

## A Survey of Students' Perceptions about the Role of Chatbots in English Language Learning at Graduation Level

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### Abstract

It is not easy to discuss that learning a foreign language is relatively easy, with good pronunciation, a proper understanding of grammatical rules, and sufficient vocabulary. Nevertheless, it is difficult for students to pronounce correct words in language classrooms, so they receive unsatisfactory feedback. The chatbots have only one solution to this problem. The chatbot is a platform that is developed technology for a conversation like a human. Learners can use chatbot applications on their smartphones anywhere and anytime. Chatbots make it comfortable and possible for learners to continue their learning without the proper environment. This study aims to determine students' perceptions about using chatbots in English language learning. The current study uses a quantitative approach with the descriptive analysis method. The participants of the research were 60 students of the department of English, Ghazi University Dera Ghazi Khan. The researcher used the questionnaire to analyze the learners' responses regarding the use of chatbots in English language learning. Statistical Package for Social Sciences (SPSS 26.0) analyzed the data by applying frequency, percentage, reliability, and One-way ANOVA. The study results indicated that the learners were motivated to adopt chatbots in their smartphones for English language learning. Based on the findings, the investigator concluded that chatbots play a pivotal role in learning English. The majority of the learners showed a positive attitude towards the use of chatbots in English language learning. So, the current study is significant for English as a Second Language (ESL) learners because it offers an innovative way of learning. The engagement of chatbots is recommended as an effective tool in a language classroom. Further, new researchers can conduct

experimental research to analyze chatbots' effectiveness for English language learning.

**Keywords:** CELL, Chatbots, language classroom, Smart Learning, Text Messaging

## **Introduction**

The use of technology in English learning benefits learners through the fulfillment of essential outcomes and reinforces connections with other components and an integrated approach to modern media systems. Hence learning English has become very important, primarily because of the phenomenal improvement in various fields and subjects. The education sector must keep pace with the multimedia tools and technological revolution by applying modern technological means such as computerization, mobile phones, audio/visual effect applications, and social media to improve English language teaching. The internet provides easy and virtually unlimited access to learn a second language more proficiently. Chatbots is an instant application and provides friendly learning platforms that enable learners to speak a second language fluently. Additionally, the program has promoted effective English learning while simultaneously learning Urdu comprehension and English language skills.

Chatbots are software a valuable equipment to simplify learning activities in the education system. Chatbots are often created for a specific purpose. In education, chatbots help learners to learn English as a foreign language, which has four skills like all known languages. According to Utari (2017), every student must learn four language skills and these critical and essential skills are listening, speaking, reading, and writing. Among all these skills, writing is a difficult and complex one. Hourani (2008) says writing is a complicated process as it is difficult to even in L1, but it gets more complicated in learning L2 or a foreign language. The chatbot is the most excellent remarkable Artificial Intelligence expertise to support learning accomplishments. Today's students can learn quickly and easily with online education, either through the classroom platform or online, using various technological implements such as chatbots. Chatbots have become the most pervasive tool people use to continue their studies.

The following are the domains of ESL where chatbots are more effective:

- Check our writing and readings' accuracy.
- Checks pronunciation, grammar, and spelling.
- Check the readability.
- Definitions of grammar principles.
- Double-click to view synonyms and definitions.
- Immediately identifies contextual spelling and grammar errors.

English Language Speech Assistant (ELSA) is an English Learning app that helps us with pronunciation and vocabulary to speak English confidently and clearly. Practice English conversations with fun language games that cover core English skills like pronunciation, grammar, word stress, rhythm, intonation, listening, and conversation. ELSA can help learners to study English for IELTS exams, TOEFL, TOEIC exams, and even for our ESL classes. ELSA Learn essential English conversations and phrases before we plan to travel or take a trip and practice English related to our professional field to advance your career and speak fluent English.

### **Problem of the Statement**

In today's world, technology has gained momentum. It has been analyzed that people use the mobile phone for different purposes. Even the parents allow their children to use the mobile phone. The students use social media and waste their precious time. So, there is a need to improve their learning system. There is a need to discover an application to help learners in their education. It could be on their mobile phone and they can use it without any hesitation. However, this situation has increased the need for ELSA-speak chatbots, which help students in education, particularly in English language learning. It is only one solution to improve their learning skill with chatbots. ELSA chatbots can be an effective tool and play a vital role in learning English. It enhances vocabulary and improves pronunciation.

