ANALYSIS OF THE NEEDS FOR DEVELOPING VIRTUAL REALITY TOUR MEDIA WITH A CULTURAL APPROACH TO IMPROVE LANGUAGE SKILLS

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Abstract

Language skills are essential in learning a foreign language, especially English, which requires innovative and contextual learning media. The main problems in this study are the low level of student involvement and the lack of culture-based learning media that support integrated language skills. This study aims to analyze the need for the development of Virtual Reality (VR) Tour media with a local cultural approach as an effort to improve the language skills of junior high school students. The study subjects were grade VIII students at junior high schools in the Brangsong area, Kendal, and English teachers. The research method used was a qualitative descriptive with a needs assessment approach. Data collection techniques included observation, interviews, and distributing questionnaires to students and teachers. The results showed that students were highly interested in using technology-based media such as VR in language learning, especially when combined with familiar local cultural elements. Teachers also recognized the importance of developing innovative media to support integrated listening, speaking, reading, and writing skills. This study concludes that there is a significant need to create culture-based virtual reality tour media to improve junior high school students' language skills. Recommendations for further research are to design and develop a prototype of local culture-based VR media that can be tested on a limited basis to see its effectiveness in the context of English learning.

Keywords: Cultural Approach, Language Skills, Needs Analysis, Virtual Reality Media

1   INTRODUCTION

Language and literacy skills among junior high school (SMP) students are critical to preparing a competitive generation in the era of globalization. Language learning, especially English, has become necessary to meet the demands of an increasingly complex job market. In this context, language skills are not only related to communication skills, but also to adequate literacy mastery, both in academic and social contexts. In Indonesia's education context, strengthening the curriculum based on key competencies such as literacy, numeracy, and language skills is crucial. There is an urgent need to complement the curriculum with a more contextual approach that can integrate language skills with students' daily lives. (Mahendra et al., 2022); (Alfarisy, 2021b). This way, language learning will be an academic task relevant to students' practical lives.

The basis for the importance of language skills in junior high school can be seen in research showing that students with high literacy skills tend to have better academic performance. Literacy is a link between various scientific disciplines and supports the development of critical thinking skills needed in education and everyday life. (Rahmadani et al., 2023) (Alfarisy, 2021a). Mastery of a foreign language, such as English, has increased students' academic and professional opportunities. Educational literature shows that students with good language skills can adapt better in multilingual social and professional environments. (Chen, 2024) (Danzer et al., 2022)

Even though English has become a subject integrated into the curriculum, many students still experience difficulties mastering these language skills. Various factors can influence language acquisition, including educational background, teaching methods, and social environment. One of the main problems is students' low motivation to learn English. Mardhiah et al. noted that a lack of student involvement in teaching and learning can reduce their self-confidence and enthusiasm for learning. (Mardhiah et al., 2024). Learning strategies that do not suit students' needs can also contribute to low language achievement. (Triwibowo, 2023)Lack of mastery of listening and speaking skills is also a challenge for junior high school students in Indonesia. A study by Subekti et al. revealed that many students felt less confident speaking English, and concerns about making mistakes often hampered their communication ability. (Subekti et al., 2023). This shows that more speaking practice is needed in class so that students can get used to using English in authentic contexts.

A critical area of research in language skills is the influence of cultural and social context on language development. For example, research by Tanaka indicates that cultural and social factors can influence language skills. (Tanaka, 2024). In addition, Aris and Hashim emphasize the importance of cultural awareness in language classes, which can improve language acquisition abilities. (Aris & Hashim, 2023). This study shows that understanding cultural differences helps students better understand the language they are learning, potentially facilitating the development of better language skills.

Integrating local cultural content in Indonesia's English curriculum can increase students' engagement with the studied material. Research shows that students who connect emotionally with the material they study experience improvements in their language skills. (Cahyani et al., 2023) (Budiman et al., 2023). Research shows that teacher awareness of

student culture in the learning process contributes to student engagement and deeper cultural understanding. (Kuncahyo et al., 2023). In this way, teachers can design an inclusive curriculum, considering students' cultural backgrounds, so that every student feels represented and can contribute to learning.

