

## The Efficiency of Metaverse Platforms in Language Learning Based on Jordanian Young Learners' Perceptions

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### Abstract

This study aims to collect young Jordanian learners' opinions about the efficiency of using Metaverse platforms in language learning, focusing on the system's perceived trialability, complexity, observability, and compatibility. It also aims to determine if it is appropriate for the future or should be used currently. The significance of the current study was to analyze the various technological changes that have occurred in the field of language learning to gain a deeper understanding of the effects of these changes on the students' learning procedures of languages. To achieve the study's primary goal, the researcher conducted the research during the academic years 2021-2022 on a sample of 50 high school students from different Jordanian schools. The study adopted a mixed-method approach, qualitative and quantitative. The researcher collected data from the participants through a refereed survey and various interviews conducted after the survey. Most young learners indicated that the Metaverse platforms could be used in various educational disciplines and fields. It could improve their knowledge of the language, and it could make the language course more enjoyable. However, they focused on the idea that they need more time to be ready to use Metaverse platforms in language learning, especially with oral language skills. The young learners believed the Metaverse platform has various advantages and could be used in the classroom soon. However, they noted that it could make learning challenging and distracting as it violates their class discipline.

**Keywords:** Education, language, Metaverse platforms, perceptions, young Jordanian learners,

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## Introduction

Due to the rapid emergence and evolution of social media and the Internet, researchers and computer scientists have been searching for new areas of innovation in virtual environments. These new technologies allow them to create better digital media content. The concept of Metaverse was first used in a science fiction novel written by Stephenson in 1992, which provided a 3D virtual environment. Through the creation of the Metaverse, individuals could interact and communicate with each other over the Internet. It has since been regarded as a world that has enhanced both space and physical Reality (Sari et al., 2020).

This concept allows users to imagine a variety of digital and real-world mirrors of the world, both non-existent and existent, for various purposes. Numerous studies have been conducted on using Metaverse in educational settings (Chen & Zhang, 2022). In 2009, researchers used it to create a problem-based learning environment that allows students and teachers to explore different ideas and solutions in the virtual world (Narin, 2021).

Using Metaverse, students can develop an interest in learning styles different from traditional methods. In a study conducted by Jung and Jeon, they noted that Metaverse could help improve students' immersion and motivation (Yang et al., 2022). Other studies conducted by Huh 2020 explored the Metaverse's importance in developing invariant fields of study. These studies focused on using Metaverse in real-life experiments (Huh, 2022).

To better understand the role of the Metaverse in developing learning styles, a conceptual model is necessary. This model will analyze the various aspects of the system and its effectiveness. It will also reflect the personal innovativeness and satisfaction of the users. The factors that influence the personal innovativeness of users are the ease of use and usefulness of the system (Jovanović & Milosavljević, 2022).

This study aims to collect students' opinions and thoughts about the potential use of Metaverse platforms in learning languages. It also explores their concerns about its practicality and potential impact on their future. Through answering the main study question: what is the impact of using the Metaverse platform as a tool in learning language?

The researcher aims to find out what kinds of features the platform offers and their perceived utility.

The study aimed to collect data about 50 high school students in Jordan from 2021 to 2022.

Through a mixed-method research design, the researcher gathered information from the participants. In addition to the survey, the researcher could conduct interviews after the study.

## 2. Literature Review

### 2.1. Metaverse: An Overview

The term Metaverse was used to describe a fictional world where users would create and appear as avatars to imitate their interactions with other people in real life (Article & Narin, 2021). In this world, users interact with each other in a 3D virtual world. The characteristics of Metaverse, such as interactivity, persistence, and corporeity, make it an exceptional tool for creating a collaborative and autonomous learning environment. Its virtual world allows users to interact with each other and gain access to various resources. This dynamic setting also sets the stage for an innovative educational environment (Kanematsu et al., 2014).

The goal of the Metaverse system is to provide a continuous connection between the users and the virtual world. It eliminates the need for users to move to the real world. Another feature that allows users to create a more realistic environment is the ability to interact with the virtual

world's various avatars. The persistence feature is essential, allowing users to keep track of their conversations and data even after they leave the virtual world. This is because the changes brought about by the evolution of the Metaverse environment require an educated workforce and new organizational leadership models(Hirsh-Pasek et al., 2022b).