### **Research Objectives**

1. To find out the role chatbots play in the learning of the English language.
2. To investigate the reasons for using chatbots in English language learning.

### **Research Questions**

- Q1. What kind of role do chatbots play in the learning of the English language?  
Q2. What are the reasons for using chatbots in English language learning?

### **Literature Review**

A few years back, chatbots were regarded as the representative of the same system in mobile devices. Still, today, it is regarded as a mark of an individual's class that students depend on chatbots to adjust their study in the educational frame. With the advancement in educational technology, new functions of chatbots in mobile phones were introduced, like information availability and sharing and messaging services. Students who have nothing to feel about their monotonous routine, such as individuals, are noticed to depend on their chatbots. The present difference in opinion is a fact, particularly for teenagers. When teenagers feel leisurely bored, they use their smartphones and spend time on social media. So, learners can have good conversations between English-speaking chatbots and language learners, and the chatbots must provide "comprehensible input" (Krashen, 1981) relative to the learners' English language proficiency in the form of realistic exchanges. The chatbots can adjust their language use for compatibility with the English language learners and whether they can successfully negotiate the meanings by interacting with it.

Chatbots make it comfortable and possible for English language learners to continue their learning without the proper environment of traditional classrooms. They can perform all their learning activities with just a single touch. One of the advantages of chatbots is that they provide a friendly environment for learners. English language learners can use it on their smartphones anytime and anywhere for learning.

ELSA Speak is an excellent example of an automated interactive language tutorial. It has multiple language courses with instruction in different mother tongues, depending on the language. For example, Urdu speakers can learn English, German, Spanish, and French, while English speakers can learn 34 languages. It can recognize what they say (audio) and write. Marinelli (2021) states that students can answer the questions in both written and audio form. Therefore, learning on the platform can improve all aspects of speech by practicing

through repetition and different examples. Students can learn independently, practice at least 5 minutes a day, and choose exercises according to their level and personal needs. In addition, the platform allows a teacher to create a class account and track the achievements of participating students: an automated reward system, reminders, and a gamification approach help stimulate students' desire to learn.

Mageira et al., (2022) recognized that the creation of chatbots through the SnatchBot application or the messenger of some social networks does not require programming knowledge. These chatbots do not need to be super, smart, or sophisticated, but they can successfully serve educational goals while empowering students.

In general, when having a conversation with a Chabot, users expect Chabot's to be able to answer questions and process orders, while also enabling the automation of certain types of routine, repetitive, and time-consuming communication. Interactions with a Chabot on Messenger tend to feel more natural than with a mobile app or website. People tend to ask the question on their mind and expect to get an answer. However, Zaib et al., (2020) reported that Facebook has seen 70% of its interactions with catboats fail, meaning that the artificial intelligence could not understand what users were saying.

### **An Effectiveness of Chatbot Tools in Learning English Language**

In the field of education, chatbots are most significant in learning the English language.

#### **Grammar**

Molnar & Szuts (2018) recognized that grammar is essential for effective communication and learning English. While the correct use of grammar conveys the desired meaning in English language learning, on the other hand, incorrect use of grammar creates complete confusion and changes the meaning of sentences completely. Hence, chatbots can identify the learner's mistakes and help them to improve their grammar skills.

#### **Vocabulary**

The English language has a vast vocabulary. Vocabulary difficulties arise when the complexity of word knowledge exceeds the dictionary definition. Chuah & Kabilan (2021) stated that the lack of understanding of grammar and incorrect pronunciation also lead to vocabulary problems. Chatbots can be considered a great tool to improve vocabulary.

#### **Pronunciation**

Gupta et al., (2020) stated that the use of the correct pronunciation of words, the learners speak enables others to understand quickly. When the second language learners need to improve their pronunciation. Chatbots is a tool and it enables learners to speak fluently. Chatbots notices learners' pronunciation and mentions the words that learners pronounce correctly or incorrectly when the learner chat with chatbots.