Improving language skills using virtual reality (VR) media is an innovative approach increasingly gaining attention in education. VR media enriches students' learning experiences and allows them to develop language skills in a more interactive and immersive context. Various studies have shown that using VR in language learning can overcome traditional teaching challenges. Realistic virtual environments assist students in developing their language competence and intercultural understanding. (Bahari, 2021) (Rahmanu et al., 2022) (Daelman et al., 2023) (Wu, 2024)

In conclusion, the use of cultural approach virtual reality media in English language learning shows promising results in improving students' language skills, allowing them to practice in an interactive and contextual environment. This approach improves linguistic understanding and encourages students to adapt and communicate more effectively in multicultural contexts. The need to develop virtual reality (VR) tour media with a cultural approach to improve language skills is an important aspect that needs to be explored. VR media offers an immersive experience that can increase student engagement and enable them to learn languages in a more lively and interactive context. VR can focus on introducing fundamental cultural aspects in language use to understand linguistic structures and improve cross-cultural communication skills. Based on this, developing an artistic approach to VR learning media is necessary to improve Language Skills.

2   METHODOLOGY

The research method used is qualitative. Qualitative research explores students' experiences, perceptions, and needs in depth, to reveal the complexities associated with using VR media in English learning. The data collected used questionnaires and in-depth interviews with teachers and students at SMP Negeri 1 Brangsong, Kendal Regency. With this approach, researchers can gather subjective experiences and diverse views on how VR media needs can function as a teaching tool in cultural contexts. There are five indicators for needs analysis, including 1). Evaluation of English learning, 2). Analysis of module/learning media needs, 3). The need for applying technology in English learning, 4). Analysis of language skills improvement, 5). Language skills learning targets.

Data analysis was carried out using thematic analysis. This method allows researchers to identify significant themes and categories in the data from interviews and group discussions. (Creswell, 2014).. The application of this analysis focuses on: 1). Identifying students' specific needs in language learning related to cultural aspects, 2). Understanding the barriers to using VR media and recommendations from teachers for better implementation, 3. Explores how cultural context can be integrated into VR media to increase the relevance of learning. Several techniques can be used to ensure credibility, such as member checks, where researchers return to participants to validate the results obtained. (Sukestiyarno, 2020). It is important in qualitative research to verify that the researcher's interpretations match the participants' views.

3   FINDINGS AND DISCUSSION

3.1   FINDINGS

Five leading indicators were analyzed based on teachers' needs in learning English: learning evaluation, analysis of needs for learning modules/media, needs for applying technology in learning, analysis of improving language skills, and language skills learning targets. The research results show variations in the level of need for each indicator, which provides a comprehensive picture of teacher expectations for the development of innovative learning media. The results of the questionnaire can be seen in the image below.
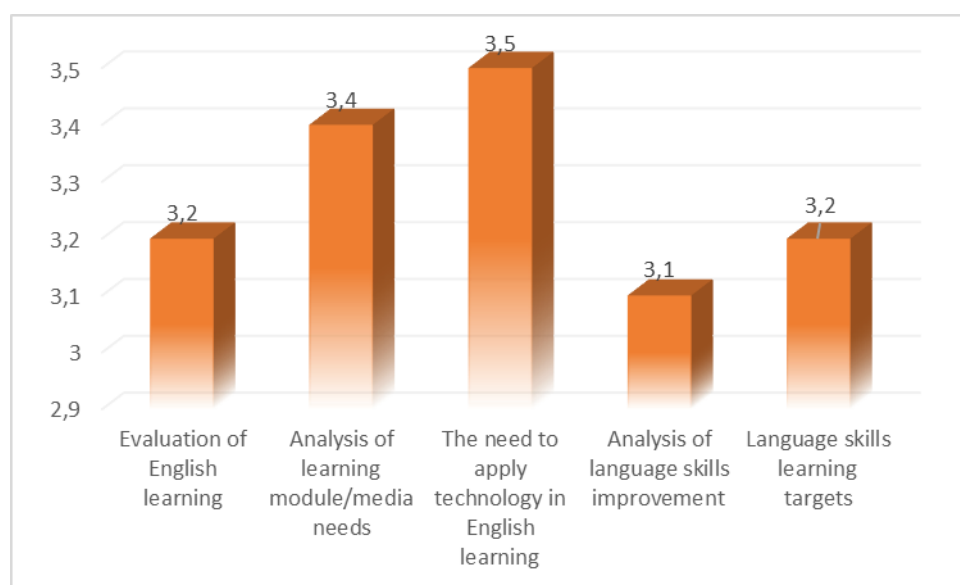

