

# Linguistic Impact of Augmented Reality (AR) on English Language Use

Imran Nazeer<sup>1</sup>, Saima Jamshaid<sup>2</sup> and Nida Mushtaq Khan<sup>3</sup>

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## Abstract

*Augmented Reality (AR) technology has begun to significantly influence human interaction with language, particularly in English language use. Hence, this research examined the influence of Augmented Reality (AR) on communication patterns, the emergence of specialized AR-related language, and its impact on English language norms. For this purpose, 10 Students from the MA TEFL workshop at Allama Iqbal Open University, Islamabad, were selected to conduct detailed interviews. Interview data and its content were analyzed linguistically. These students were also teachers, so the data were used both ways. Through linguistic analysis, it was found that Augmented Reality (AR) significantly influences English language communication patterns by notable shifts in vocabulary, syntax, and discourse structures. Integrating AR-specific terms into everyday language among MA TEFL students signifies a transformative impact on linguistic norms, reflecting a deeper entwinement of language and technology. The study's findings recommended that language educators and curriculum developers should actively integrate AR technology and its associated linguistic elements into English language teaching and learning frameworks.*

**Keywords:** Linguistic Impact, Augmented Reality, Language Use, English Language, Linguistic Analysis, Content Analysis.

## Introduction

Rapid scientific and technological advancements have transformed how humans interact with technology in the twenty-first century. AR, Virtual Reality (VR), and mixed-reality technologies will rise significantly in the next years. AR technology, a quickly developing digital interface, has immensely impacted our engagement with language, specifically in English language use. AR enhances reality by imposing digital content on natural environments that are changing communication, language learning, and the broader linguistic landscape through its immersive experience (Billinghurst et al., 2015). The combination of technology and language has also led to the examination of the linguistic implications of AR, particularly considering that English is a global lingua franca (Crystal, 2003).

The introduction of AR in language education has proved to be very promising. Research shows that AR enables language learning through contextually rich experiences, thus improving vocabulary acquisition, pronunciation, and grammar skills (Marrahi & Belda, 2022). AR facilitates realistic scenario simulations and plays a crucial role in learning ESL (English as a Second Language) by providing tutors with an improved learning environment that is more interactive and engaging (Wu, 2021). In terms of language acquisition, this immersive nature of AR is crucial because it enables learners to interact with language in different realistic

<sup>1</sup>Admin Staff, University of Gujrat, Gujrat, Pakistan. Corresponding Author Email: [imranpoems@gmail.com](mailto:imranpoems@gmail.com)

<sup>2</sup>Lecturer, Department of English, University of Gujrat, Gujrat, Pakistan. Email: [saima.jamshaid@uog.edu.pk](mailto:saima.jamshaid@uog.edu.pk)

<sup>3</sup>Instructional Designer, Department of Learning Sciences, The University of Oklahoma, Norman, Oklahoma. Email: [nk9200252@gmail.com](mailto:nk9200252@gmail.com)



environments, one of the most critical aspects of effective language learning (Schmalstieg & Höllerer, 2016).

The influence of AR on everyday language use is also substantial for educational purposes. Through smartphones and AR glasses, AR technology has become a trend in our daily lives that impacts society by shifting how individuals interact to share information (Kumar et al., 2020). For marketing purposes, AR affects the language of marketing and customer engagement by conceiving more dynamic, interactive content (Nazeer et al., 2023). The influence of AR is also felt in social communication; it is set to express its hand in both-way interaction. AR filters and applications in social media have redefined visual communication. The new language has also created new linguistic expressions and styles, including the users' picking up new styles and terminologies (Swirsky et al., 2021). This is apparent, especially in the younger generations, who are consumers of AR-enhanced social media and are changing language patterns and vernaculars (Mittmann et al., 2023).

The benefits and results of augmented reality (AR) use for English speaking are visible, yet its disadvantages should also be addressed. The digital divide extends language education inequalities by unequal access to AR technology for all learners (Van De Werfhorst et al., 2022). Moreover, language heavily influenced by AR and digital media is adaptive and evitable, thereby creating language homogeneity and question marks on preserving linguistic diversity (Thurlow, 2018). The linguistic factors of English language AR consist of many domains, including education, interaction, and broadly sociolinguistic considerations. Nevertheless, the area is projected to increase because AR technology is pervasive, a topic of research and analysis concerned with it (Nazeer et al., 2024).

