The Role of Virtual Reality and Augmented Reality in Enhancing Field Training for English Language Teachers

By:

Mrs. Huda Al-Hailum Al-Azemi
Collage of Basic Education (PAAET) -State of Kuwait

The Role of Virtual Reality and Augmented Reality in Enhancing Field Training for English Language Teachers

Mrs. Huda Al-Hailum Al-Azemi*

Abstract:

research explores the role that Virtual Reality and Augmented Reality may play in enhancing the effectiveness of field training among English language teachers in Kuwait. This was based on an overview using descriptive-analytical methodology for estimating current problems arising from field teacher training with the potential benefits accruing from using VR/AR to enhance this component, while incorporating perceptions and acceptance of such training devices held by teacher trainees. The population of the study consisted of all English language teachers in public schools in Kuwait. The size of the population was N = 1,898. A stratified random sample of 320 teachers was selected from the five educational districts of Al Asima, Hawalli, Al Farwaniya, Al Ahmadi, and Al Jahra. The data was collected through the use of a questionnaire that was divided into two parts: one for demographic information and another consisting of 30 items distributed across three main axes: traditional training challenges, potential VR/AR implementation, and teacher perceptions. This research, therefore, will go some way toward helping the realization of the goals set forth in Kuwait Vision 2035 in relation to the integration of immersive technologies into the educational training systems.

Keywords: Virtual Reality, Augmented Reality, Teacher Training, English Language Teaching, Educational Technology, Digital Transformation, Kuwait Education.

* **Mrs. Huda Al-Hailum Al-Azemi:** Collage of Basic Education (PAAET) - State of Kuwait**.**

Introduction

It is an integral part of training English language teachers; it equips trainees with practical teaching skills and makes them more confident in the real-classroom environment. However, traditional field training is usually bound by a series of constraints: lack of resources, time pressures, and inadequate exposure to diverse teaching scenarios. This restriction can be resolved by Virtual Reality (VR) and Augmented Reality (AR), which have emerged as potential methods for offering immersive, interactive, and realistic environments for training due to the emerging development in technology. The trainees in teaching are afforded the opportunity to rehearse classroom situations, different teaching methods, and immediate feedback without impacting real students with these technologies.

This field training is important for an English language teacher for a number of reasons: it helps develop teaching skills, the ability to work with people from different cultures, and to put into practice the academic information one has acquired. Field training is one of the most considerable steps towards becoming a teacher because it allows one to put into practice everything learned in school within a real classroom. This hands-on experience is very vital in the achievement of skills for teaching English as a second or foreign language effectively. According to Yücel (2019), the infusion of the multicultural components into the teaching of the English language makes the role of the teacher even more vital as transformational change agents. Teachers have the potential to bring an influence on worldviews and communication skills of their students through training and pedagogical practices.

It further shows, in the case of the University of Benghazi, the evaluation of the English language teaching programs and its implication in bringing about structured training and building up of skills for betterment in the learning environment. This curriculum not only trains instructors in using foreign language materials effectively but also provides them with the management skills needed for creating a positive learning environment (Laurel et al., 2021). In a country where English is taught as a foreign language, such training is very important, as it affects

both the quality of education and the level of involvement among students directly.

Field training is not only composed of pedagogical skills but also covers specific issues that teachers encounter, more so when English is not the native language of the country. For example, Hijazi (2023) claims that in learning a language, special emphasis has to be placed on oral components. He recommended that teacher training in the use of the English language should be conducted in concentration centers for the teachers to become fluent and mastery over the language. This becomes more so in situation where the teachers are teaching in a setting where English is not the mother tongue having to surmount barriers in both the language and the culture in carrying out their service.

There is adequate relevance of pragmatics in preparing teachers. Also, according to Glaser (2018), primary English teachers, who often lack specialized training, should be provided with additional training that enhances their language competence as well as knowledge on how to apply the language in practical life. The training will ensure there is effective communication in the classrooms with diverse learners since the teacher will have to diversify their approaches to meet students' needs.

Moreover, as underlined by Gonçalves (2019), the training of English language teachers also depends very much on contextual elements. He claims that the motivation to become a profession, the level of professionalism, and the infrastructure of schools are factors that remarkably have a big impact on the effectiveness of the teacher training programs. It follows, therefore, that field training needs to be tailored to the specific educational and cultural contexts where teachers operate in order for it to be appropriate and meaningful.

According to Rybina (2023), the concept of succession in teaching emphasizes the need for constant professional development among teachers of the English language. This chapter supports the progressive approach to teacher education that results in raising the general quality of English language teaching through previous knowledge and experience gained. This implies that there should be constant training programs to

update the instructors in the area of pedagogy to ensure good quality teaching.

Hamad (2015) stresses the need for ensuring that qualifications of the teachers match their programs of training while in Sudan, and he also calls for regular updates to ensure instructors are updated on new developments in teaching. This becomes all the more imperative in places where English is taught with a prescribed curriculum, like the SPINE program. Under such programs, instructors are put to have down-to-earth knowledge of content and cultural contexts of English language teaching.

According to Snow et al. (2006), the need for English as a lingua franca worldwide increases the challenges in teacher preparation. Since most of the instructors in English are nonnative speakers, it is rather important that they can have at least high-quality professional education in this area. That requires careful preparation of teachers, which includes not only the language ability but also a set of practices for effective teaching under variable linguistic circumstances.

