

WEB 3.0 : LEARNING AND TEACHING ENGLISH

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Abstract

In the recent times , the technology is growing very rapidly leading to the future of internet called as Web 3.0 . Augmented reality is a term used to describe a new form of mobile technology. The great popularity of online mobile games is an example of how AR has advanced and been largely integrated into mobile technology, making it feasible for almost everyone with a mobile device to use AR. Although augmented reality is just starting to make its way into the educational space, it has the potential to significantly improve our educational system. In fact, according to earlier academic research, augmented reality has been proven to be useful for learning the English language and may increase student motivation. Thus, this conceptual paper discusses results from earlier researches on the application and value of augmented reality in the teaching and learning of English language reading .

Introduction

Web 3.0 which is the future of internet and technology contains many things like Augmented reality(AR) ,virtual reality (VR) , blockchain technology , metaverse , Artificial intelligence , machine learning and many more things . Web 1.0 was the 1st version of internet which contained only static web pages and next came web 2.0 which is the present internet which is based on centralised database system. Where web 3.0 has decentralised system which means no individual person or organization can control the database by their

self .Web 3.0 is crypto currency enabled which means crypto is going to replace the current currency in the world slowly .Web 3.0 has metaverse which is a virtual world where we can interact with people all over the world as if they are with us right now using technology of VR and AR. Web 3.0 includes many more things like NFT (non fungible tokens) , DeFi(decentralized finance) , dApp(decentralized applications) , smart contracts. The most common form of technology in use today is mobile; practically everyone has a mobile device, such as a smartphone or tablet, and can easily access the internet through Wi-Fi. There have been many advancements in integrating mobile technology in language and literacy instruction to examine how it could be used effectively. This is in addition to using mobile technology for everyday activities like online transactions, instant messaging, etc.

Literature review

Firat observed that Web 3.0 have affected the educational research significantly in the recent years . The concept of e - learning has emerged as the teaching tradition is shifting from traditional teaching method to digital learning method . Web 3.0 includes many technologies like augmented reality , 3d games , 3d visual environments and semantic web . After collecting data from the target group it was found that people prefer Web 3.0 more than the traditional method of learning .

The disciplines in which the studies were carried out are Science education was the highest followed by computer science, mathematics , language learning and then music learning . The trends in the use of web 3.0 were experimental method was the highest followed by designing followed by qualitative, quantitative etc .

Rudman observed that many organisations consider generating income and controlling cost as a major asset of the organisation . The internet (Web) is considered to be the fastest growing means (technology) of all time to browse . The web can help in the development and enhancement of technology . The web 1.0 which was the 1st phase of internet was having only static pages whereas the next phase web 2.0 (which is the present internet technology) is interactive . The study shows us the advantages and the risks of Web 3.0 . It also tells us about the possible safeguards for those risks .

Identified opportunities can be classified into 2 different categories , the autonomous integration of data and service which increases the capabilities of the web services making it more efficient . The major risks are unauthorised

access, manipulation or changing of data , autonomous initiation of action and the development of languages and scripts.

Carlos Flavián observed that the arrival of Augmented reality (AR) and Virtual reality (VR) is designing the new environment where the physical and the virtual objects are integrated as if they are existing together . The physical – virtual connections are very strong as the technology is so developed . This article will help us to understand the concepts of linking physical and virtual world (through AR and VR) in a better way .

This study involves a technology called “EPI Cube” which allows academic and manages all technologies , current and the potential technology which might help improve the consumer experience .

Cipresso noticed that the recent appearance of low cost virtual reality (VR) like Oculus rift , HTC Vive and Sony PlayStation VR is attracting he attention of the users as the technology is new and very interactive and researchers think that the Web 3.0 may be the largest stepping stone in technology improvement . The history of VR is longer than it seems . The concept of VR was started in 1960s and the 1st VR tool came in the late 1980s . This article helps us understand the evolution of VR and AR over the time . This work discusses about the changes about to occur and the challenges we might face .

Cankaya observed that in the recent years the use of VR technology has spiked up . Most importantly the use of VR headsets has increased so much due to its interactive nature with users . This article shows that the number of users using VR headsets for education is increasing year by year as we get a more interactive feel during lectures as we are virtually present there in VR headsets .

Boonbrahm stated that the most crucial component of early education is motivation. There isn't much evidence that it worked, despite the fact that many schools have made considerable investments in information technology in the hopes that it will boost student enthusiasm. The solution may lie in augmented reality, which allows kids to engage with virtual objects while still in their natural surroundings. In this study, we designed three AR trials to support the idea that AR might inspire kids to learn English. These AR experiments will emphasize dialogue, reading, and writing. For this, various AR approaches, including marker-marker interaction and user-defined targets, were applied. The findings support the hypothesis that kids are very interested in and eager to learn more.

Ismail found that despite its centrality in the process of language learning, EFL students sometimes disregard the significance of understanding English phonetics. When English phonetics are not used and understood, mispronunciation problems result, which then obstruct oral and written communication. In response to this problem, research was conducted on the use of augmented reality (AR) technology to speed up the acquisition of English phonetics. The technology created a more appealing and engaging learning environment by combining virtual items with video footage. In addition to revealing how the students used this media in their learning processes, this study also explained the stages and procedures for creating augmented reality as English Phonetic learning material.

Ahmad found that many educational institutions all over the world have a clear goal in mind when it comes to improving English language ability. AR is one of the newest technologies lately utilized in education, nevertheless needs additional thought and research to ensure its efficacy in English language learning ELL. The majority of AR technologies used in ELL are highlighted in this document, along with an assessment of their usefulness and value. Additionally, it draws attention to the drawbacks that would hinder the adoption of augmented reality in education generally and English language acquisition specifically.

Arrieta found that the goal of the Sign Language Teaching Model (SLTM) described in this article is to help deaf children develop their various communication skills in a collaborative learning environment with mixed reality.

Gavalas states that since virtual reality (VR) is the first and only medium that has the potential to allow for the incorporation of the full spectrum of both verbal and non-verbal cues, there are reasons to view it as a recently developed communication medium that needs to be distinguished from all other forms of mediated communication. The current paper is a component of a larger investigation on potential differences in interpersonal communication between the real world and virtual reality. Analysis shows that VR-mediated communication is as complicated as face-to-face communication because subjects were equally compliant or more so, with the type of information exchanged playing a role. These findings highlight the under-development and potential applications of VR collaborative environments.

Jamrus (2019) observed that Augmented reality is a term used to describe a new form of mobile technology. Although augmented reality is just starting to make its way into the educational space, it has the potential to significantly improve our educational system. In fact, according to earlier academic studies, augmented reality has been proven to be helpful in improving student motivation and English language proficiency. Thus, this conceptual paper presents findings from earlier investigations on the application and value of augmented reality in the teaching and learning of English language reading. The idea of augmented reality, its application in language learning, the advantages of using AR in language learning, the limitations of using AR in language learning, and the level of teacher readiness and acceptance of utilising AR in classroom reading instruction will all be covered in this essay. Additionally, the authors will offer some stakeholder recommendations, particularly in relation to the use of augmented reality in teaching English language reading, as well as ideas for future study.