Researchers can gain a deeper understanding of human behavior in an educational setting through virtual environments. This can help them design effective interventions that will help improve the quality of Education. For instance, educational institutions can improve their teaching and learning by providing a flexible environment that allows students and faculty to communicate with each other. In addition, educational institutions can improve their teaching and learning by providing a flexible environment that allows students and faculty to communicate with each other. This concept is also supported by the Metaverse, which refers to merging a real university with a virtual one(Collins, 2008).

Unfortunately, the single-stage analysis method used for analyzing various aspects of a project failed to support advanced decision-making capabilities. A study conducted by Sohaib and colleagues in 2020 revealed that the traditional method of performing a single-stage data analysis was not feasible due to the lack of linear relationships between model factors(Sohaib, Hussain, Asif, Ahmad, & Mazzara, 2020). The other main issue with this method was that it only highlighted linear relations between the variables.

The Metaverse system is related to the multiple learning systems that enhance educational institutions' teaching and learning styles. Recent studies have looked into various topics, such as gender differences and variations in students' attitudes. In particular, studies are focused on using social media in a blended-type learning setting to assess the effectiveness of a project. Due to the increasing number of technologies used in this type of learning, researchers must develop additional tools to track students' performance. One of these tools is eye-tracking technology. This method can monitor students' reading performance (Chen & Zhang, 2022; Sohaib et al., 2020). The increasing popularity of virtual reality has led to the emergence of a Metaverse system that will significantly impact the future of Education. Numerous studies have shown that virtual reality can positively and negatively impact the learning environment.

## ***2.2. Metaverse in Education***

According to a study conducted by Preston, the Metaverse is a new social form that combines multiple modern technologies(Preston, 2021). The rise of the Metaverse will significantly impact different aspects of human life, such as Education. Although technology will continue to play a significant role in developing the world's education system, a good education is still expected to be accompanied by technological advancements.

Metaverse is a multi-technology platform that can potentially transform how Education is conducted. It combines the latest technologies, such as Virtual Reality and Augmented Reality, to create a new world of learning. Several years ago, the concept of Augmented reality emerged in various applications. These allow users to see and interact with images in three dimensions. In some applications, users can scan an image, which will appear as if it is accurate (Jeon, 2021).

Although Metaverse has been used to describe various virtual reality-based technologies, how they will affect Education needs to be clarified. The world of Education is already influenced by existing technology. Various gadgets and media that can facilitate learning and work for humans have been created as part of the Metaverse. According to Wang et al., the platform aims

to create an immersive and self-sustaining virtual workspace for individuals(Lee, Woo, & Yu, 2022).

Even though the world of Education is already heavily affected by technology, it is still vital that the sector continues to develop and integrate the latest innovations to produce high-quality Education. Several organizations, such as universities and corporate offices, have started using the Metaverse technology. The widespread use of this technology has made it an essential component of the social networking site Facebook's future applications(Ortega-Rodríguez, 2022).

One of the positive effects of the Metaverse technology is its potential to improve the quality of Education. Through virtual reality, students can gain a deeper understanding of a theory. It can also allow them to interact with objects that they learn through. The widespread use of Metaverse technology has made it an essential component of the social networking site Facebook's future applications. The world is expected to eventually become three-dimensional (Siyayev & Jo, 2021b).

Even though Metaverse technology is already widely used, it is still important to note that its potential to transform Education is still immense. In the 21st century, the effects of this technology will significantly affect the way methods, techniques, and learning systems are conducted. Despite the technological limitations in the education world, people continue to embrace the Metaverse technology. Several universities in different countries, such as BrainSTEM University, the University of Cyprus, and Khon Kaen University, have started using the platform for Education. In Indonesia, Muhammadiyah University has started using the Metaverse technology(Hirsh-Pasek et al., 2022a).

Through the Metaverse platform, we can connect Education and the future of virtual learning. Many possibilities will happen. To ensure that the learning process is still effective, teachers must adapt to the changes brought about by the current situation. Online learning has replaced face-to-face classes in most schools. This method of Education is commonly used in schools that require students and teachers to interact with each other on various social media platforms (Damar, 2021).

The lack of literacy between students and teachers is one of the main factors contributing to schools' low performance. The Metaverse platform should be used to connect students and teachers and improve education quality. On the other hand, teachers should provide a direct and authentic touch to students. The traditional role of schools has diminished due to the emergence of virtual learning facilities. Since teachers no longer have to be present in the classrooms to carry out their duties, the building is no longer necessary. As technology develops new immersive worlds, teachers must be equipped with the necessary skills to teach these new learners(Siyayev & Jo, 2021a).