Furthermore, the integration of technology in English language teaching is increasingly recognized as an indispensable component of teacher training. Fitri (2024) demonstrates that the use of information and communication technology (ICT) could raise teaching efficiency and enhance students' engagement, meaning that teachers need ongoing training in this respect. As technology continues to evolve, so too must training programs for English language instructors if teachers are to be able to use these tools effectively in the classroom.

In the very vital area of training programs within the traditional field of training English language instructors, there exist several barriers to effective training. Problems arise from quite a number of sources, ranging from gaps in methods of teaching to insufficient training programs and changes in the requirements of learning a language in this globalized environment. This synthesis will go into great detail about these issues, using a number of scholarly sources to give an in-depth understanding of the problems being addressed.

One of the major challenges identified in the literature is the gap between the competence levels that instructors of the English language are expected to have and the levels of proficiency they actually possess. As Mukhtiar et al. (2022) put it, many instructors are not trained in the important language skills—listening, speaking, reading, and writing—that ought to accompany language teaching. Moreover, the report highlights that teachers are not usually trained for their work or refresher courses, and therefore this results in a failure in developing themselves. Nguyen and Nguyen (2021) also refer to this lack of continuous training, noting that it is one of the major challenges facing universities in the area of improving the quality of education and training activities. This is in an effort to give pre-service teachers the skills and knowledge they will need to teach English effectively.

The issue of teacher competence is further compounded because instructors must have a strong knowledge of grammar and language skills. Coniam et al. (2017) note that English teachers must possess an in-depth knowledge of the subject content for them to effectively teach the students. The said factor has put greater focus on comprehensive language proficiency tests among teachers. The need for competence becomes all the more imperative within a globalization context in view of a rising demand for teachers of spoken English. As stated by Sawalmeh (2023), teacher training programs must relate to the local context and apply current approaches to teaching and learning to fit diverse learner needs. On the other hand, the fact that there is no uniformity in English language instruction makes it very difficult to reach these objectives.

In addition to the issue of competence, the other major challenge that a teacher faces when trying to incorporate intercultural elements into English language teaching is related to what Yücel (2019) argued as the teachers needing to raise their capacities both in interpretation and in reflection, hence enabling an adequate integration of intercultural training in a manner that furthers communication and boosts students' world outlooks. This new pedagogical approach turns educators into the change makers who can use education to respond to the social problems

of society. However, most of them are not properly trained, as required, in the competent execution of this kind of pedagogical practices.

The move toward online education, increasingly common in English language teaching, makes the traditional field-training difficulties much worse. Luu (2021) states that online education has some advantages but also brings new obstacles that may exert a bad influence on the quality of teaching and learning. Teachers often find the adaptation of their practice to the online environment difficult, as this involves a different set of skills and resources. This change underlines the need for professional development geared specifically at meeting the unique demands of teaching online.

The other important aspect in the readiness of teacher trainees to teach in a classroom relates to how they perceive the quality of their preparation programs. According to research by Nguyen and Nguyen (2021), student perception can be a really big determinant of how effective teacher education programs could be. Pre-service teachers whose perception is that their preparation was inadequate might experience a decrease in self-confidence and self-efficacy in their teaching skills. Shan and Aziz (2022) also portray this feeling in their study, which singles out the lack of English language trainers and inadequate facilities as the major setbacks in rural areas. All these conditions translate into an unpreparedness trap that keeps haunting the English language trainers.

The psychological and social dimensions of learning also play their part in the challenges that are faced under conventional field training. According to Nair (2021), English language teachers often have to negotiate complex emotional dynamics while they work on developing their professional selves. To create a supportive teaching environment, it will be necessary to develop new models of teaching that are cognizant of these dynamics for emotional engagement. Furthermore, the lack of resources and institutional support increases the emotional pressure on the teachers, which is gradually making them disabled to perform their jobs.

The implementation of EMI brings about further demands on English language instructors. McKinley and Rose, 2022 note that the multiple roles played in EMI by English language instruction are likely to cause tremendous problems both for teachers and students in terms of language. The lack of academic and language support classes, coupled with poor communication between subject and language teachers, are the barriers to the success of EMI programs. This calls for a re-evaluation of teacher training programs so that they truly prepare teachers for their role in addressing challenges arising from teaching in EMI settings.

Chen et al. (2021) make a call for the need in teacher preparation to take a more holistic approach and for teacher education to adopt a global English viewpoint. This challenges the traditional views about natives and marks the need for preparing teachers to face the new linguistic environments that they will find in their classrooms. By adopting this approach teacher education programmes will be better placed to equip teachers to meet the needs of students in an increasingly interconnected world.

Based on the above, the many challenges that confront English language teachers being trained under the standard field-based training are complex and emanate from a number of systemic issues. These problems, which include pedagogical gaps, competency issues, the emotional complexities of teaching itself, and the demands that today's educational contexts entail, all do cry out for a genuinely serious attempt at a solution. With the fostering of complete training programs that include continuous professional development, emotional support, and a focus on global English, the domain of English language teaching will likely be more successful and inclusive in years to come.

Research Problem

The application of Virtual and Augmented Reality tools in teacher training for the English language instruction has been really instrumental in overcoming practical training gaps in teacher preparation. With the fast-changing landscape of technology, there is a need for adjustment to new ways by teachers—most especially EFL instructors—while making good use of such immersive technologies as a way forward in improving practices in their methodologies and involving the students. This

synthesis will review the numerous benefits of virtual reality (VR) and augmented reality (AR) tools in teacher training, which have been supported by a range of academic sources.