Figure 1: Needs analysis from the teacher's perspective

The indicator with the highest score is the need to apply technology in English learning, with an average value of 3.5. This confirms that teachers value the importance of technology integration as part of the modern learning process. Teachers see that the use of technology, such as interactive media, digital-based applications, and the potential implementation of virtual reality tour media, can provide a learning experience that is more interesting, contextual, and in line with the developing needs of the digital generation. These findings also show that teachers know technology is a tool and a strategic means to build a more immersive and meaningful learning environment.

Furthermore, the module/learning media needs analysis indicator obtained an average score of 3.4. This indicates that teachers view the existence of learning media that are relevant and appropriate to students' needs as very important to support the English learning process. Teachers assess that the currently available learning media are still limited and lack contextualization, so it is necessary to develop new media to connect language material with the cultural context and real needs of students inside and outside the classroom.

Learning evaluation indicators and language skills learning targets received an average score of 3.2. Although not as high as the previous two indicators, these results still show that teachers pay quite a lot of attention to the importance of evaluation that is relevant to students' language skill achievements, as well as the need for learning targets that are clear, measurable, and appropriate to students' ability levels. Teachers hope there will be teaching media that can integrate formative and summative evaluations in a more applicable manner and support the achievement of targets for English language skills (listening, speaking, reading, and writing) per established standards.

The indicator with the lowest score is the analysis of language skills improvement, with an average of 3.1. This value reflects that teachers feel there are still limitations in learning strategies and media that can encourage significant improvement in students' language skills. Teachers assess that, despite various learning efforts, improving students' abilities is often not optimal due to limited media that can provide authentic experiences. Therefore, these results emphasize the urgency of developing technology-based learning media that are not only visually attractive but also able to provide real context that can hone students' communication skills directly.

Overall, the results of this research confirm that teachers have a high need for developing innovative technology-based learning media to support English language learning. Hopefully,