### **Research Methodology**

#### **Data Collection Procedure**

The researcher used quantitative research method for the study. In quantitative research, data was collected using surveys and questionnaire, and collected data is used for quantitative analysis. The quantitative research method is appropriate for the present study

as it is statistically reliable and trustable. The process of collecting data has been done using a questionnaire. Twenty items have been selected for the questionnaire. The essential instrument for obtaining the primary data in applied research was a questionnaire; because of this element, the researcher resolved different categories of inquiries from the respondents.

### **Sampling**

The purposive sampling technique was used for the present research. In Purposive Sampling, researchers depend on their peculiar judgment when selecting participants of the population for study participation. This type of sampling is selective, subjective, and judgmental. It is a kind of non-probability sampling technique. The purposive technique can substantiate to be efficacious when restricted sums of individuals may act as primary facts basis because of the nature of the inquiry approach, goals, and research goals. In purposive sampling, personal judgment is needed to be used for selecting cases that assist in answering research questions or achieving objectives.

### **Sample Size**

The sample size of the research were 60 students of the department of English, Ghazi University Dera Ghazi Khan. All the students were of similar educational backgrounds, and they have been in the same class and studied a similar course in English. The researcher selected male and female students to get the required data for the study.

### **Participants**

The population of the present study consisted of students from Ghazi University, Dera Ghazi Khan at the B.S. level. The age of students ranges from 17-22 years. Males and females students were participated in the present research.

### **Research Tool**

The closed-ended questionnaire investigates roles, and reasons for to use of chatbots in English language learning at the graduation level. In a closed-ended questionnaire, participants are bound to provide suitable answers. The questionnaire is also developed on a Likert-type scale

### **Data Analysis**

The reliability of the questionnaire was checked by using Cronbach's Alpha via IBM SPSS Statistics 26. The reliability of the learner's questionnaire was 0.947. The ANOVA was applied to get an accurate result. The researcher used the questionnaire to analyze the learners' responses regarding the use of chatbots in English language learning. Statistical Package for Social Sciences (SPSS 26.0) analyzed the data by applying frequency, percentage, reliability, and One-way ANOVA.

## Results

**Table 1 Most significant items using chatbots in English language learning at graduation level**

ANOVA						
		Sum of Squares	Df	Mean Square	F	Sig.
6. Chatbots help EFL learners acquire the required knowledge.	Between Groups	33.693	2	16.847	13.049	.000
	Within Groups	189.780	147	1.291		
	Total	223.473	149			
8. English language learners are not allowed to attend classes physically in the wake of epidemic.	Between Groups	27.040	2	13.520	7.766	.001
	Within Groups	255.920	147	1.741		
	Total	282.960	149			
9. The use of chatbots enables English language learners to continue their learning through online.	Between Groups	12.360	2	6.180	6.304	.002
	Within Groups	144.100	147	.980		
	Total	156.460	149			
13. EFL learners feel comfortable in using chatbots.	Between Groups	42.653	2	21.327	16.103	.000
	Within Groups	194.680	147	1.324		
	Total	237.333	149			
17. Learners show the positive attitude because they find it is easily accessible.	Between Groups	22.653	2	11.327	9.999	.000
	Within Groups	166.520	147	1.133		
	Total	189.173	149			
19. Learners feel happy while	Between Groups	28.360	2	14.180	11.906	.000



studying through chatbots.	Within Groups	175.080	147	1.191		
	Total	203.440	149			

\*. The mean difference is significant at the 0.05 level.

This table reveals the consequences of the ANOVA with the correlation to the members of the present research, the relation of chatbots' use in learning English with the sub-types of the primary standard category shows the statistically most significant connection of the role of smartphones in the English language learning "chatbots helps the language learners to acquire the required knowledge" with  $F= 13.049$  and  $P=0.000$ . The next sub-type discloses the statistically most significant connection of the use of chatbots in learning English "The English language learners are not allowed to attend classes physically in the wake of the epidemic"  $F=7.766$  and  $P=0.001$ , "The use of chatbots enables the English language learners to continue their learning through online" with  $F=6.304$  and  $P=0.002$ .