Similarly, the use of virtual reality and augmented reality in teacher training programs may go a long way in improving teachers' knowledge of how to effectively make use of technology in their teaching. According to various research, educators trained in using Information and Communication Technology can become more effective in using such tools in their practice (Abraham et al., 2022). Similarly, Abraham et al. (2022) found that ICT-supported training is not only good at increasing the capacity of instructors but also responds to current educational contexts and the increasing demands flowing from digital literacy requirements (Ran, 2024). Moreover, research has proven that instructors who are technologically literate show higher levels of confidence and competencies in controlling online and blended learning environments. This is fundamental in today's learning environment (Baroudi & Shaya, 2022).

Moreover, the application of AR and VR technology makes it easier to create immersive learning experiences capable of helping bridge theoretical knowledge with practical application. For example, virtual reality—VR—can create simulated environments that closely resemble real classroom settings. This allows preservice teachers to practice classroom management and instructional practices in a safe environment (Chen, 2022). Evidence has proven that virtual reality training could result in better student outcomes compared to traditional training methods, hence justifying this experiential learning approach (Sholeh et al., 2024). More importantly, the use of AR tools can enhance language learning with dynamic and interesting information that might lead to more motivation and engagement from students (Hung et al., 2023). It would be of great help to learners in understanding and retaining subjects related to languages if they could see and interact with them in real time.

AR and VR have further implications for education beyond engaging the students; they also offer new methods of assessment and improvement for language skills. For example, the study by Nabil on

augmented reality filters in fluency speaking shows that these tools can be easily integrated into language learning because they present learners with a chance to practice speaking in situations much like real life (Nabil, 2024). Consistent with this is the study by Huang et al. (2021), which showed that through creating virtual environments for students that simulate real-life situations, AR and VR technologies may substantially improve language learning ability. These immersive experiences do not simply help students learn a language; they also help teachers learn how to use the technology in teaching them.

Integration of AR and VR in teacher training can also solve problems posed by the COVID-19 epidemic, which underlined the necessity for more effective online teaching strategies. Meirovitz et al. (2022) indicated that most instructors were not trained enough in the use of technology when they had to switch to distant learning. This makes it important for teachers to engage in constant development of their skills in this field. Teachers can gain the competencies they require to confidently work within online teaching environments by incorporation of VR and AR into teacher training programs. This will go a long way in reducing anxiety and increasing their ability to handle virtual classrooms (Baroudi & Shaya, 2022).

On the other hand, instructors' readiness and willingness to adopt the AR and VR technologies would be an essential factor. A survey published by Muryanti in 2023 indicated that a great number of instructors were willing to adopt augmented reality in their teaching activities since they were open to adopting it. A willingness to embrace new technologies is necessary for building a learning environment that encourages creativity and gives instructors the confidence to experiment with diverse teaching approaches. The fact that teachers more accepting of AR are more likely to use it underlines the need for adequate teacher training and support in this area (Muryanti, 2023).

It can be revealed from the literature that AR and VR technology helps to improve English language teaching because it increases students' motivation and engagement. For example, Jamrus and Razali (2019) pointed out that augmented reality is used in order to improve students' motivation and learning outcomes while reading in the English language.

Likewise, research by Chang et al., (2020) has established that AR tools allow learners to respond more quickly and get better performances on average. Each of the results is evidence that teachers well-trained in how to use AR and VR tools appropriately may prepare more engaging and interactive lessons addressing the diverse needs of students.

The integration of virtual reality and augmented reality in the training curricula of English language teachers opens up whole new perspectives of improving field-training practices and overcoming the drawbacks of existing methods. This will be an immersive, dynamic learning environment for teacher preparation. This would help them develop their technological skills and encourage them to try new teaching methods. Education has embraced digital technologies since they are the vogue. In the area of virtual and augmented reality, focus can totally change how training is carried out. That is, in fact, part of the overall goal of this project, which seeks to find out how virtual and augmented reality can be exploited for the betterment of field training of instructors of English as a second language.

Research Objectives

The current research seeks to achieve the following objectives:

RO1. To identify the challenges encountered in traditional field training for English language teachers.

RO2. To analyze the potential of VR and AR technologies in improving the quality of field training for English language teachers.

RO3. To evaluate the perceptions and attitudes of teacher trainees toward integrating VR and AR technologies in their field training experiences.

Research Questions:

RO1. What are the challenges faced by English language teachers during traditional field training?

RO2. How can Virtual Reality (VR) and Augmented Reality (AR) technologies enhance the effectiveness of field training for English language teachers?

RO3. What is the perception of English language teacher trainees regarding the use of VR and AR in their training programs?

Significance of the Study

This work is of special importance because its focus is on using Virtual Reality and Augmented Reality technologies for developing field training of English language teachers in Kuwait, especially when there is a trend towards digitization in all sectors, training, and education, and at a time when there is an accent on integrating new technologies into educational practices according to Kuwait Vision 2035. This will add to modernizing educational institutions by contributing to the analysis of the role of modern technologies in the development of field training programs. The findings will help to establish how VR and AR technologies can be adopted to overcome traditional challenges in practical training. Moreover, such research will fill the research gap in using these technologies for teacher training within the Kuwaiti context. Hence, this is very imperative to policy makers, educational leaders, and practitioners.