this media can fulfill the need for relevant modules, support the evaluation process, facilitate the achievement of learning targets, and directly improve students' language skills. Thus, it can be concluded that the direction of developing virtual reality tour media with a cultural approach is one potential solution to answer teachers' needs in improving students' language skills. The results of the student perspective analysis can be seen in the image below.
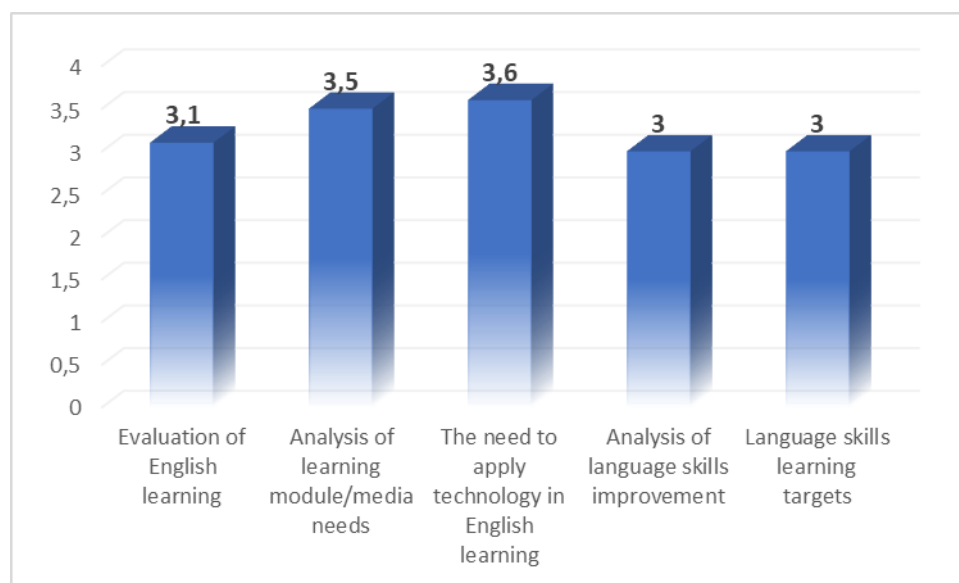

Figure 2: Needs analysis from the student perspective

The indicator with the highest score is the need to apply technology in English learning, with an average value of 3.6. These results confirm that students have a high interest in learning by utilizing modern technology that is more interactive and contextual. Students feel that technology can provide a more interesting, enjoyable learning atmosphere and help them to be actively involved in learning. This also shows the digital generation's tendency to be more comfortable using technology-based media, including the potential use of virtual reality tour media to provide a more real learning experience.

Furthermore, the module/learning media needs analysis indicator obtained an average score of 3.5, which ranks second-highest. This indicates that students need modules or learning media relevant to their needs, easy to use, and appropriate to contextual language development. The expected learning media is not just text or conventional material, but also media that allows interaction, real visualization, and provides opportunities for more natural language practice.

The learning evaluation indicator received a score of 3.1. This shows that although evaluation is essential, students do not consider it the central aspect of their needs. However, students

still expect a form of evaluation that is more applicable and relevant to language skills and provides constructive feedback to determine how far their language skills have progressed.

The indicators with the lowest scores were analysis of language skills improvement and language skills learning targets, both of which received an average score of 3.0. These results illustrate that students feel that the learning process they have participated in so far has not had an optimal impact on improving language skills (listening, speaking, reading, writing). Likewise, the learning targets set are often not yet fully felt by the real benefits. This condition reinforces the importance of learning media innovation to connect learning objectives with authentic learning experiences relevant to daily communication needs.

Overall, the research results from the student side show that they emphasize the need for learning media that suits their learning needs and the application of technology in learning English. Students hope that the media developed can provide a contextual, interactive, and fun learning experience while supporting real improvement in language skills. Thus, it can be concluded that the direction of developing technology-based media, such as virtual reality tours with a cultural approach, is very relevant to answering students' needs in improving language skills.

The research results show that both teachers and students equally emphasize the importance of applying technology in English language learning. This aspect received the highest score of 3.5 from the teacher's side, while from the student's side, it was even higher, namely 3.6. This confirms that both parties believe technology is essential for creating more effective, interactive learning and aligning with current developments. Furthermore, teachers emphasize analyzing the needs of learning modules/media (3.4), which is almost in line with students (3.5). This shows the conformity of the perception that the existing learning media are still limited and need to be developed to be more contextual and relevant to learning needs. In other words, both teachers and students want learning media that is innovative, practical, and supports language skills.

3.2   DISCUSSION

The results of this research show that both teachers and students place the application of technology in English language learning as a primary need. Teachers gave an average score of 3.5, while students gave it a higher score of 3.6. This finding is in line with research conducted by (Zaim et al., 2020) This confirms that integrating technology, particularly exceptionally immersive learning-based technology such as virtual reality (VR), can increase

student engagement and motivation in language learning. Research also confirms this. (Prianty et al., 2021) A study found that VR-based media can provide authentic learning experiences, thereby more effectively supporting improving communication skills.