Ardiny (2018) observed that technology has been advancing quickly and has a noticeable impact on many facets of life, including education. According to studies, augmented reality and virtual reality hold great promise for enhancing students' abilities and understanding. In actuality, combining AR/VR with education can enhance learning and teaching in an engaging way. In this review paper, we first give an overview and definition of augmented reality and virtual reality. Then, we quickly review current studies and the newest AR and VR devices that have pedagogical benefits and the potential to enhance educational systems. We then discuss the strengths and weaknesses of AR/VR to determine what benefits it can offer to teachers and students.

Karacan (2021) saw that Using the framework developed by Osterweil et al. for assessing the appropriateness of educational technology use in global development programmes, the paper reviews educational AR technology in terms of learning theories, learning pedagogies, teachers, students, culture, infrastructure, and sustainability after conducting a brief but thorough literature review. The analysis revealed that AR technology has a number of advantages for language learning, but it is not yet prepared for full incorporation into language programmes. The report also offers recommended applications and concrete ideas for AR-enhanced exercises in four language skills. For teachers,

teacher educators, researchers, and those who create course materials, this review has a number of consequences.

Yildiz (2021) observed that the term "augmented reality" refers to a technology where virtual things are combined with the real environment and can communicate with one another. Although there are many uses for augmented reality apps, the sector of education is the most significant. Through the use of virtual reality technology, kids may now learn difficult subjects in a pleasant and straightforward manner. Students can learn more about the virtual environment by interacting with its objects. For instance, lessons can be taught in a classroom setting while on a digital tour of a museum or zoo in a foreign nation. At the conclusion of the study, it was recommended that the educators carefully read the prepared portions and put them into practise in their courses. Additionally, it was noted that it should be preferred to connect with students in real time in order to properly communicate with them, particularly throughout the pandemic process.

Jantjies (2018) observed that through the use of diverse digital resources, educational technology may support the learning environment and improve learning. Emerging technologies have made it possible for students to access a wealth of information on digital platforms, filling the resource gap in learning environments. In order to facilitate experiential learning in South African institutions, this study reviews the research on the use of mobile augmented reality (AR) and virtual reality (VR) technology. There is a need for studies that examine the potential of augmented reality and virtual reality in enhancing higher educational institutions like universities and Technical and Vocational Schools.

Drajat (2019) observed that Virtual Reality is a brand new generation which broadly used and really famous amongst younger generation. Virtual Reality and Artificial Intelligence technologies grows rapidly. ELT in Indonesia is very poorly normal via way of means of college students because of the teacher`s dull and conventional coaching techniques or method ensuing in college students lack in English. So if instructors use new coaching techniques via way of means of the usage of synthetic intelligence incorporated digital truth as a media of coaching then college students could possibly be involved and the coaching or magnificence may be completed from their very own domestic in a digital global that may additionally imply much less cash spent on transportation, lunch, etc. This also make college students higher in english on a every day basis.

Therefore Using Artificial Intelligence incorporated Virtual Reality in ELT enables college students improves their English hence also can saves cash for Parents. Hence using Artificial Intelligence incorporated Virtual Reality as a media in ELT in Indonesia can be an opportunity technique for ELT to be nicely normal via way of means of college students and to enhance college students English.

Li (2020) observed that Artificial intelligence (AI) technology made a significant advancement in 2016. Virtual reality and AI-based language service solutions are becoming more prevalent on the commercial market, which has had a significant impact on the language service sector. Based on artificial intelligence and VR (virtual reality) technology, this project develops a collection of oral English training systems that adapt oral English instruction to the needs of the modern world.

Yang (2022) observed that VR and AI technology to college English instruction in an effort to enhance its effectiveness. In this article, a semiactive address-driven pixel structure is suggested in accordance with the pixel structure of the English teaching image and its array drive architecture. In addition, this article regulates the scanning rate by altering the CLK clock signal's period, which is generated by the computer or FPGA and controls the speed of image transmission. Additionally, the negative feedback loop is biased and an intelligent teaching system is built in order to determine the output DCvalue of the cascode structure.

Xie (2021) observed that Globalization and informatization are changing human life and social behaviour. Its aim is to explore global strategies for promoting international talent with a global vision. As the world's language with the largest population, English, especially its educational value, has always been a major concern of scholars and educators. This work is a combination of immersion-based English teaching and virtual reality (VR) technology. is considered in an innovative way. Then, based on an experimental design, her 106 students from a Chinese school were selected for her quasi-experimental study. Collected data are analysed by computer statistical software to test hypotheses. The results showed a significant positive correlation between VR and immersion-based language teaching. There was a significant positive correlation between immersion-based language instruction and academic performance, and VR was positively correlated with learning outcomes (LO) . Compared with other cutting-edge research methods, this work corrects students' oral exams through analysis and comparison with the system database, greatly improving students'

learning effect. Finally, based on the research results, some suggestions are made to provide experimental references for English teachers and future linguistics teaching.

Mukhallafi (2020) observed that as time goes on, machines are becoming more complex, faster and smarter. Although we still have a long way to go to be exactly human-like in reasoning, reasoning, and decision-making, several notable advances in the application of artificial intelligence (AI) and machine learning techniques have been noted recently. Therefore, the current research attempts to explore strategies for effectively using artificial intelligence (AI) applications for teaching and learning English from the perspective of college students. This study applies an analytical-descriptive approach to study and analyse the literature to describe AI and strategies for using AI in English teaching/learning. A 40-item questionnaire was used. It covers AI strategies and appropriate applications for English teaching/learning, the effectiveness of these applications, their practical use, and the requirements for their use in the English teaching/learning field. We measured the validity and reliability of the questionnaire, resulting in Cronbach's alpha of 0.931. The survey sample consisted of 44 of her male students randomly selected from the English department of Northern Border University. Many learning tools were used. The results revealed a set of strategies suitable for teaching and learning English using AI. The results also show little use of these strategies for teaching and learning English, indicating their effectiveness when used in this area. In this study, we determined the need for training in terms of the study sample. A proposed plan including foundations, goals, content, processors and evaluation methods for using AI applications in the field of English teaching is envisioned.

According to Kim, N.Y., Cha, Y. and Kim, H.S., (2019) in their article "FUTURE ENGLIS LEARNING: CHATBOTS AND ARTIFICIAL INTELLIGENCE" research developments in robotics have made it possible for robots to help humans in a variety of ways. Chatbots are regarded as useful in a variety of fields, and research is increasingly concentrating on using this technology in language instruction. This study's objective was to review and report on various intelligent chatbot types for language learning. According to the research, there aren't many chatbot programmes that enable direct voice recognition or text communication between humans and chatbots for the purpose of learning foreign languages. Researchers have looked into the sparse application of AI in

educational settings, including chatbot programmes designed to enhance English teaching and learning. According to their empirical studies, chatbots have shown to have some favourable effects on students' communication skills, primarily by increasing the quantity of their interactions, which entails negotiation, boosting their motivation, and enhancing their interest in learning. In light of this, this study suggests that chatbots can enhance linguistic inputs and provide opportunities for language learners to improve their communicative proficiency.