### **Research Statement**

This study examines the influence(s) of Augmented Reality (AR) on the English language usage. This technology's role has become increasingly significant in various sectors, such as education, as examining how it influences linguistic interaction becomes necessary. The research examines the problems of the appearance of AR speech and the implementation of AR language into native speech. It also examines possible implications for English norms. The research aims to discover how AR impacts language learning resources and which forms of language teaching methods it entails. The problem statement accentuates the need to study the linguistic effect of AR in teaching and language communication, which could enhance efficiency in an advanced technological society.

### **Research Objectives**

This research was conducted to achieve the following research objectives:

1. To assess the influence of Augmented Reality (AR) on English language communication patterns.
2. To examine the emergence of specialized AR-related language and its impact on English language norms.

### **Significance of the Study**

The importance of this study lies in its contribution to both academic and practical spheres of English language communication patterns and language education influenced by the implementation of AR. The described linguistic shifts when it comes to vocabulary, syntax, and discourse structures, in turn, indicate the dynamic character of language employed in connection to the AR technology. Identifying and comprehending such alterations is crucial for educators, curriculum developers, and language specialists to alter teaching methods so linguistic instruction is congruent with the current technological environment. The research also adds to the general discussion of language and technology, highlighting the importance of

further research and the introduction of augmented technologies to linguistics for favorable communication skills while using modern technology.

## Literature Review

The emergence of digital authoring tools related to Augmented Reality (AR) has made integrating this cutting-edge technology into education easier. As a result, "different publications have come out to light about the affordances and limitations of integrating technology AR" in English literature (Khan et al., 2024). The literature on the linguistic impact of Augmented Reality (AR) on English language use reveals a dynamic and evolving landscape shaped by technological advancements and societal changes. "AR technology has been adopted in the Educational System, and, more precisely, it has been integrated into the teaching of English" (Rafique et al., 2024). Sydorenko et al. (2021) early works on AR laid the foundation by introducing the concept and exploring its potential applications. Since that time, the researchers have focused on numerous dimensions of AR-related impacts on linguistics, education, and communication. Kazim et al. (2023) remark that it "can be applied in different ways and contexts, in language learning and teaching in general".

Majid and Salam (2021) have demonstrated that in language education, AR has positive effects on language learning. The contextualized learning process through AR enables learners to learn vocabulary more quickly, obtain more accurate pronunciation, and improve their understanding of grammar. Nazeer and Syed (2023) conclude that "there is an increasing demand for research related to AR usage in language learning. Although the use of AR in language learning is still new, the usage has increased from 2016 onwards".

Apart from the academic field, the influence of AR on the everyday use of language is also explored in different contexts. Hoorain et al. (2023) investigated AR in advertising, exposing how it changed marketing language and customer engagement. Parmaxi and Demetriou (2020) state, "The strategies employed in an AR environment are different from those uncaptured during the use of traditional media". With the development of AR technology in social media, Rauschnabel et al. (2017) evaluated its influence on online communication. Wu et al. (2013) also pointed out the role of AR in ESL environments. The facilitation of AR in reproducing real-life linguistic environments is in tandem with contextual learning principles, leading to improved language acquisition (Nazeer et al., 2023). It not only revolutionized visual communication but also transformed how we communicate through new linguistic expressions and communicative styles in younger groups. "AR applications can be utilized in language teaching and learning contexts" (Cai et al., 2022).

Nevertheless, the literature identifies challenges associated with the widespread use of AR technology. The digital divide in AR technologies investigated by Yasmeen et al. (2022) should be understood as the inequality of access to AR tools and their possible aggravation of educational disparities. Also, rapid language change caused by AR and digital media has created worries over linguistic diversity and risks of language homogenization (Dalim et al., 2020). Communication practices transform thanks to AR. Consider the bigger picture sociolinguistic ramifications of AR in terms of its effect. "AR can situate students in real-life situations and provide ample opportunities for real-life communication and language usage" (Khan, 2023). Shaumiwaty et al. (2022) have investigated the societal impact of AR-induced language changes, addressing the problem of how these changes may influence linguistic norms and cultural expression (Baron, 2018).