1. Theoretical Significance

- Provides a comprehensive theoretical framework concerning the integration of VR and AR technologies in the teacher training curriculum that paves the way toward future studies along this line.
- Deepens the understanding of the relation of these technologies with the field training processes by developing new theoretical models explaining these relations.
- Enriches academic literature related to teacher training with particular research on how modern technologies can raise the learning and training process.
- Provides the theoretical base for challenges and opportunities associated with the implementation of VR and AR in an educational training environment, which helps to develop more effective theoretical approaches to those challenges.
- Opens new horizons in developing theories of training within the framework of the digital revolution by providing new theoretical insights into how these technologies transform traditional practices in training.

2. Practical Significance

- Provides practical insight into how educational institutions can implement VR and AR solutions in-field training programs, helping decision-makers make informed choices about adopting and implementing these technologies.
- Offers practical guidance for overcoming existing challenges in the implementation of these technologies in Kuwait's educational environment, helping institutions develop effective strategies for technology integration.
- Helps the education leaders to understand how VR and AR technologies can be harnessed for the betterment of field training, instrumental in improved performance among teachers.
- Helps in the formulation of policies and guidelines which will facilitate the implementation of these technologies in institutions of teacher preparation, ensuring good governance and controlled implementation.
- Provides frameworks for the measurement and evaluation of successful implementation of the technologies in the field training programs for continued improvement of education and service in the institutions.

Research Methodology

Thus, the research is based on the descriptive-analytical method, which will use a quantitative approach and therefore be appropriate for studying and analyzing the role that Virtual Reality and Augmented Reality can play in improving field training for English language teachers in Kuwait. The chosen approach makes it possible to obtain an adequate amount of details regarding the phenomenon being studied and analyzing the same with the purpose of making relevant conclusions.

Study Population: The study population involves all English language teachers in public schools in Kuwait. The approximate number of teachers of the English language is 1,898 (Ministry of Education Kuwait, 2023). In general, the stratified sampling randomly selects samples with respect to major English language teaching districts in five educational districts belonging to the state of Kuwait namely: Al-Asima; Hawalli,

Al-Farwaniyah, Ahmadi and Jahra. The Study tool achieved response rate from the total number of (320) respondents which approximately represented 16.9% population studied.

Research tool: The researcher used the questionnaire as a research tool and for data analysis in the study of the role that Virtual Reality and Augmented Reality play in improving the field training of teachers of the English language in Kuwait. This is because the target sample size is somewhat large, and the nature of the research is a survey that seeks to monitor the reality of society through collecting and analysing the largest amount of information. The research tool in its final form consisted of two parts:

- **The first part:** deals with the initial data of the research sample individuals, such as:
  1.Gender. 2.Years of teaching experience.
  3.Educational qualification. 4.Educational district.
- **The second part:** deals with the role of Virtual Reality and Augmented Reality in enhancing field training, and consists of "30" paragraphs distributed across three main axes, as follows:
  1. **First Axis:** Traditional Field Training Challenges (10 paragraphs).
  2. **Second Axis:** VR/AR Implementation and Enhancement Potential (10 paragraphs).
  3. **Third Axis:** Teacher Perceptions and Readiness for VR/AR (10 paragraphs).

The researcher asked the research individuals to answer each paragraph by placing a mark (√) in front of one of the following options: (very high, high, medium, low, very low). Table No. (1) specifies the categories of the five-point scale:

Table No. (1): Determining the categories of the five-point scale

Very low	Low	Medium	High	Very high
1 – 1.80	1.81 – 2.60	2.61 – 3.40	3.41 – 4.20	4.21- 5

Validity of the questionnaire

- **Apparent validity of the study tool (validity of the arbitrators):** After completing the preparation of the tool, the questionnaire was presented to the supervisor, and notes and modifications were taken

from him, then it was presented to a number of arbitrators (10) in the universities of Kuwait.

- **Validity of the internal consistency of the study tool:** After confirming the apparent validity of the study tool, the researcher applied it in the field on a survey sample consisting of (30) English language teachers, and on the sample data, the researcher calculated the Pearson correlation coefficient to determine the internal validity of the questionnaire, where the correlation coefficient was calculated between the degree of each paragraph of the questionnaire and the total degree of the axis to which the paragraph belongs, as shown in the following table.

Table No. (2) Pearson correlation coefficients between the degree of each paragraph of the questionnaire and the total degree of the axis

Axis paragraph	Correlation Coefficient	Axis paragraph	Correlation Coefficient
Traditional Field Training Challenges			
1	0.700**	6	0.754**
2	0.785**	7	0.812**
3	0.770**	8	0.798**
4	0.841**	9	0.763**
5	0.799**	10	0.792**
VR/AR Implementation and Enhancement Potential			
1	0.723**	6	0.801**
2	0.665**	7	0.756**
3	0.690**	8	0.789**
4	0.837**	9	0.745**
5	0.685**	10	0.778**
Teacher Perceptions and Readiness for VR/AR			
1	0.723**	6	0.834**
2	0.665**	7	0.788**
3	0.690**	8	0.745**
4	0.837**	9	0.793**
5	0.685**	10	0.812**

** Correlation is significant at the 0.01 level (2-tailed)

The previous table shows that all correlation coefficients between the paragraphs and their respective axes are positive and statistically significant at the level of (0.01), with values ranging between (0.665) and (0.841). This indicates strong internal consistency and construct validity

of the questionnaire items within each axis. The correlation coefficients demonstrate that each item effectively contributes to measuring its intended construct within the respective axis.