According to Jia, J. and Ruan, M., (2008) article “USE CHATBOT CSIEC TO FACILITATE THE INDIVIDUAL LEARNING IN ENGLISH INSTRUCTION: A CASE STUDY” These skills include those related to the global economy and technology. The recommended strategy involves incorporating chatbot technology into the current teaching-learning environment while taking into account both enabling and restricting variables. The conceptualization of this method is based on social constructivism, which holds that social interaction is crucial to the development of cognition and that learning is mediated by cultural tools and scaffolding.

According to Jia, J., (2009) article “CSIEC: A COMPUTER ASSISTED ENGLISH LEARNING CHATBOT BASED ON TEXTUAL KNOWLEDGE AND REASONING” a virtual chatting partner (chatbot) that can communicate in English with English learners wherever they are is still the main emphasis of the CSIEC system, which has recently evolved many features for English instruction. According to user input, dialogue context, knowledge of the user's and its own personalities, common sense, and inference knowledge, it develops communicative responses. NLML, an annotation language for natural language text, is used to convey all of these different types of information. These NLMLs can be generated automatically by parsing the text or quickly created with the use of GUI editors that we developed. As a result, the CSIEC system recommends a simplistic method of logical reasoning and inference that relies solely on the syntactical and semantic analysis of textual knowledge. Compared to the outdated ELIZA-style keywords matching technique, this method has advantages.

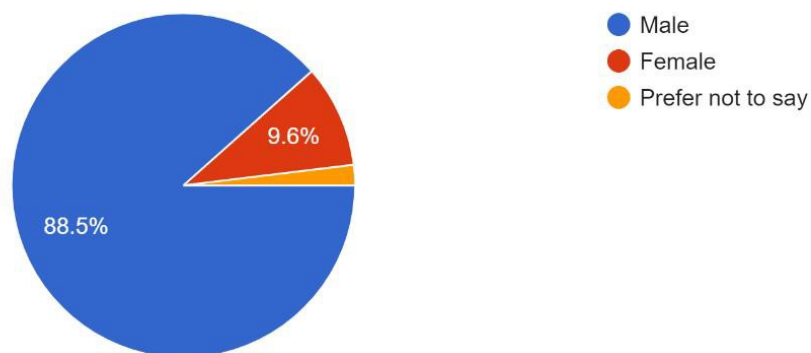
According to Coniam, D. (2008) article “AN EVALUATION OF CHATBOTS AS SOFTWARE AIDS TO LEARNING ENGLISH AS A SECOND LANGUAGE” "Chatbots"

are computer programmes that can speak or carry on a conversation in English. Chatbots have advanced significantly since Eliza's command-line days, to the point where many of them currently have an avatar interface and provide speech recognition as a feature. Six chatbots that are currently for sale or purchase online are evaluated in this study. This study looks at chatbots' suitability as educational software tools and their user interfaces as a human-sounding or human-looking chat companion. The report's analysis of already accessible chatbots closes by emphasising that, despite their advancements since Eliza's early days, they still have a ways to go before they can engage with students in the way that academics like Atwell (1999) had envisioned.

According to Sarosa, M., Kusumawardani, M., Suyono, A. and Wijaya, M.H. (2020) article "DEVELOPING A SOCIAL MEDIA-BASED CHATBOT FOR ENGLISH LEARNING" for recent graduates, the rise in multinational businesses giving employment opportunities in Indonesia is a blessing. Due to their poor English, they were unable to take advantage of the chance. The absence of human resources that can directly, gradually, and consistently help people improve their English skills may be the cause of this problem. Social media are quite popular today among many different demographics; however, they are mostly utilised for sharing of information. This study intended to create a Facebook application as an English learning tool to aid students in learning the language more quickly. To assist folks who struggle with learning English, this programme was designed as a Chatbot (an automated responding machine). As consumers are already accustomed to its layout and navigation, the chatbot incorporated into social media should make adoption easier. Students at the State Polytechnic of Malang's D3 English Study Program and the Telkom Vocational High School in Malang have both applied to use this application.

What is your gender ?

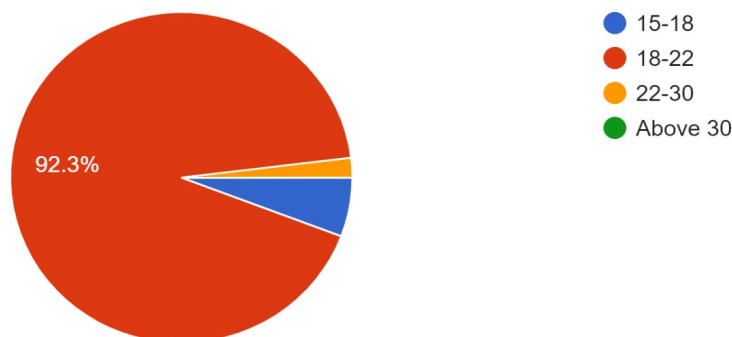
52 responses



The given pie-chart shows the gender of the respondents. We can see that 88.5% of the respondents are male, 9.6% are female and 1.9% did not want to reveal their gender. It can be concluded that maximum respondents are male.

What age group do you belong to ?

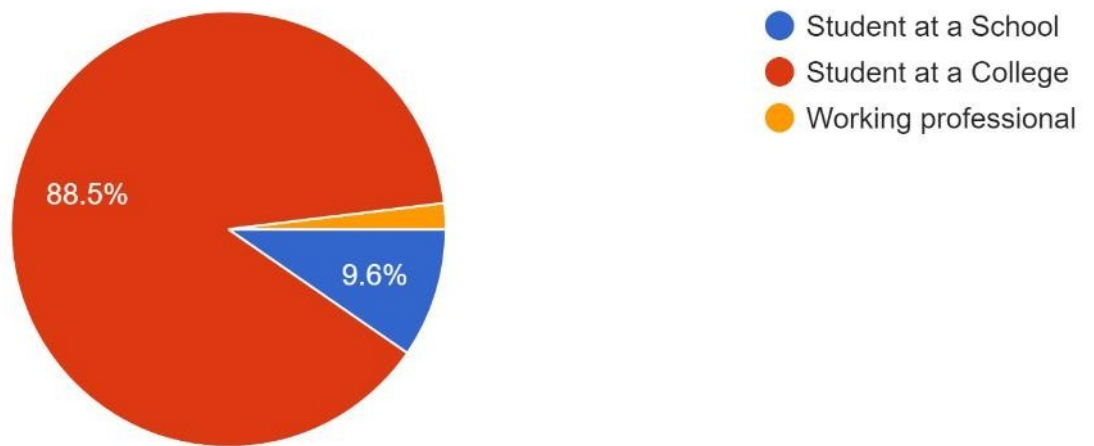
52 responses



The given pie-chart shows the status of the respondents. We can observe that 92.3% of the respondents belong to the 18-22 age group ,5.8% of the respondents belong to the 15-18 age group , 1.9% of the respondents belong to the 22-30 age group . So from this we can conclude that most of the respondents belong to the 18-22 age group.