AR can be successfully incorporated into a language class through theories such as constructivism or situational language learning. The reason why learning is affected is because it happens within a specific context. The learning process is influenced by the interactions between people, places, things, processes, and cultures that are present within and related to that context (Dunleavy & Dede, 2014).

The body of literature exploring the linguistic impact of AR on English language use becomes more and more extensive. Thus, this research area is deemed multidimensional, and further in-depth research and analysis are needed. Integrating AR into different aspects of life fundamentally impacts language learning, communication patterns, and societal structures, thus necessitating a detailed understanding of the changing dynamics between AR technology and language use (Nazeer et al., 2024).

### Research Methodology

The participants for the study about the linguistic effect of AR recruitment were taken during an MA TEFL workshop. This workshop was held at Allama Iqbal Open University, located in Islamabad, Pakistan, and students from many different cities in Pakistan took part in it. Among the attendants, ten students were thoroughly chosen for the study. These students also served as teachers in different educational institutions run by the government throughout the cities of Pakistan. Hence, these participants presented insightful data to fulfil research objectives. Interviews with the participants were carried out to get enough information and their opinions about the place of AR in linguistics. The study was conducted through interviews and linguistic analysis, which effectively addressed the study's questions.

The present research was designed to study how augmented reality (AR) technology interferes with English language communication processes. It used a comprehensive content analysis of AR interactions in different contexts and employed qualitative interviews as a resource. The research examined language usage changes, i.e., vocabulary, syntax, and discourse structures, and how language develops in the presence of augmented reality technology. An exploratory method was used to see how particular AR languages developed and how this influenced the English language standards. This involved a qualitative analysis of AR-related materials and an examination of language-learning tools. The objective was to identify the linguistic trends, cultural influences, and the terminalization of AR, allowing for assessing AR's impact on English language development.

### Results and Analysis

Qualitative data thus was obtained from students through in-depth interviews. These students also served as English teachers in various government schools across Pakistan. These interviews addressed several angles of the effect of AR on English language communication. They put forth a new way of looking at the linguistic undertones of AR technology. The goal was to highlight the differences in the language communication dynamics that manifest in English language use starting from the early stages of AR use, i.e. vocabulary changes, syntax changes, changes in discourse structures, and others.

Further investigation is being conducted into the selection of words and the impact of AR technology. Further investigation is being conducted into the selection of words and the impact of AR technology. This type of deep analysis seeks to highlight linguistic patterns and cultural factors, revealing the emergence and interaction of AR-specific terminology in the greater context of the English language.

### In-Depth Interviews

The selected students were gathered in a room, and they were interviewed one by one. The detailed answers of most of the students are given below:

**Question 1:** How often do you use AR applications daily, and in what contexts?

Most of the participants employed in the study declared that they often use AR applications as a part of their routine activities, and their usage behaviors, with nothing to the contrary, are

influenced by varying contexts. Several students reported interacting with augmented reality technology multiple times per week, mainly for educational purposes such as learning and teaching. Some students, however, readily pointed out that they use AR applications daily, including navigation, shopping, and primarily gaming. Such frequent use in different contexts hints at the growing embeddedness of AR technology in the everyday lives of these people, providing a blend of practical utility and interactive experiences. The trend underlying these answers is that AR is more than just sporadic or novelty; it is a trend that is steadily more ingrained in participants' everyday life activities, hence having a vast influence on the personal and work aspects of their lives.

**Question 2:** Have you noticed any language or communication style changes when engaging with AR technology?

Most students admitted that their language application and speaking styles have changed after interaction with AR technology. A common theme among them was the introduction of more technical AR terms into their everyday speech. Many students noted that communication had become more transparent and direct due to AR apps' interactive and often instruction-based nature. Moreover, some students pointed out a shift toward more descriptive and visual language concepts that mostly happen when describing or explaining AR concepts or as a tool to guide people through AR experiences. This change in the communication style reflects the adaptation to the interactive and immersive qualities of AR, hinting at the fact that language not only introduces new words but also imperceptibly influences the English style in which individuals communicate.