Apart from that, the results of this research also emphasize the importance of developing learning modules/media relevant to students' needs. The teacher scored 3.4 and the students 3.5, showing a common perception that the current media still lacks context. These results are in line with the findings of (Arrosagaray et al., 2019) Technology-based learning media must be designed according to the cultural context to facilitate students' intercultural communicative competence (ICC). Thus, developing virtual reality tour media with a cultural approach becomes relevant as an effort to simultaneously meet the needs of teachers and students.

Teachers score higher (3.2) on learning evaluation indicators than students (3.1). This shows that teachers pay more attention to measuring learning outcomes. This finding is in line with research. (Li, 2019) This emphasizes that teachers prioritize evaluation as a measure of learning success. However, from the student side, evaluation is often considered not to be a primary need, as research. (Prianty et al., 2021) Also, students value an enjoyable learning experience more than the evaluation pressure.

Meanwhile, teachers (3.1) and students (3.0) gave low scores in the analysis indicator for improving language skills. This condition shows that there is a gap between the learning process carried out and the expected results of improving language skills. A similar thing was expressed by (Parmaxi, 2023) Although digital media has been widely used, improving students' language skills is still not optimal due to the lack of media that presents an authentic context. Thus, the development of VR-based media that presents real scenarios with a cultural approach can be a solution that bridges this need.

Implementing a culture-based approach in learning can increase student engagement and learning outcomes. (Akmalia et al., 2023). This research shows how integrating cultural elements in the learning process can strengthen the quality of education, which aligns with the intention to use VR media that deepens the cultural context when students learn a foreign language. Research by Gustiana and Muftianti shows that using contextual press, such as image media, can help students understand the material better and increase their motivation in learning. (Gustiana & Muftianti, 2022)This research shows that media relevant to students'

daily lives and cultures can improve the quality of learning. VR media, which focuses on real cultural experiences to improve students' language mastery, exemplifies this.

Research from Najib and Fariha also shows that teachers' skills in creating learning media greatly influence classroom learning quality (Najib & Fariha, 2023). These results are relevant when considering that the development of VR media must involve skills and training for educators to utilize the technology to the maximum extent in a cultural context. Furthermore, research by Gustiana and Muftianti notes that context and culture-based media can help improve students' language skills, such as connecting lesson material with their real lives (Gustiana & Muftianti, 2022).. With an approach like this, implementing VR media that highlights local and contemporary culture can effectively support language acquisition. Thus, the results of this research support the development of virtual reality tour media that consider cultural context and language skills. This approach helps students understand language linguistically and provides critical cultural insights for more effective communication.

Overall, the findings of this research strengthen the results of previous research that English language learning requires technology integration based on real and contextual experiences. Both teachers and students recognize the need for innovative, relevant media that support improving language skills. Thus, developing virtual reality tour media with a cultural approach is a strategic solution that can answer the gap between teacher needs (evaluation & targets) and student needs (interactive & fun learning experiences).

4   CONCLUSION

Based on the needs analysis research on teachers and students in learning English, several conclusions were obtained: 1) Technology integration as a primary need: Both teachers and students place the application of technology in English language learning as a priority need. Students gave a higher average score than teachers, indicating that students are more enthusiastic about using technology-based learning media, especially interactive and immersive ones such as Virtual Reality 2. The need for contextual and culture-based media: Teachers and students share the same perception that the current learning media do not fully meet their needs, especially regarding cultural context and authentic situations. This strengthens the urgency of developing virtual reality tour media with an artistic approach as a more meaningful learning solution. Overall, this research concludes that the development of culture-based virtual reality tour media is really needed in English language learning because

it can answer technological needs, cultural relevance, achieve academic targets, and improve language skills in a balanced way.

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