What is your Occupation ?

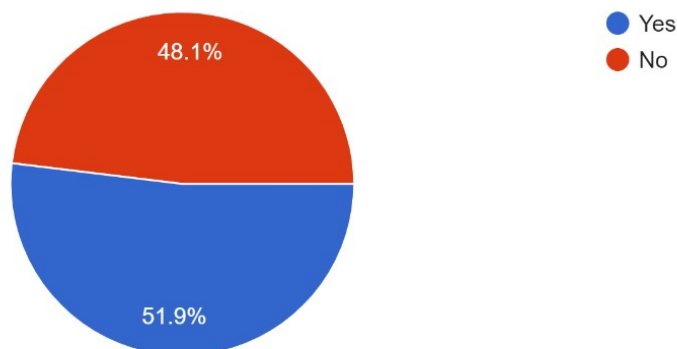
52 responses



The given pie-chart shows the status of the respondents. We can observe that 88.5% of the respondents are Students at a College , 9.6% of the respondents are Students at a School , 1.9% of the respondents are Working Professional . So from this we can conclude that most of the respondents are Students at a College .

Have you heard of the term Web 3.0 ?

52 responses

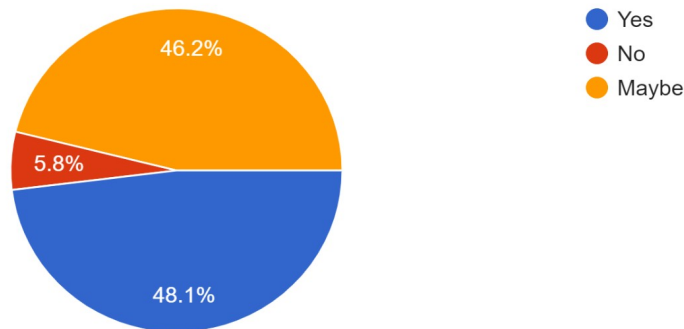


The given pie-chart represents whether the respondents have heard of the term Web 3.0 for which 51.9% voted Yes and 48.1% voted No. We can see that 75% of the respondents are male while 25% are female. It can be

concluded that maximum respondents are male. It can be concluded that majority of the respondents heard the term Web 3.0.

Do you think the future is Web 3.0 ?

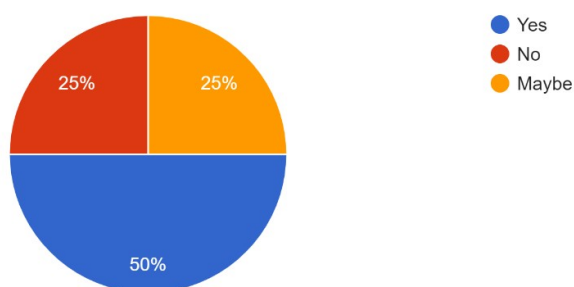
52 responses



The given pie-chart shows 48.1% of the respondents agree that the future is Web 3.0 and 46.2% of the respondents are not sure about the future is Web 3.0 and 5.8% of the respondents are not in Favour . The majority of the people's opinion is that the future is Web 3.0.

Do you think that AI will cause loss of human jobs ?

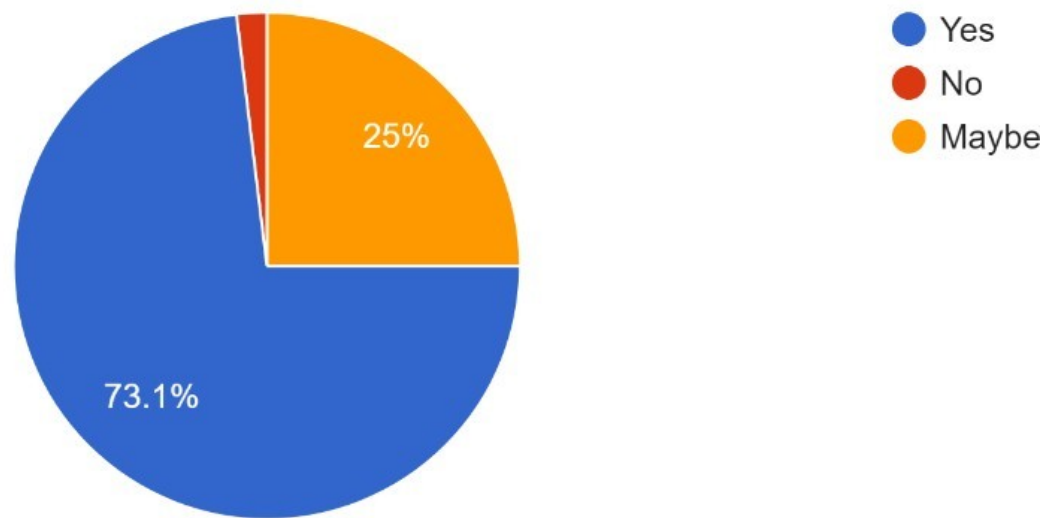
52 responses



The above chart represents the opinion of students, on how the respondents feel whether AI will cause loss of human jobs. 50% of the respondents voted Yes, 25% voted Maybe, and 25% of the respondents voted No. It can be concluded that the majority of the respondents feel that AI will cause loss of human jobs.

Do you think we can teach a language using AR and VR

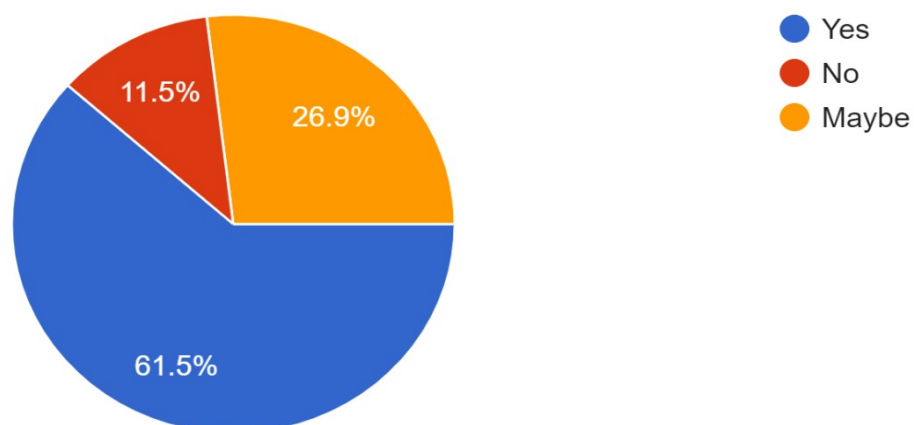
52 responses



The given pie-chart shows 73.1% of the respondents agree that we can teach a language using AR and VR and 25% of the respondents are not sure about the teaching of a language through AR and VR and 1.9% of the respondents are not in Favor . The majority of the people opinion is that we can teach a language using AR and VR .