**Question 3:** Can you give examples of new vocabulary or phrases that have become part of your language due to AR usage?

Most students answered the questions in which new vocabulary or phrases were adopted due to AR usage by giving a set of vocabulary that now became integrated into their language. Typical cases are demonstrated given technical terms like 'augmented reality,' 'virtual overlay,' 'real-time integration,' and 'interactive simulation.' Several students used phrases such as 'augmenting the environment,' 'digital layering,' and 'interactive 3D models' in their essays, reflecting the immersive and interactive nature of AR. Terms such as 'spatial computing,' 'haptic feedback,' and 'augmented interface' were also identified, suggesting that the technology was more sophisticatedly understood. These responses reflect that AR technology is not only influencing the vocabulary of their educator profession but also expanding their everyday language by adopting earlier terms considered highly technical and industry-specific.

**Question 4:** How has AR affected your syntax or the structure of your sentences in English?

The students' responses concerning using augmented reality in their English sentence syntax or structure showed apparent changes. One major group of students pointed out that their sentences became more advanced, containing AR-connected words and mixing technical expressions with conversations and everyday communication. There has been a noticeable development in augmented reality vocabulary usage in sentence structure, leading to AR language sophistication reflecting their usage of AR technology. Moreover, some students indicated that they began to apply more imperative sentences, mainly when assisting others with AR experiences, thus showing a practical effect on their syntax. Overall, the answers indicate that AR not only leads to introducing new words but also influences the architectural and intricacy qualities of language used by MA TEFL students.

**Question 5:** How has AR influenced how to construct narratives or tell stories in English?

Students in the interview revealed that storytelling became more dynamic and visual after interaction with AR. AR has changed the traditional narrative style. Some students noted that they now include scenarios that freely combine virtual and natural elements into their stories, increasing the storytelling process's engagement level. Also, the students had a common ground: AR added more dimensions to narratives to make them more interactive. They described thinking in layers, foregrounding the natural world and integrating AR elements, contributing to a richer and more immersive storytelling experience. Thus, AR has changed the content of their narratives and how they narrate stories in English, including a more active and visual presentation.

**Question 6:** Have you observed any changes in discourse structures, like turn-taking or topic management, in AR-mediated communication?

As for the changes in AR-mediated communication discourse structures, the students' responses brought about significant observations. The main observation was a more collaborative nature in conversations within AR settings. Most of the students observed that the turn-taking in the AR content-related interactions became more fluent and smoother. Moreover, they highlighted the rapid shifting of topics from reality to virtual components, necessitating higher levels of management while discussing. This implies that AR brings into communication a dynamic element, influencing how participants handle topics and engage in dialogue within the augmented setting. Thus, the overall opinions of MA TEFL students favor a discourse-type shift focused on collaboration and flexibility in the AR-mediated communication setting.

**Question 7:** Does AR significantly impact how English is taught or learned? How?

All students agreed that AR profoundly influences how English is taught and learned. They delved into how AR revolutionizes and immerses the teaching of English. Students noted that AR technology enables the visualization of complex ideas, which helps teach and master abstract language elements like grammar and vocabulary. The AR also focused on the idea that AR can make learning more hands-on, encouraging a greater connection and recall of the material. Students also underscored AR possibilities regarding covering different learning styles and greatly supporting kinesthetic learners since they benefited greatly from the interactive and richly visual AR environment. The central tendency was that AR is a creative device and an active supporter of rejuvenating classical approaches to EFL instruction.

## Content Analysis

Through AR-led discourse analysis, the language implications linked to AR's design features on language practice in seven questions were uncovered. The significant finding was the learners' acquisition of AR-specific phrases. Terms such as 'augmented reality,' 'virtual overlay,' and 'real-time integration' were omnipresent and confirmed a large-scale development of technical terms that underwent regular AR application exploitation. Therefore, AR coins words and forms a heavily tangled lexicon with everyday speech.