Reliability of the questionnaire

The reliability of the questionnaire ensures that responses are approximately consistent when administered to the same individuals at different times. To verify the reliability of the questionnaire scores, the researcher measured the study's reliability using Cronbach's Alpha. Table 3 presents the reliability coefficients for the study's axes as follows:

Table No. (3): Cronbach's Alpha Coefficients for Measuring the Reliability of the questionnaire

Axis	Number of paragraphs	Cronbach's Alpha
Traditional Field Training Challenges	10	0.923
VR/AR Implementation and Enhancement Potential	10	0.918
Teacher Perceptions and Readiness for VR/AR	10	0.926
Overall	**30**	**0.965**

The reliability analysis demonstrates exceptionally high internal consistency across all dimensions of the questionnaire. Cronbach's alpha values range from 0.918 to 0.926 for individual dimensions, with an outstanding overall reliability coefficient of 0.965 for the entire instrument. The Teacher Perceptions and Readiness for VR/AR dimension shows the highest reliability (α=0.926), while all other dimensions maintain excellent reliability above 0.9, far exceeding the acceptable threshold of 0.7. These results indicate that the questionnaire is highly reliable and consistent in measuring the intended constructs.

Results

- Answer to Question One: **What are the challenges faced by English language teachers during traditional field training?**

Table No. (4): Arithmetic Means and Standard Deviations of the challenges faced by English language teachers during traditional field training Ranked in Descending Order by Arithmetic Mean

Paragraph Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Hnj 7 I
3	Traditional field training provides limited opportunities for practicing various teaching scenarios.	4.16	0.73	1	High
4	It is difficult to receive immediate feedback during traditional training sessions.	4.00	0.83	2	High
1	Current training methods lack sufficient opportunities for repeated practice.	3.97	0.81	3	High
5	Managing classroom situations effectively is challenging in traditional training settings.	3.67	0.96	4	High
2	The current training system offers limited exposure to diverse teaching situations.	3.63	0.91	5	High
7	There is limited access to varied teaching resources during training.	3.45	0.88	6	High
6	Time constraints affect the quality of traditional field training.	3.38	0.94	7	Medium
9	Current assessment methods in field training need improvement.	3.35	0.87	8	Medium
8	Traditional training methods do not adequately address individual learning needs.	3.32	0.92	9	Medium
10	Traditional training lacks flexibility in scheduling and implementation.	3.28	0.85	10	Moderate
Overall		**3.62**	**0.67**	**High**	

Table 4: Detailed analysis of challenges faced by English language teachers during traditional field training in Kuwait. From this analysis, several key observations emerge that deserve a detailed discussion. The overall mean of 3.62 with a standard deviation of 0.67 shows a high level of agreement about the existence of major challenges in traditional field training methods. This high score suggests that teachers are bound to face considerable challenges during their regular training programs. A

relatively low standard deviation of 0.67 has also shown consistency in responses and a general consensus among participants about these challenges.

The most striking difficulty found was the limited practice of different teaching scenarios: this scored the highest, with a mean of 4.16 and a standard deviation of 0.73. The very high mean score indicates that teachers strongly perceive themselves to be constrained in the trying and practicing of teaching situations. Its low standard deviation value indicates that it is an agreed-upon fact among teachers concerning the traditional training method.

The second most serious problem, at a mean of 4.00 and standard deviation of 0.83, was related to the difficulty in obtaining immediate feedback. The high mean score of this item reflects strong concerns about the feedback mechanisms in a traditional training setting. With a slightly higher standard deviation, this indicates that while teachers do have fairly varied experiences with feedback processes, overall sentiment about it is generally quite negative.

The third rank was for insufficient chance of repeated practice with a mean of 3.97 and a standard deviation of 0.81. Such a high score has shown that the teachers feel particularly bad about not having enough opportunities to practice what they have learned during the course. In this case, consistency in responses indicates it is a problem throughout the teaching community.

The ability to deal with classroom situations was ranked with mean of 3.67 with a standard deviation of 0.96. While still showing a high level of concern, the higher standard deviation suggests more diversity in the experience of teachers on classroom management challenges during training. The mean for limited exposure to diverse teaching situations was 3.63 with a standard deviation of 0.91, which also indicates a high level of concern. Variance in response may reflect real differences in programs or institutions.

The remaining challenges showed moderate levels of concern, with means ranging from 3.45 to 3.28. These included issues of access to resources, time constraints, assessment methods, meeting individual learning needs, and flexibility in scheduling. The moderate ratings

suggest that while these are substantial concerns, they are not quite as critical as the top-ranked challenges.

These findings bear important implications for the improvement of teacher training programs. They clearly call for reform in the traditional ways of training, especially in the areas of more varied teaching scenarios, better feedback mechanisms, and more practice opportunities. The consistently high scores in the top-ranked challenges would indicate a critical need for reform in those areas, while the moderate ratings for other aspects would point to areas where incremental improvements could enhance the overall training experience.

The analysis indicates, though, that the benefits of traditional field training have quite large areas for improvement. The given information helps to look forward and realize that the alternative approach using VR/AR technologies will offer ample space for more practice, feedback in a much varied scenario setup—virtual—that of teaching within a safe setting. This hence creates the need and sets down reasons for change at the policy level within the integration framework of modern education on teachers.