Schools can be more beautiful and complete in the virtual world, with more facilities and a more comfortable atmosphere. However, the lack of interaction between students and teachers in the real world can affect the bond between students and teachers. This is because, in the virtual world, teachers and students only interact with each other through their avatars. Besides the usual activities related to the teaching and learning process, such as creating lesson plans and distributing textbooks, the Metaverse platform can also manage other administrative tasks. However, it still needs to be clarified if this system will be implemented in the country(Preston, 2021).

Education activities in the virtual world can negatively impact the relationships between students and teachers. For instance, if all activities are conducted in the virtual world, the lack of interaction between teachers and students can lead to the loss of social warmth. Compared to the

real world, the meta world allows students to feel more comfortable. However, encountering specific environments and people can also cause them different feelings. Because of the technological advancements in Education, teachers are still needed to facilitate and direct learning (Getchell, Oliver, Miller, & Allison, 2010; Narin, 2021).

Despite the availability of virtual teachers, it is still important to note that the real world will still not be as beautiful as the virtual world. It will require a balance between the teaching and learning process in the future. In 2022, Dewantara and colleagues identified the various disadvantages of the Metaverse platform. These include its high-quality graphics and complexity, which require much technology to operate correctly. It also costs much money to access the necessary tools to support it (Huh, 2022).

The emergence of Metaverse has opened up a new chapter in integrating technology into the education industry. Despite the various advantages of the meta world, it still needs to be determined if schools must adopt it. The Metaverse platform will eventually be used in the education industry as technology develops. It is now up to the teachers to develop their skills and knowledge about using technology to maximize its effectiveness (Lee et al., 2022).

### **2.3. Factors of Users' Satisfaction**

The following describes a user's satisfaction and perception of an innovation's features, such as compatibility, complexity, and trialability. This tool is used to evaluate the adoption of new technology. Before a user's preference is established, expectations are typically formed regarding the perceived attributes of innovation. A user's expectations are usually established during the first stage of the adoption process. This stage indicates that the user's positive perception of innovation will likely be confirmed. However, if the expectations are not confirmed, the user might not adopt the new technology (Jovanović & Milosavljević, 2022).

This could lead to a reduction in the user's level of satisfaction and prevent them from continuing with the use of the innovation. A user's satisfaction level can be categorized as transaction-specific or cumulative. The former refers to the positive evaluation of the technology after experiencing it. On the other hand, the latter is the evaluation of the technology's overall satisfaction. According to Jones and Suh., 2000, the transaction-specific perspective is the main factor contributing to a user's overall satisfaction (Yang et al., 2022).

The perceived trialability of a new technology is also related to the intent to use it. Various studies have used this term to describe the positive impact of innovation on adopting a system. It refers to the ease of carrying out operations related to the innovation. Other concepts, such as the level of effort required to implement the technology and the risk involved in the operation, are additionally included in this concept. The perceived ability of new technology to be noticed and appreciated by other users is called perceived observability. This level of recognition can influence the adoption of the innovation. The idea of visibility can also stimulate discussion among other users (Jovanović & Milosavljević, 2022).

According to Greenhalgh et al., the compatibility factor is the degree to which users can readily adopt an innovation (Lee et al., 2022). This concept is also related to compatibility, which indicates that people are more likely to adopt an innovation if it is compatible with their existing practices. The perceived compatibility of new technology is also related to the learner's perception of its compatibility with their backgrounds, standards, and involvements. This concept suggests that users can quickly adopt the technology if it fits their preferences.

Studies have shown that if a new technology is perceived to be in line with a user's needs, experiences, and values, the level of compatibility is high. The user's perception of the technology's practicality can explain this positive relationship between the perceived usefulness and the compatibility factor. The complexity of under-used innovations is also referred to as the degree of difficulty that a user encounters when using new technology. This concept can describe the extent of the learner's perceived difficulty, which can affect their learning. Previous studies have shown that end-users avoid using new technology if they perceive it as complex (Huh, 2022).

According to Tobin, Hardgrave, and other researchers, complexity can negatively affect the use of technology. It is, therefore, crucial that the design and implementation of new technology are simple to make it easier for the users to use. Another factor that can influence the adoption of new technology is the perceived complexity of its features. This suggests that the complexity of innovation can prevent users from quickly adopting it (Hirsh-Pasek et al., 2022b).