Also, the subject analysis revealed significant syntax and sentence composition changes due to AR. Most of the students increased the complexity of their syntax, combining technical terminology with conventional language. It is symptomatic of a subtle alteration of the language used by the participants, probably triggered by a need to explicate aspects of the AR phenomenon more comprehensively. How imperative sentences— the predominant syntax in AR experience direction— are another part of AR's development of syntax, thus illustrating the functionality and didactic nature of the new grammar dictated by AR, is one more example.

The stories of the students, as depicted in their accounts and storytelling approaches, indicate the impact of AR in tale-telling in English. It is impossible to ignore the change in storytelling methods, which is evident with the amalgamation of virtual and real-world elements and the changing strategy of storytelling, which is also more interactive and dynamic. This corresponds to the immersive nature of AR that highlights an exit from everyday linear stories and moves towards more visually gripping narrative techniques.

Regarding discourse structures, the content analysis illuminated the collaborative nature of AR-mediated communication. Cooperation of the conversation and the logical management of the topics from the AR real and virtual parts show an active and cooperative communicative environment. Such a discovery implies that AR can not only rearrange individual communicative norms but patterned interactivity as well.

The bigger picture is that the students see that AR positively affects the teaching and learning of the English language. The content analysis revealed the role of AR in informing about abstract language concepts, interactivity of learning, and allowing different learning styles in the system. This is consistent with the more far-reaching pedagogical implications of AR; thus, the adoption of AR into school classes could be a way of changing traditional teaching methods and, hence, creating an involved and meaningful teaching of English. For the most part, the content analysis stresses the multisided influence of AR on English language use, from vocabulary development, morphosyntactic variation, discourse change, communicative quality, and educational progress.

### **Linguistic Analysis**

The data analysis of the AR-mediated interactions between the MA TEFL students, which is from the responses they gave to seven questions, revealed interesting patterns and insights into the linguistic effects of AR on English language use. The research adds to the academic discourse on language evolution and technology. The findings provide insights into the language change and the influence of AR technology on language norms. This study suggests that AR enriches ordinary language with new words and is related to extraneous vocabulary in generating a specialized lexicon.

The analysis shows an observable inclusion of AR-classification vocabulary in the speech of MA TEFL students. 'Augmented reality,' 'virtual overlay,' 'real-time integration', and so on were repeatedly found. This linguistic trend is the growth of a lexicon, which indicates that AR not only incurs new terms but also actively develops a set of language conventions in the context of its use.

The linguistic analysis subtly developed language use at the syntax and sentence structure levels. Students were inclined to more advanced sentence patterns, mixing language acquired from interaction with AR with everyday speech practices. Instantiation of imperative sentences, mainly in the instructional domain, pointed to the role of AR in the syntactic side of language. Thus, it accentuated a functional and structural adaptation.

Moreover, the content investigation by way of narratives and storytelling devices highlighted a specific influence on the English language norms by AR. From the descriptive accounts of the students, a dynamic and interactive storytelling narrative that involves AR elements was observed. Through individual language use, this presented not only variation but also conveyed a shift in the English language narrative norms that showed a departure from traditional linear stories to the more involving visual narration style.

In examining discourse structures, interactional linguistics showed a collaborative and adaptive identity of AR-mediated communication. The seamless-switching and smooth transitions between the real and virtual that formed part of the communicative dynamic displayed an evolving meeting. This result indicates that the spread of specialized AR-related language

increased in single language use and the interpersonal communicative style towards the collaborative discourse structure.

Linguistic analysis of AR content reveals the emergence of a specific language resulting from AR technology. The results demonstrated a transforming impact on lexis, syntax, narrative building, and discourse positions for English usage. The presented work further contributes to understanding the linguistic changes caused by AR since it shows how AR modifies language norms and rules.

### **Language Learning Resources**

Language resource evaluation, which forms the second research activity focused on the linguistic effect of augmented reality (AR) on the English language, was vital in understanding how the AR industry language influences English. This study takes a qualitative approach to carry out the analysis and provides examples of linguistic patterns, cultural elements, and terminology associated with the learning materials, augmented reality (AR).