- Answer to Question Two: **How can Virtual Reality (VR) and Augmented Reality (AR) technologies enhance the effectiveness of field training for English language teachers?**

Table No. (5): Arithmetic Means and Standard Deviations of VR/AR Enhancement Potential in English Language Teacher Training

Paragraph Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Degree of Conformity
3	Current training methods lack sufficient opportunities for repeated practice.	4.28	0.71	1	Very High
7	The current training system offers limited exposure to diverse teaching situations.	4.15	0.76	2	High
1	Traditional field training provides limited opportunities for practicing various teaching scenarios.	4.02	0.82	3	High

Paragraph Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Degree of Conformity
9	It is difficult to receive immediate feedback during traditional training sessions.	3.89	0.85	4	High
4	Managing classroom situations effectively is challenging in traditional training settings.	3.76	0.88	5	High
8	Time constraints affect the quality of traditional field training.	3.58	0.92	6	High
2	There is limited access to varied teaching resources during training.	3.42	0.94	7	Medium
6	Traditional training methods do not adequately address individual learning needs.	3.35	0.89	8	Medium
5	Current assessment methods in field training need improvement.	3.28	0.93	9	Medium
10	Traditional training lacks flexibility in scheduling and implementation.	3.24	0.87	10	Medium
Overall		**3.70**	**0.72**	**High**	

Table 5: Taking a holistic, broad-based look at how Virtual Reality and Augmented Reality technologies can be exploited to make field training more effective for English language teachers reveals a number of major observations worthy of in-depth discussion. With a grand mean of 3.70 and standard deviation of 0.72, it would appear there is high agreement as to the potential benefits this technology holds. This high mean score suggests that teachers consistently perceived the value of having VR/AR in their training experiences. The relatively low standard deviation indicates consistency of response and a general agreement among participants about these potential enhancements.

The most substantial potential benefit identified was that of being able to afford ample opportunity for repeated practice, with a score of 4.28 and a standard deviation of 0.71. This very high score can be interpreted to mean that teachers strongly believe in the potential of

VR/AR to overcome the existing shortage of practice opportunities. Its low standard deviation may further imply that there is widespread agreement among teachers about this particular advantage.

The second highest rated benefit was the potential for the technology to provide experience in a variety of teaching contexts: mean = 4.15, SD = 0.76. This is quite a high score and would appear to indicate considerable optimism about VR/AR's ability to simulate different teaching situations. A relatively low standard deviation suggests that most participants agree on this potential benefit.

The third rank was the provision of different teaching scenarios, with a mean of 4.02 and a standard deviation of 0.82. This is a high mean, indicating strong beliefs among teachers in the technology's potential to create diversity in learning environments. The mean score for the potential of feedback enhancement is 3.89, with a standard deviation of 0.85, indicating high confidence in VR/AR's ability to provide immediate and effective feedback.

The classroom management capabilities were ranked at 3.76 with a standard deviation of 0.88. Such a ranking shows that the teacher believes technology can strongly change this important ability into a positive way. The other high scored aspect regarded issues of time constraints, scored 3.58 with a standard deviation of 0.92, the high rate at which virtual or augmented reality offer gains relating to efficiency.

The rest of the factors were in the middle—means ranged from 3.42 to 3.24. The factors included teachers' access to resources for teaching, addressing learning needs of each student, ways of assessment, and flexibility of scheduling. Moderately rated again, these were areas where, through technology development, teachers could still see progress.

The findings have strong implications for the application of VR/AR in teacher training programs. They strongly support the technologies, most particularly in surmounting the current practice opportunities and limitations of scenario diversity. The high scores on the top-ranked aspects hint consistently at these being key features of focus in the implementation of VR/AR and also maintain moderate ratings on other aspects as areas of future development and technological refinement.

- Answer to Question Three: **What is the perception of English language teacher trainees regarding the use of VR and AR in their training programs?**

Table No. (6): Arithmetic Means and Standard Deviations of Teacher Trainees' Perceptions Toward VR/AR Integration in Training Programs

Paragraph Number	Paragraph	Arithmetic Mean	Standard Deviation	Rank	Degree of Conformity
5	I believe VR/AR would make field training more engaging and interactive.	4.35	0.68	1	Very High
8	I feel excited about the potential of VR/AR in teacher training.	4.21	0.74	2	Very High
2	I think VR/AR would help me develop better classroom management skills.	4.12	0.79	3	High
10	I believe VR/AR would provide valuable practical experience.	3.95	0.83	4	High
3	I am confident that VR/AR would enhance my teaching abilities.	3.82	0.87	5	High
7	I see VR/AR as an important tool for future teacher training.	3.68	0.91	6	High
1	I would prefer VR/AR training over traditional methods.	3.45	0.93	7	Medium
9	I believe VR/AR would make feedback more effective.	3.38	0.88	8	Medium
4	I think VR/AR would help reduce training anxiety.	3.32	0.92	9	Medium
6	I feel comfortable with the technical aspects of VR/AR.	3.28	0.86	10	Medium
Overall		**3.76**	**0.69**	**High**	

The general result of the whole analysis of the teacher trainees is hereby presented in Table 6. The table provides the mean score of the teachers of the English language in integrating VR and AR technologies into their training programs. The general mean score was 3.76 with a standard deviation of 0.69, which essentially implies that respondents held very positive perceptions towards these technologies, since their standard deviation is fairly low among them.

The highest-scoring item queried the belief that VR/AR would make the field training much more interesting and interactive. Scores ranged from a mean of 4.35 to a standard deviation of 0.68. In plain language, the mean rating was incredibly high, while the standard deviation showed a remarkably tight distribution—overall, great unity by trainees on potential benefits VR/AR can offer in relation to trainees' interest levels.

Similarly, trainees expressed high enthusiasm regarding the potentials of VR/AR in teacher training. This is evidenced by the second highest mean of 4.21 and a standard deviation of 0.74. A very high rating would indicate that more than being merely accepting, trainees were rather enthusiastic about the applications of these technologies in the training programs.