Do you think teaching and learning through AR and VR will be effective ?

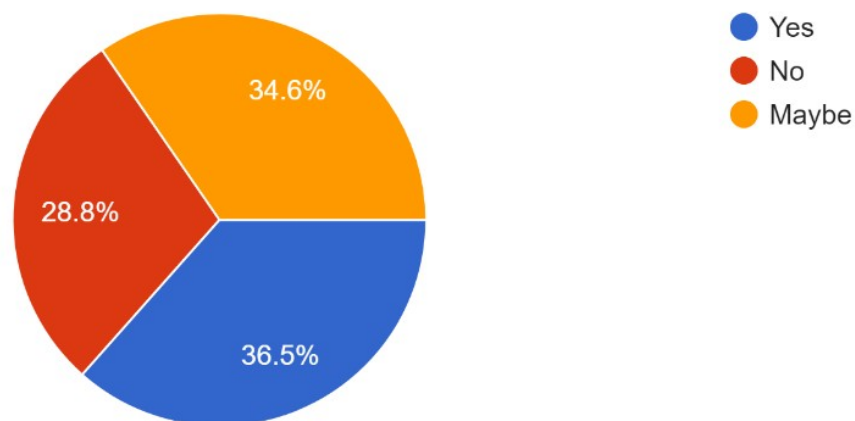
52 responses



The given pie-chart shows 61.5% of the respondents agree that we can learn and teach a language using AR and VR and 26.9% of the respondents are not sure about the teaching of a language through AR and VR and 11.5% of the respondents are not in Favour . The majority of the people's opinion is that we can teach and learn a language using AR and VR is effective.

Do you think internet is harmful for your youth

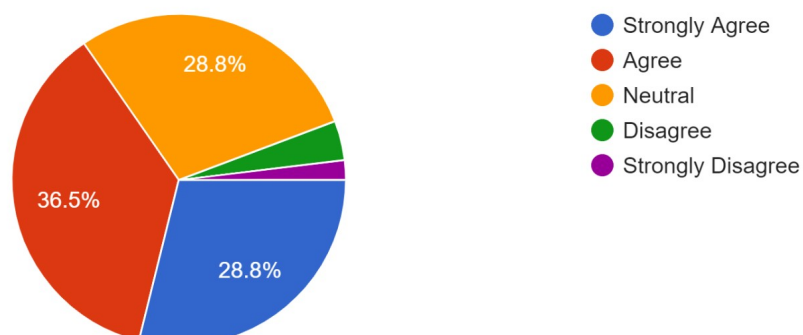
52 responses



The above chart represents the opinion of students, on how the respondents feel whether internet is harmful for the youth or not. 36.5% of the respondents voted Yes, 34.6% voted Maybe, and 28.8% of the respondents voted No. It can be concluded that the majority of the respondents feel that internet is harmful for the youth.

I feel that in the future , teaching will be done through Augmented reality (AR) and Virtual reality (VR) .

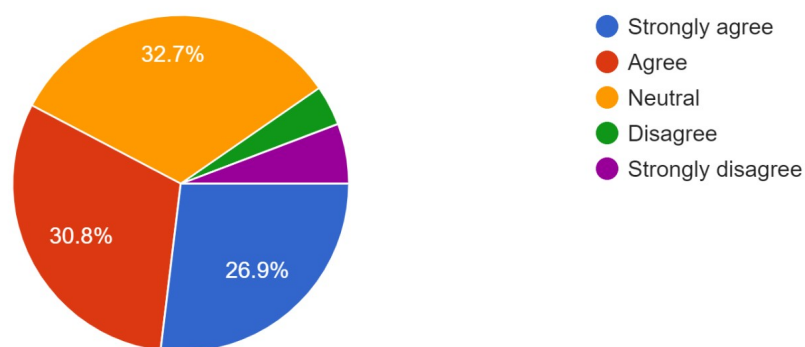
52 responses



According to the data collected on the statement that in the future , teaching will be done through AR and VR . 36.5% of the respondents agree about the statement , 28.8% of the respondents Strongly agree with our Statement , 3.8% of the respondents disagree with our Statement , 28.8% of the respondents are neutral with our Statement and 1.9% of the respondents are not in favour. So from the above pie-chart we can observe that the majority of the respondents agree with our statement.

I feel that we can use AR and VR to teach primary students also which makes their learning more effective

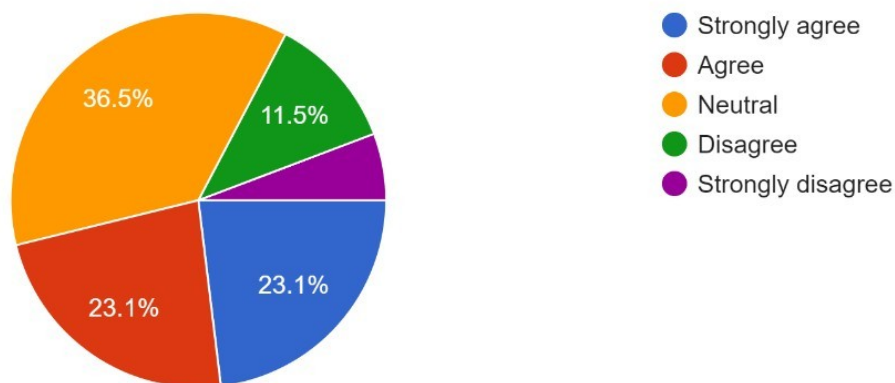
52 responses



According to the data collected on the statement that we can AR and VR to teach primary students also which makes their learning more effective . 32.7% of the respondents are neutral about the statement , 26.9% of the respondents Strongly agree with our Statement , 30.8% of the respondents agree with our Statement , 3.8% of the respondents Disagree with our Statement and 5.8% of the respondents are not in favour. So from the above pie-chart we can observe that the majority of the respondents are neutral.

