets are become vital piece of language learning instruction. This study found that using technology based on computers and artificial intelligence can make it easy to create an environment that is both independent and collaborative for learning a second language. With the assistance of computerized reasoning innovation understudies can take part in helpful activities with peers in their homeroom and all through the worldwide local area.Most of the language learners in this study had positive viewpoint towards the use of artificial intelligence in language learning but many of them still unsure that weather artificial intelligence can

achieve the language learning objectives because Pakistani language learners are still unaware about the use of this technology.

Many of the Pakistani undergraduate students are interested in learning language by the use of artificial intelligence technology. They thought that in this modern era artificial intelligence can reorganize the educational system for language learning and it can play an important role in language learning. Many students felt that artificial intelligence technology is going to become the necessary tool of language learning process. However, language learner's thoughts that attitude of English language teachers towards using artificial intelligence technology must be positive.

Conclusion

The emergence of intelligent technology and application not only makes the life of people convenient but also facilitates the development of science and technology which provides a good direction especially in the field of English language learning.This study reveals that artificial intelligence based technology and computer-assisted technology is playing pivotal role in language learning. By the utilization of man-made brainpower innovation it becomes more straightforward to partake in language educational experience anyplace and whenever to learn language. A larger part of the understudies are involving PC innovation in their instructive life (Chapelle, 2001). They can involve computerized reasoning innovation for learning new dialect. Our generation is encouraged to use modern technology to achieve their goal of learning a second language by the use of artificial intelligence.

The artificial consciousness innovation has been furnishing second language students with creative chances to foster the four language abilities past the homeroom walls. If language learners do not receive adequate training for the application of artificial intelligence technology and do not have a positive attitude toward it, artificial intelligence technology will not achieve its full potential in the teaching of second languages. Last but not least, positive attitudes can help artificial intelligence technology create a real-world language learning environment, despite the fact that artificial intelligence (AI) technology is only a tool for all language learning needs (Zhaoyi Liu, 2018).

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