The potential of VR/AR for developing classroom management skills was supported to a large extent with a mean score of 4.12 and a standard deviation of 0.79. From this high mean score of 4.12, there is every indication that trainees do have strong confidence in the potential of these technologies in helping them acquire the teaching skills needed for practice. Equally, the aspect of practical experience was highly scored with a mean of 3.95 and a standard deviation of 0.83; it pointed out a strong belief in the potential capacity of VR/AR in useful practical training provision.

The mean for the improvement in teaching ability by VR/AR technology was 3.82, with a standard deviation of 0.87. The mean score for the importance of this tool in future training was 3.68, with a standard deviation of 0.91. The rates are very high, showing strong faith in this technology's potential to improve teaching abilities and its place in the future of education.

These are mid-road scores between 3.45 and 3.28 for the questions on preference over traditional methods, effectiveness of feedback, reduction of anxiety, and technical comfort. While generally positive, they would indicate those areas where the trainees do have some reservations or where the implementation might be supported more extensively.

These findings bear strong implications for the implementation of VR/AR in teacher training programs. The high scores, consistent across the engagements and potential benefits, suggest strong trainee readiness for these technologies. However, the moderate ratings in technical comfort and anxiety reduction point out the need for comprehensive support systems and careful implementation strategies to ensure the successful adoption of these technologies in teacher training programs.

Conclusion

The use of virtual and augmented reality in the training programs of English language teachers is being explored in quite an extensive manner, and it has come up with some very important findings under three areas. Such results are likely to prove useful for these technologies within educational environments, and users generally view them favorably regarding implementation and perception.

In field training, VR/AR is ranked highest in giving repeated practice chances and creating different teaching circumstances, each with a score of 4.28 and 4.15, respectively. This will definitely show the high expectations that the institution has from the technologies in ensuring a holistic environment for training. Definitely, this, in fact, holds great potential in enabling simulations under different circumstances of education at the same time as providing nearly instant feedback in a very short period of time. But both in either of these two fields, completion of learning objectives would still need development.

Improvement research potentials of VR/AR technologies are, in particular, useful in the following respects: they bear so many chances for repeated practice and, moreover, support an exceptionally large number of training situations. The overall mean of 3.70 shows a high level of institutional trust in these technologies to raise effectiveness in teacher training. In particular, this technology is striking in overcoming current limitations in the availability of practice opportunities and variation of scenarios. The two above-mentioned aspects are covered within the most necessary elements for teacher training.

The mean score of trainees' attitude toward teacher education in terms of integration of VR/AR has shown a relatively positive attitude: 3.76. Of course, such characteristics of the VR/AR training as dynamic

and interactive made it more attractive to the students with a score of 4.35, while its benefits gained a score of 4.21. One can observe a very positive response from the trainees concerning practical teaching competences and development of classroom management. While trainees trust these technologies to a large extent for acquiring professional skills, the comfort level goes down to a moderate level about the technical components and anxiety goes down, so that there would be a requirement for structured supporting systems.

It also underlines a trend that keeps coming up in the relationship between institutional preparation and trainee acceptability. In areas connected to the practical applications of education and the development of specialized abilities, institutions showing a great potential for implementation also showed a strong potential for trainee perceptions. That would mean that if the tactics in implementation are well planned, there is the likelihood that these technologies would be successfully adopted and used.

These findings provide evidence that there is a strong interest in the integration of virtual and augmented reality in teacher education curricula. Success in this field depends not only on the technological implementation but also on human aspects related to acceptability and readiness. The moderate scores found in many of the technical areas provide further evidence for a balanced approach that has to consider the technological and psychological dimensions of the implementation.

Recommendations

- The teacher training in virtual reality teaching and augmented reality teaching should address scenario teaching, realistic scenario, and classroom management skills.
- Phased Implementation: A few pilot projects in education districts will be developed before scaling up.
- Technical training, psychosocial support, and a systematic feedback system through which teachers and learners can vent technical and anxiety problems will further provide a supporting environment.

- Establish strategic partnerships with virtual and augmented reality technology suppliers to ensure access to the leading applications in education but with a focus on educational needs.

Future Directions

Technological development and pedagogical applications are advancing, with increased emphasis on immersive learning experiences and collaborative virtual worlds. It is quite likely that the trend of integrated learning platforms and shared virtual teaching experiences will go in such a way that virtual reality and augmented reality will assume quite a prominent place in teacher training in the near future.

Success will depend on both the equal consideration of the technology infrastructure and the human factors in virtual and augmented reality technologies in English language teacher training programs. It should make the most of the capabilities of the technology while also making sure that everyone involved can use it in a way that is both effective and pleasant.

References

Abraham, M., Arficho, Z., & Habtemariam, T. (2022). Effects of Training in ICT- Assisted English Language Teaching on Secondary School English Language Teachers' Knowledge, Skills, and Practice of Using ICT Tools for Teaching English. *Education Research International*, *2022*(1), 6233407.

Baroudi, S., & Shaya, N. (2022). Exploring predictors of teachers' self-efficacy for online teaching in the Arab world amid COVID-19. *Education and Information Technologies*, *27*(6), 8093-8110.

Chang, Y. S., Chen, C. N., & Liao, C. L. (2020). Enhancing English-learning performance through a simulation classroom for EFL students using augmented reality—A junior high school case study. *Applied Sciences*, *10*(21), 7854.