I think that the learning through AR and VR is easy compared to the present learning method (traditional teaching)

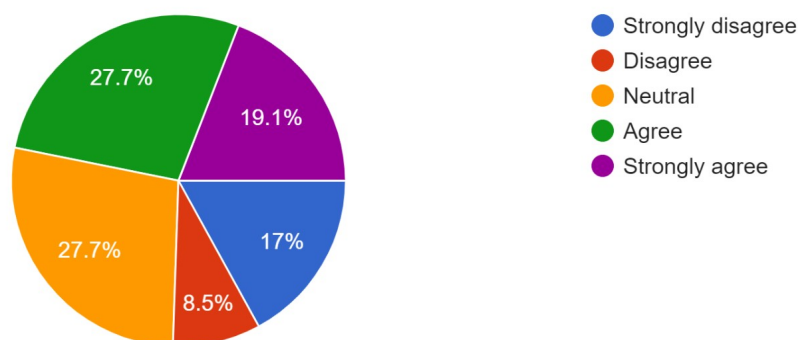
52 responses



According to the data collected on the statement that learning through AR and VR is easy compared to the present learning method (traditional method). 36.5% of the respondents are neutral about the statement , 23.1% of the respondents Strongly agree with our Statement, 23.1% of the respondents agree with our Statement, 11.5% of the respondents Disagree with our Statement and 5.8% of the respondents are not in favor. So from the above pie-chart we can observe that majority of the respondents are neutral .

I feel that AR and VR will be expensive at the beginning but the cost will surely reduce as the technology develops

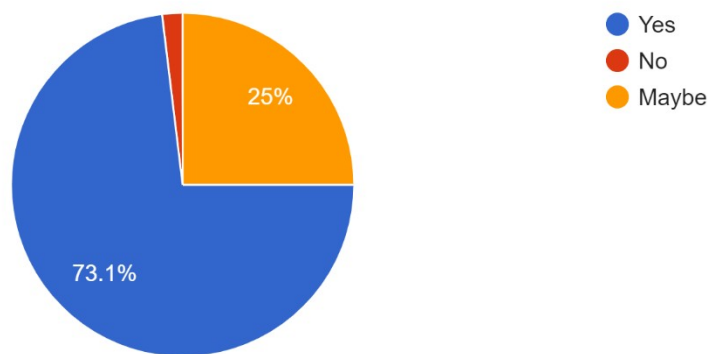
47 responses



According to the data collected on the statement that AR and VR will be expensive at the beginning but the cost will surely reduce as the technology

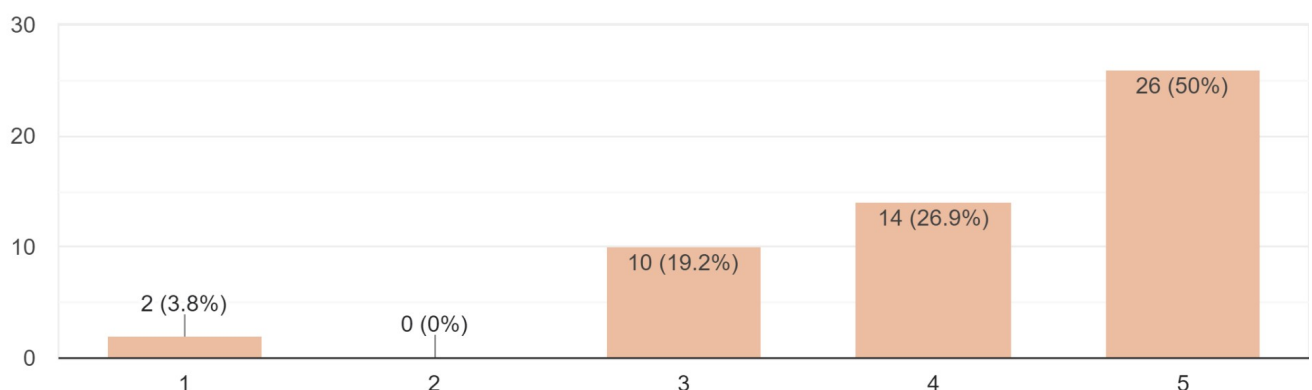
develops . 27.7% of the respondents agree about the statement , 17% of the respondents Strongly agree with our Statement , 8.5% of the respondents disagree with our Statement , 27.7% of the respondents are neutral with our Statement and 8.5% of the respondents are not in favour. So from the above pie-chart we can observe that the majority of the respondents agree/neutral with the statement.

Do you think teaching through AI and VR saves time compared to the traditional method?
52 responses



The above chart represents the opinion the respondents on how they feel whether AR and VR saves time compared to the traditional method. 73.1 % of the respondents voted Yes, 25% voted Maybe, and rest of the respondents voted No. It can be concluded that the majority of the respondents feel that AR and VR saves time compared to the traditional method.

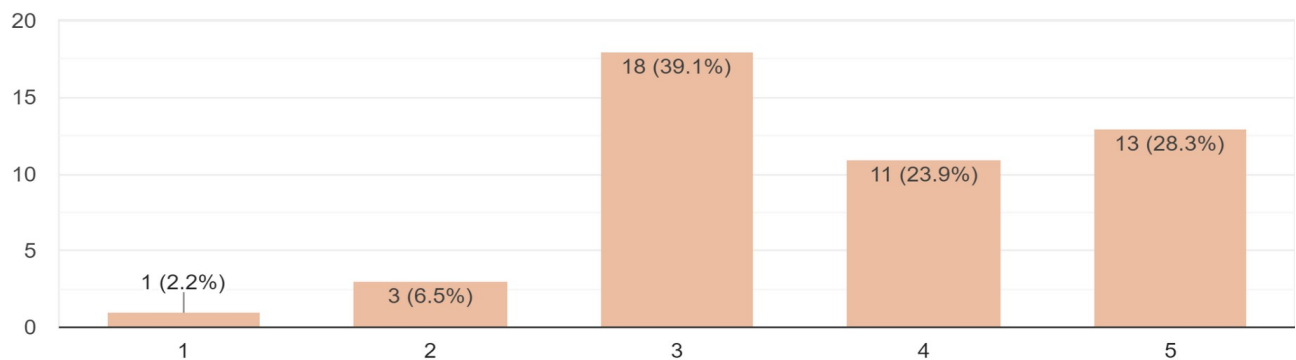
What do you think about the idea of using AR and VR as means of communication for deaf people
52 responses



The graph represents the idea of using AR and VR as means of communication for deaf people. 50% of the respondents expect that it will be outstanding with the idea of using AR and VR as means of communication for deaf people, 26.9% of the respondents are excellent , 19.2% of the respondents are neutral ,0% of the respondents are inoffensive , 3.8% of the respondents are inconvenient . So from the above graph we can conclude that the idea of using AR and VR as means of communication for deaf people was great . This shows that most of the people accept the idea of using AR and VR as means of communication for deaf people.