The following sub-category exposes the most significant connection of chatbots' impact on EFL learners "EFL learners feel comfortable in using chatbots" with  $F= 16.103$  and  $P=0.000$ . The next sub-type also discloses the most significant connection of learners' attitudes toward using chatbots in learning English "Learners show positive attitude because they find it portable" with  $F=9.999$  and  $P=0.000$ . "Learners feel happy while studying through chatbots", with  $F=11.906$  and  $P=0.000$ , according to the SPSS rules, reveals that it is highly significant.

### Significant Findings of the Current Study

The total number of participants in the current research was 60, and the researcher collected the data from the department of English at Ghazi University Dera Ghazi Khan. The significant findings that emerged from the results are below:

1. Chatbots has a positive impact on students' achievement in learning English.
2. Chatbots doesn't waste the students' precious time and can be used anytime during 24 hours.
3. The chatbots technique is good but relatively new for users, boosting their confidence.
4. The chatbots is enjoyable, and learners can use it independently.
5. It enhanced students' vocabulary and was helpful for pronunciation.

### Discussion

#### RQ 1. What kind of role do Chatbots play in the learning of the English language?

Under the most extraordinary circumstances, learners face educational variances, pronunciation complications, ebbing inspiration, a deficiency of genuine commitment, the need to learn the target language, and many other complications during their education. Then chatbots plays a vital role in that critical condition. The finding shows that the chatbots' role in learning English is very significant. Present collaboration with chatbots can gratify students' requirements for a self-learning step (Chen et al., 2020) and give learners an intellect of faithfulness in an instinctive learning atmosphere (Jiang et al., 2017). It also helps build an extensive vocabulary collection in their homes, study more, and work on their tasks. The highest three possible profits of chatbots that students conveyed in our study:

1. 24-hours service
2. Instant responses
3. Answers to simple questions

### **RQ 2. What are the reasons for the use of chatbots in the English language learning?**

The survey shows that there are specific causes that force the English language learners to use chatbots to learn English during pandemics or in their leisure time. Learners can prepare themselves to speak with chatbots through writing or communication (Fryer et al., 2017). Participants learning English, especially speaking skills, made better gains with the help of chatbots.

The survey shows that students use chatbots in their leisure time, which is an exciting tool. The chatbots is easily accessible; one can open it with one click. Most learners had a positive attitude because students like to study with CELL (Chatbots English Language Learning) resources. The chatbots is a stress-free and suitable tool to improve learners' English language. The EFL learners agreed that they feel happy and comfortable while studying through chatbots. Learning a new language is easy if you know what to focus on:

- i. Learn how to pronounce all English sounds effectively.
- ii. Become Bilingual Quickly
- iii. Learn English fast with an AI speech coach. Our AI will select the best bite-sized lessons to help us sound like a native speaker and help us with our English accent.

### **Conclusion**

In light of the survey findings, the researcher concludes that using chatbots in the English language learning tools at the graduation level in Dera Ghazi Khan is essential. Previously, academicians were clear about Chatbot that it is playing a significant role in language learning in the district of Dera Ghazi Khan. However, the present study has indicated that chatbots plays a pivotal role in the English language learning. It enables learners to become more active and feel more confident while using chatbots. Chatbots can understand learners better; they can feel more relaxed while talking to chatbots than a person.

Chatbots is an abundant source of learning as it can be used anytime in a friendly environment inside or outside the classroom. Chatbots is an exciting platform; students can use it independently because it reduces students' fear, stress and anxiety. The other qualities due to which chatbots could be a learning choice for ESL learners are: Chatbot is stress reducer, joyful learning companion and a valuable platform for correct grammar rules, pronunciation and practice of different language skills.

### **Recommendations**

According to the current research findings and results, the following are the future recommendations.

- It is recommended that all the above-stated institutes should facilitate the learners with a good syllabus that is available on their chatbots.
- Teachers should prepare to use the chatbot technology before the learners and present a model before them.
- It is recommended that the learners use different apps to help them learn the English



language.

- The present study's data was collected from both genders, male and female. The same study should be conducted with female and male participants distinctly.
- The current study shows the significance of chatbots in English language learning. A similar study should be conducted to discover the significance of chatbots in learning all languages.

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