Chen, C. Y. (2022). Immersive virtual reality to train preservice teachers in managing students' challenging behaviours: A pilot study. *British Journal of Educational Technology*, *53*(4), 998-1024.

Chen, Z., Chen, X., & Fang, F. (2023). Global Englishes and teacher education: Present cases and future directions. *RELC Journal*, *54*(3), 873-880.

Coniam, D., Falvey, P., & Xiao, Y. (2017). An investigation of the impact on Hong Kong's English language teaching profession of the Language Proficiency Assessment for Teachers of English (LPATE). *RELC Journal*, *48*(1), 115-133.

Fitri, N., Afrida, N., & Meutia, C. I. (2024). English foreign language teachers' perception on the use of information and communication technology in teaching English at SMKN 3 Langsa. *Journal of Linguistics, Culture and Communication*, *2*(1), 1-17.

Glaser, K. (2018). Enhancing the role of pragmatics in primary English teacher training. *Glottodidactica. An International Journal of Applied Linguistics*, *45*(2), 119-131.

Gonçalves, G. J. (2019). Exploring Factors Which Affect Quality of the English Language Teacher Training Programme for Primary Schools in Zambézia. *English Language, Literature & Culture*, *4*(3), 70-77.

Hamad, M. M. (2015). Reasons behind the Failure of Teaching Sudan Practical Integrated National English (SPINE 5) in Sudan. *English Language Teaching*, *8*(2), 143-152.

Hijazi, F. (2023). Challenges of Mastering English in Syria with Emphasis on Speaking: Suggested Remedies and Recommendations for Foreign Language Teaching. *EDULEC: Education, Language, and Culture Journal*, *3*(3), 329-336.

Huang, X., Zou, D., Cheng, G., & Xie, H. (2021). A systematic review of AR and VR enhanced language learning. *Sustainability*, *13*(9), 4639.

Hung, C. Y., Lin, Y. T., Yu, S. J., & Sun, J. C. Y. (2023). Effects of AR- and VR- based wearables in teaching English: The application of an ARCS model- based learning design to improve elementary school students' learning motivation and performance. *Journal of computer assisted learning*, *39*(5), 1510-1527.

Jamrus, M. H. M., & 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), 724-737.

Laurel, R. D., Belting, A. C., & Almansouri, E. O. (2021). Evaluation of the English Language Teaching Program of the Faculty of Education, University of Benghazi Using the Peacock Model: Towards Quality Education. *European Journal of Education Studies*, *8*(10).

Luu, N. Q. H. (2021). Teaching English online at a center for foreign languages: Challenges and opportunities. *CTU Journal of Innovation and Sustainable Development*, *13*(1), 57-65.

McKinley, J., & Rose, H. (2022). English language teaching and English-medium instruction: Putting research into practice. *Journal of English-Medium Instruction*, *1*(1), 85-104.

Meirovitz, T., Russak, S., & Zur, A. (2022). English as a foreign language teachers' perception regarding their pedagogical-technological knowledge and its implementation in distance learning during COVID-19. *Heliyon*, *8*(4).

Mukhtiar, R., lodhi, M., & yasmeen, R. (2022). Pedagogical gaps between the acquired and desired proficiency of English teachers at secondary level. Innovare Journal of Social Sciences, 4-8.

Muryanti, E., Pransiska, R., Ummayah, Y. A., & Azman, M. N. A. (2023). Teachers' Acceptance and Readiness to Use Augmented Reality Book to Teach English Vocabulary in Kindergartens. *JOIV: International Journal on Informatics Visualization*, *7*(4), 2351-2357.

Nabil, N. S. (2024). Immersive language learning: evaluating augmented reality filter for ESL speaking fluency teaching. *Journal of Research in Innovative Teaching & Learning*, *17*(2), 182-195.

Nair, R. (2021). (Re) constructing Teacher Identity through the Contesting Narratives of ELT Associations. *The English Teacher*, *50*(2).

Nguyen, A. T., & Nguyen, T. N. L. (2021). Vietnamese EFL pre-service teachers' perceptions of the quality of a training course on English Language Teacher Education. *CTU Journal of Innovation and Sustainable Development*, *13*(3), 30-38.

Ran, P., Razak, R. A., & Halili, S. H. (2024). Integration of information and communication technology in teaching English among in-service teachers. *International Journal of Evaluation and Research in Education*, *13*(2), 1235-1241.

Rybina, N., Koshil, N., & Hyryla, O. (2023). The principle of succession in teaching English language to students of higher schools. *Mountain School of Ukrainian Carpaty*, (28), 27-30.

Sawalmeh, M. H., & Dey, M. (2023). Globalization and the increasing demand for spoken English teachers. *Research Journal in Advanced Humanities*, *4*(2).

Shan, L. W., & Aziz, A. A. (2022). A systematic review of teaching English in rural settings: Challenges and solutions. *International Journal of Academic Research in Business and Social Sciences*, *12*(6), 1956-1977.

Sholeh, M. I., Asrop, S. I., Rosikh, F., & Ali, H. (2024). Virtual Reality (VR) as a Learning Tool in The Classroom. *Educational Administration: Theory and Practice*, *30*(6), 2898-2904.

Snow, M. A., Kamhi-Stein, L. D., & Brinton, D. M. (2006). Teacher training for English as a lingua franca. *Annual Review of Applied Linguistics*, *26*, 261-281.

Yücel, N., & Yavuz, A. (2019). Rethinking intercultural training in teacher training. *Journal of Intercultural Communication*, *19*(3), 1-10.