Despite the various studies conducted on the effectiveness of factors such as trialability, complexity, and observability, researchers have found that these properties can significantly impact the perceived ease of use and enjoyment of new technology. There needs to be more literature regarding the relationship between the perceived complexity, trialability, and observability of new technology and the satisfaction of its users. This study tries to fill this gap by examining the impact of these factors on the adoption and satisfaction of new technology.

#### ***2.4.Challenges in Using Metaverse in Education***

The rise of the Metaverse is regarded as the next evolution of the Internet. It allows users to work, play, and communicate in a virtual world. With the help of powerful edge computing and wireless connections, Virtual Reality VR users can experience the world of virtual reality through various providers. Virtual reality systems are used in various ways to enhance the efficiency and safety of business and Education. They are also used to study and develop new learning experiences. Unfortunately, due to the complexity of these systems, they are not always accessible through fast internet connections (Huh, 2022).

Besides being expensive, simulation can be time-consuming and prevent users from using VR-based applications. Since many countries are still offline, students might need help to finish their studies or interact with the materials within the allotted time frame. The need for targeted students and the unwillingness of many learners to enroll in online courses can prevent the educational process from working correctly. If countries do not migrate their systems to the Metaverse, they cannot communicate effectively and efficiently (Hirsh-Pasek et al., 2022a).

Various companies and governments have already started using the Metaverse and are expected to continue. Developers, architects, and tailors are also expected to collaborate and create a simulation of the system they want to share. This should involve working on the interaction, background functionalities, and systematic presentation. Although Augmented reality is already being used in various educational activities, it has yet to be ready to replace traditional classes. Instead, it will be combined with other learning tools to provide a more creative environment (Ortega-Rodríguez, 2022).

Although the Metaverse can explain complicated concepts in a way that simulates emotions and processes, only some of its materials and courses can be taught or displayed in the virtual world. This includes religious and physical activities. Although the benefits of using the Metaverse are still widely acknowledged, practicing may be a different story. For instance, while students can get a great experience by learning about tornadoes or volcanoes in a virtual environment, they do

not need to take special precautions. Conversely, in complicated surgery, patients need to learn all at once, which can be lengthy.

The Metaverse can provide various services, such as educational applications that can explain complicated concepts in a way that simulates emotions and process

es. One of the main issues that can prevent students from using the Metaverse is the practice of learning. For instance, in civil engineering, many topics can be covered in lessons, but practice is more important. Students can experience the effects of errors and failures in real projects and labs. However, practicing in the real world can be different since variables can always be revealed during practice. The complexity of embedded systems and the increasing cost of technology are some of the factors that can prevent students from using this type of technology. Many students will take their studies independently when studying costs become high.

### 3. Method

The preferred method for this study was a mixed approach that combines qualitative and quantitative methods. This method allowed for a more comprehensive understanding and improvement of research issues by taking advantage of both approaches. The quantitative portion of the study was carried out through a questionnaire that the researcher prepared. The case study was used to gather information about the young learners' perceptions concerning the effectiveness of using Metaverse platforms in language learning on the Metaverse.

#### 3.1. Study participants

The researcher collected the demographic information of 50 high school students in Jordanian schools, ages 15-17, during the 2021-2022 academic period.

##### 3.1.1. Demographics of Study Sample

According to McMillan and Schumacher (2001), a case study is a qualitative Research focusing on a single case. This type of research is usually conducted with a limited number of samples. The data collected from the participants are shown in Table one.

Table 1. *Demographics of the study sample*

Variables	Category	F	%
Gender	Female	22	44%
	Male	28	56%
Age	15	5	10%
	16	26	52%
	17	19	38%

The study was conducted on 50 students, 22 (44%) female and 28(56%) male. Regarding their age groups, those aged 16 were the most common participants, with 26 (52%) students, while those aged 15 and above were the least with 5 (10%) participants.

##### 3.1.2. Research Instruments

The researcher used the literature review to develop the interview questionnaire. The quantitative part of the study involved the use of an opinion survey. A structured interview form was also used for the qualitative part. After multiple experts analyzed the questionnaire, it was given its final form.

The questionnaire's first section comprises questions about the participants' demographic information. It also has four questions about the Metaverse. Additionally, six Likert-type questions deal with using the platform in the classroom. The researcher validated the questionnaire's reliability with an accuracy of 0.89.