The study of language learning resources reveals the existence of AR content in the educational material created. The textbooks, modules, and interactive sites that contain terms and AR lexicon were defined. This incorporation implies a deliberate endeavor of language learning tools to build the grammar of AR technology among learners. Analyses also uncovered a pattern of producing items that satisfy AR's properties of interactivity and immersiveness, which entailed activities and directions to evoke AR-oriented interaction.

Culture is also shown through language learning resources, focusing on contextual modification of AR language. Usually, the resources included scenarios and dialogues that wove in cultural elements using AR-specific terms in culturally framed contexts. Such a diabolical attitude shows an awareness of the cultural dimension of the development of AR-based linguistic norms that support the premise of the role of context in language usage.

Specialized terminology in Arabia addresses educational necessities by reassessing the learning facilities. AR content had a linked glossary and definitions, enabling the subjects to understand AR technical terminology better. Capitalizing AR language in educational resources entails unlocking linguistic skills and familiarizing oneself with the language necessary for effective AR communication.

Cataloguing language learning resources highlighted that AR-associated language had been systematically integrated into instructional materials. The use of AR-specific lexical items, the consideration of cultural factors, factors, and the formation of terminology represent the key characteristics of the language influence of AR on English language norms. This analysis demonstrates the continuous interplay of language learning resources to the changing language conventions shaped by integrating AR technology in educational environments.

### **Findings**

Empirical inquiry into the AR effect on English communication patterns gathered from MA TEFL students' responses revealed crucial points. The result demonstrates that AR technology substantially influences the lexicon and the syntactical and discourse frameworks in English language usage. The students extensively used AR-specific terminology in everyday speech, exposing them to new vocabulary introduction and immersion. Syntactical changes were observed as sentences became complex and represented the multimodal character of AR. Syntactic changes were seen in the manner imperative sentences were employed and in the intermingling of technical terminology with everyday language. Moreover, the research pinpointed the tendency toward the shift in discourse patterns, with the increase in collaborative and adaptive communication styles in AR-based communication. Modality change in the



communication context demonstrates the high impact of AR in the formation of new linguistic practices and standards.

Evaluation of language learning materials about the growth of AR-specific language and its effect on English language standards revealed significant results. Increasingly, AR-specific terminology is included in language learning materials, showing a rise in the importance of that technology for language education. Integration shows a shift in the educational environment where language teaching is now blended with tech innovations that lead to more engaged and holistic learning. The reviewed resources also suggested a cultural framework's relevance in using AR-related language, confirming an effort to situate AR technology into a contextually appropriate paradigm. Moreover, the appearance of the AR educational materials lexicon indicates the switch to guiding trainees with the linguistic means for application in the AR operational scenarios. These findings clearly illustrate the no-return nature of AR in language learning, which determines how English is learned and acquired in an emerging technology context.

## **Discussion**

The results of the investigation can be summarized as AR's role in shaping the English lexicon and syntax. The introduction of AR-specific terminology into the students' MA TEFL students' regular language pattern is not a trend but a sign of more profound linguistic development. The blend-in of technical terms into ordinary slang represents how technological progress influences language and reaches professional and academic domains and everyday language with a fair likelihood. In this respect, the changes witnessed in the syntax, involving more complicated structures and the introduction of imperative sentences, point to AR's role in creating a more dynamic and interactive type of communication. These linguistic changes could reflect a much bigger societal transition towards a more tech-centered communal sphere, encompassing language gradually embedded in digital and augmented environments.

The study results also give insight into the modifications in discourse structures and conversation styles brought about by AR technology. The manifestation of more collaborative and adaptive communication in AR-mediated interactions accounts for a change in interpersonal dynamics. Such implications may affect areas such as education and professional communication. In an educational context, primarily in language learning, this shift can result in more challenging and interactive pedagogies that are manifested through the changes in language learning tools. The combination of natural and virtual elements in AR enables flexible communication modes, enhancing cognitive and linguistic skills such as quick thinking and language selection.