If you have used VR or AR before , rate your experience

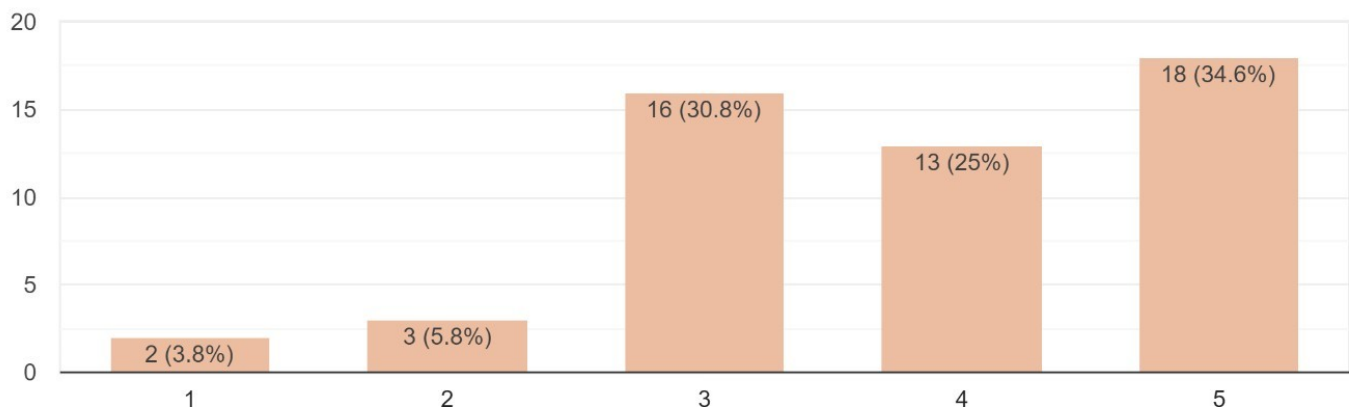
46 responses



The graph represents the rating of experience of AR/VR that 28.3% of the respondents expect that it will be Outstanding ,23.9% of the respondents are excellent, 39.1% of the respondents are neutral , 6.5% of the respondents are inoffensive,2.2% of the respondents are inconvenient . So from the above graph we can conclude that most of the respondents expect experience of AR and VR is average.

Rate your expectations of teaching of a language through AR and VR . How would it be ?

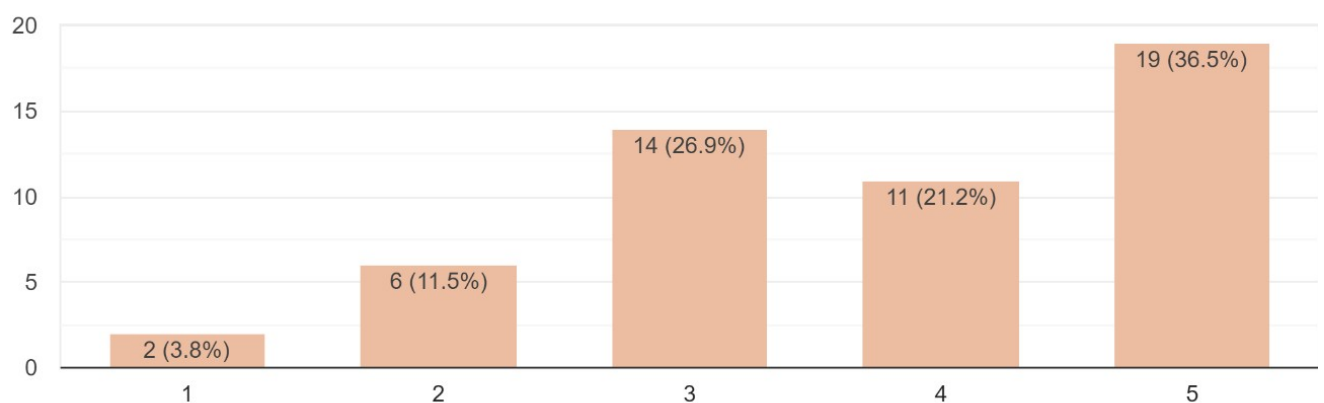
52 responses



The graph represents the expectations of teaching a language through AR and VR . 34.6% of the respondents expect that it will be Excellent with teaching of a language through AR and VR , 30.8% of the respondents are inoffensive , 3.8% of the respondents are inconvenient . So from the above graph we can conclude that most of the respondents expect that it would be great to teach a language using AR and VR . This shows that most of the people accept the method of teaching and learning becomes easier and better through AR & VR .

How do you feel about the idea of learning through AI

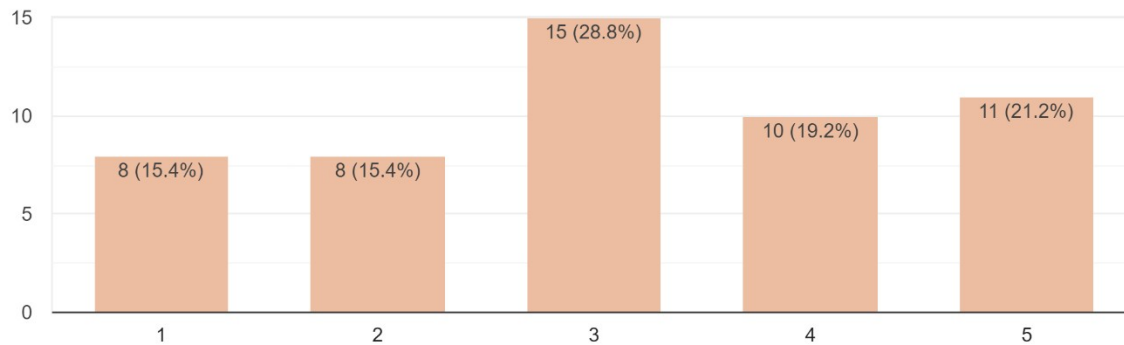
52 responses



According to the data collected on how someone would rate the idea of learning through AI the responses received were: 3.8% rated as 1, 11.5% rated as 2, 26.9% rated as 3, 21.2% rated as 4 and 36.5% rated as 5. It is observed that most of the students really liked the idea of learning through AI.

How would you rate the privacy you get in the internet ?

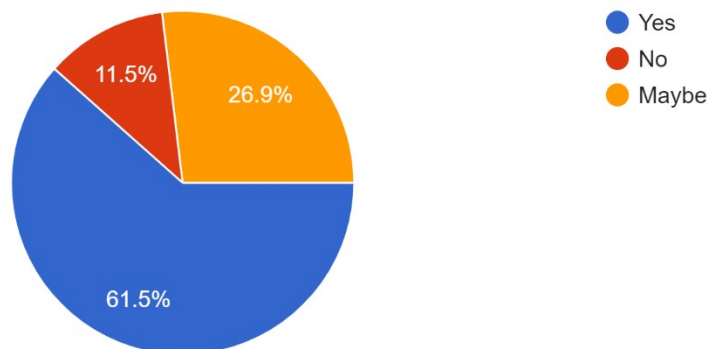
52 responses



The above graph represents the opinion of students, on what the status privacy on the internet is. Do people trust the security provided by the internet or not. 15.4% says very poor, 15.4% says poor, 28.8% has a neutral stand on it, 19.2% says good and 21.2% says very good. It can be concluded that the majority of the respondents are satisfied from the privacy that the internet is providing.

Do you think it is feasible to implement teaching through AR and VR

52 responses



The above chart represents the opinion the respondents on it is feasible to implement teaching through AR and VR. 61.5% of the respondents voted Yes, 26.9% voted Maybe, and 11.5% of the respondents voted No. It can be concluded that the majority of the respondents feel that it is feasible to implement teaching through AR and VR.