Ultimately, the study emphasizes that AR integration in language learning resources brings a substantial pedagogical shift. Attempting to be proactive is the way of inserting AR particular terminologies and contexts in educational resources as a sign of acceptance of the changing needs of language learners in today's technology-filled world. The movement towards symbiotic language learning, including technology, indicates that such trends lead to a future where language learning is engaged with technological advancements to create more effective and immersive learning experiences. Still, it brings up issues of the digital divide and accessibility, highlighting that equitable access to such technologies should be given to every learner. AR is increasingly becoming an integral part of all spheres of life; thus, its effect on language and communication strengthens. This underlines the need to continue with research to understand and have the needed adaptations.

## Conclusion

The study shows a clear pattern of influence of the Augmented Reality (AR) technology on English language communication, which is quite significant in its results. AR technology greatly influences how language is used concerning vocabulary, syntax, and discourse. The introduction of AR-related vocabulary in MA TEFL students' informal language shows an evident lexical change predominantly due to technological development. Similarly, syntax modification featuring more elaborate and interactive sentence structures shows that AR is not just an add-on technological improvement but a transforming factor in language expression. The linguistic shifts that are already happening suggest a future where language and technology are more and more tangled, changing the traditional patterns of communication. The study, therefore, highlights the necessity for foreign language training and communication skills to be in tune with the changing environment, thus enabling language proficiency to include the acquisition of skills to traverse and express in a technologically heavy context.

In the process of the rise of AR-oriented language and its influence on English language norms, the study determines that AR dramatically influences how English is taught and learned. Integrating AR-specific vocabulary into language learning resources marks a paradigm shift in foreign language education. This transition concerns adding new words, but it is more than that; it reflects a more profound, structural transformation in language teaching that considers the virtual and mixed reality world. Also, the study points out the role of the cultural context in the language of AR, showing that AR exceeds merely linguistic modification and affects cultural alterations. Language learning is not standing still because of technological progress; the role of AR in the pattern of both content and methodology of language education is headed to the top. Hence, teachers and linguists must be attentive to these changes, maintaining that language education remains relevant and effective in the AR-enabled future.

The study revealed that AR impacts English verbal interaction through terminology, grammar, and structure. The emergence of AR-specific terms in daily discourse among MA TEFL students indicates a paradigmatic shift in terms of linguistic standards, symbolizing a more profound interrelation between language and technology. Furthermore, reviewing language learning resources disclosed a strategic incorporation of AR-related language, pointing to a shift in language education paradigms. This study points out the changing dynamics of language use when associated with AR technologies, which necessitates educationalists and language experts adjusting to the changing linguistic cosmos to promote effective language instruction in a technologically saturated instructional climate.

## Recommendations

The findings of this study have culminated in the suggestion that language teachers and curriculum developers should effectively employ the inclusion of AR technology and the linguistic factors that surround it in the English language teaching and learning framework. Recent developments require new teaching aids, including relevant terms carrying the concepts of augmented reality and specific examples of its application, consequently providing the students with a backdrop that enables them to respond to the changes in the linguistic environment. Moreover, AR technology training should be included in professional development programs for language teachers since this enables them to acquire pedagogical skills in this area. Also, more studies are recommended to trace the influence of AR on the ways of using language, particularly in diverse linguistic and cultural areas that might have different regulations and needs, so that language education is comprehensive and efficient. Within these recommendations, learners and educators shall have the appropriate tools and knowledge to pass through and be part of the action-reaction interaction between language and emerging technologies.

### Implications

The implications of this study are far-reaching, calling for a proactive approach to how Augmented Reality (AR) can be incorporated into language instruction. The observed changes in vocabulary, syntax, and discourse patterns highlight the transformational power of AR for English language use, reflecting a change in linguistic standards. Language educators should acknowledge the significance of introducing AR-specific language features into the curriculum, and consequently, students are ready to participate in an AR learning environment. Furthermore, the research points to the cultural awareness demanded in using AR-related terminology, encouraging teachers to consider cultural differences in the context of language learning. This extends beyond the classroom, where educators can get acquainted with the current external training that develops the required skills and competencies to thrive in the evolving landscape of language education guided by augmented technologies. Generally, AR in language education is vital for developing language proficiency, coinciding with modern communication patterns and technological developments.

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