Discussion on the Results

After careful examination of the pie-charts and bar graphs the research team has come to a unanimous conclusion that Web3.0 plays a very critical role from a student's perspective. It is the opinion of majority of the student that learning a language like English through Web3.0 can be effective. Most of the students believe that the future is Web 3.0 due to its enhanced and advanced technology. Majority of the students feel that teaching a language is possible through AR and VR and they also believe that teaching and learning through AI and VR will be effective. Many students feel that learning through AR and VR is easy as compared to the traditional teaching method as time will be saved if we are learning through AR and VR as it reduces travelling time and students feel that there are many more factors which makes it easy than the traditional method. Many students feel that in the future , teaching will be done through Augmented reality (AR) and Virtual reality (VR). Most of the respondents feel that AR and VR will be expensive at the beginning but the cost will surely reduce as the technology develops.

Conclusion

In this conceptual paper, it was explained how augmented reality technology could help the educational field, particularly with the teaching of the English language. Since Augmented Reality technology is still in its infancy, little research has been done on how it may affect language learning. Despite all the drawbacks listed above, augmented reality has other advantages, particularly when used to teach reading. The researcher is of the opinion that these difficulties shouldn't prevent the use of augmented reality in the instruction of English reading. This is because manufacturers and businesses will eventually find solutions to issues with hardware components like glitches and bugs. With the expected quick improvement and development of technology, augmented reality will likely improve in the future, leading to a more widespread distribution in terms of its application, particularly in the sector of education. Therefore, if we want to fully benefit from Augmented Reality's ability to improve our education quality, particularly in terms of English reading, investing in it and doing research on it is crucial.

References

FIRAT, E.A. and Firat, S., 2020. Web 3.0 in learning environments: A systematic review. *Turkish Online Journal of Distance Education*, 22(1), pp.148-169.

Rudman, R., 2015. Web 3.0: governance, risks and safeguards. *Journal of Applied Business Research (JABR)*, 31(3), pp.1037-1056.

Flavián, C., Ibáñez-Sánchez, S. and Orús, C., 2019. The impact of virtual, augmented and mixed reality technologies on the customer experience. *Journal of business research*, 100, pp.547-560.

Cipresso, P., Giglioli, I.A.C., Raya, M.A. and Riva, G., 2018. The past, present, and future of virtual and augmented reality research: a network and cluster analysis of the literature. *Frontiers in psychology*, p.2086.

Çankaya, S., 2019. Use of VR headsets in education: A systematic review study. *Journal of Educational Technology and Online Learning*, 2(1), pp.74-88.

Boonbrahm, S., Kaewrat, C. and Boonbrahm, P., 2015, August. Using augmented reality technology in assisting english learning for primary school students. In *international conference on learning and collaboration technologies* (pp. 24-32). Springer, Cham.

Nugraha, I., Suminar, A.R., Octaviana, D.W., Hidayat, M.T. and Ismail, A., 2019, December. The application of augmented reality in learning English phonetics. In *Journal of Physics: Conference Series* (Vol. 1402, No. 7, p. 077024). IOP Publishing.

Alaqsam, A., Selamat, A., Alias, R.A., Zakaria, N.H., Puteh, F., Cheng, L.K. and Ahmad, M.N., 2018. Using Augmented Virtual Reality to Improve English Language Learning. In *New Trends in Intelligent Software Methodologies, Tools and Techniques* (pp. 759-770). IOS Press.

Cadeñanes Garnica, J.J. and Arrieta, M.A.G., 2014. Augmented reality sign language teaching model for deaf children. In *Distributed Computing and Artificial Intelligence, 11th International Conference* (pp. 351-358). Springer, Cham.

Dzardanova, E., Kasapakis, V., Gavalas, D. and Sylaiou, S., 2022. Virtual reality as a communication medium: a comparative study of forced compliance in virtual reality versus physical world. *Virtual Reality*, 26(2), pp.737-757.

Jamrus, M.H.M. and Razali, A.B., 2019. Augmented reality in teaching and learning English reading: realities, possibilities, and limitations. *International Journal of Academic Research in Progressive Education and Development*, 8(4), pp.724-737.

Ardiny, H. and Khanmirza, E., 2018, October. The role of AR and VR technologies in education developments: opportunities and challenges. In *2018 6th RSI International Conference on Robotics and Mechatronics (IcRoM)* (pp. 482-487). IEEE.

Karacan, C.G. and Akoglu, K., 2021. Educational augmented reality technology for language learning and teaching: A comprehensive review. *Shanlax International Journal of Education*, 9(2), pp.68-79.

Yildiz, E.P., 2021. Augmented reality research and applications in education. In *Augmented Reality and Its Application*. IntechOpen.

Jantjies, M., Moodley, T. and Maart, R., 2018, December. Experiential learning through virtual and augmented reality in higher education. In *Proceedings of the 2018 international conference on education technology management* (pp. 42-45).

Drajat, A.R., 2019. APPLYING VIRTUAL REALITY IN IMPROVING STUDENT'S ENGLISH. *PROCEEDING IAIN Batusangkar*, 3(1), pp.37-40.

Li, X., Xie, Y. and Liu, T., 2020, May. Research on oral English teaching system based on VR in the background of ai. In *Journal of Physics: Conference Series* (Vol. 1550, No. 2, p. 022031). IOP Publishing.

Yang, Z., 2022. Application and Exploration of VR and AI Technology in College English Teaching. *Advances in Multimedia*, 2022.

Xie, Y., Liu, Y., Zhang, F. and Zhou, P., 2021. Virtual Reality-Integrated Immersion-Based Teaching to English Language Learning Outcome.

Mukhallafi, T.R.A., 2020. Using artificial intelligence for developing English language teaching/learning: an analytical study from university students' perspective. *International Journal of English Linguistics*, 10(6), pp.40-53.

Kim, N.Y., Cha, Y. and Kim, H.S., 2019. Future English learning: Chatbots and artificial intelligence. *Multimedia-Assisted Language Learning*, 22(3), pp.32-53.

Jia, J. and Ruan, M., 2008, June. Use chatbot csiec to facilitate the individual learning in english instruction: A case study. In *International conference on intelligent tutoring systems* (pp. 706-708). Springer, Berlin, Heidelberg.

Jia, J., 2009. CSIEC: A computer assisted English learning chatbot based on textual knowledge and reasoning. *Knowledge-Based Systems*, 22(4), pp.249-255.

Coniam, D., 2008. An evaluation of chatbots as software aids to learning English as a second language. *The Eurocall Review*, 13, pp.2-14.

Sarosa, M., Kusumawardani, M., Suyono, A. and Wijaya, M.H., 2020. Developing a social media-based Chatbot for English learning. In *IOP Conference Series: Materials Science and Engineering* (Vol. 732, No. 1, p. 012074). IOP Publishing.