### 3.1.3. Statistical analysis

The quantitative data collected in this study were analyzed using the SPSS 24 statistical program. The qualitative data were analyzed through the content analysis method. The participants' names and opinions were coded according to the ethical rules.

The data analysis's reliability was calculated using the formula recommended by Miles & Huberman in 2015. The result of the analysis revealed that the reliability value of the data was 86%. Regarding literature, a reliable reliability coefficient of 70% or above is standard for research. Data analysis was conducted to avoid generalizations and comments. Some of the students' views were directly quoted to avoid these.

### 3.1.4. research procedures

The qualitative part of the study involved using an interview form with four questions. The researcher meticulously ensured the questions were flexible, open-ended, and transparent. The experts' opinions were considered before the interview form was created. Following a pilot study, the researcher made necessary adjustments to the questionnaire.

## 4. Results

### 4.1. Questionnaire Data Analysis

The students were asked to assess the educational value of the Metaverse. The results of the survey can be found in Table 2.

Table 2. *The percentages of knowledge of students participating in the study about the metaverse learning platforms*

Variables	Category	f	%
Have you ever used the Metaverse platform before?	Yes	9	18%
	No	41	82%
Would you like to learn different languages using the Metaverse platforms?	Yes	35	70%
	No	4	8%
	Undecided	11	22%



Do you expect that Metaverse platforms will make learning language more fun?	Yes	33	66%
	No	10	20%
	Undecided	7	14%

The study used a five-answer questionnaire to gather information about the various aspects of the Metaverse to learn more about its use in learning language. The study revealed that most of the students (82%) who participated in it had never used the Metaverse platform. However, over 70% of the students said they would like to learn different languages via the Metaverse platform. 66 % of the students claimed that the platform would enable them to learn languages in a fun way.

Table 3 shows that students agree that Metaverse can help them improve their language knowledge. The average score of those who believe it can do so is 3.3, with and p-value of 0.0020. They also think it can make the course more entertaining and motivate them to finish their studies with an average mean of 3.9 and p-value of 0.0000. The study results revealed that most students agree that the Metaverse has educational benefits in learning languages, with a mean of 3.4 and a p-value of 0.0020. However, they need more time to use it in a high school course.

Table 3. *The various aspects of the Metaverse Platforms in language learning*

Variables	mean	p-value
- Metaverse can help me improve my language knowledge.	3.3	0.0020
- The content of the course can be more entertaining with the help of the Metaverse platform.	3.9	0.0000
- Using the Metaverse platform can boost the motivation of those seeking to learn a language.	3.4	0.0002
- The use of the Metaverse platform can be used in various courses at the high school level.	3.2	0.0010
- Shortly, the use of the Metaverse platform in language learning will be widely used in schools.	2.9	0.0000

#### 4.1.1. Interviews' analysis

During the interviews, students were asked about the advantages of using this technology in various theoretical and oral courses. One student noted that it could be used in various language-learning courses.

One of the statements made by the students was that it was better suited for use in theoretical courses than in conversation skills learning; another student noted that it could be used in language learning courses such as those dealing with conversation. While discussing the advantages of using this technology in various theoretical courses, all three students noted that it needed to be more suitable for Education. Three of them also disagreed about using the Metaverse platforms in their lessons. The results of the open-ended question, which was used to gather students' views on the advantages of Metaverse in their lessons, showed that some students stated that it provided a fun learning environment, increased interest in the lesson, and reduced the time spent in class.

One of the students commented on the advantages of Metaverse by saying that it made the classes more fun. Another student noted that it increased the focus on the instructions. Another student said that it could help improve the students' visual understanding. Five of the students involved in the study stated that Metaverse platforms did not provide them with any benefits in the classroom. Eight students should have provided their views on the technology's advantages.

Some students noted that using Metaverse made learning difficult, while others said it was distracting. They also said that it could cause them to lose concentration. These disadvantages could prevent them from maintaining discipline in the classroom. Three students stated that it could cause them to lose focus and negatively affect their relationships. Another student said that it could also ruin their eyesight. Two students noted that the application would only work effectively if the Internet were strong. Another student said the need for more connectivity would prevent students from using the technology efficiently.

#### **4.2. Results summary**

To learn more about the platform's various features, the study conducted a 5-question questionnaire. Most students who participated in the study said they had never used Metaverse. Over 70% of them said they would love to learn a new language using the platform, and over half of them claimed that it would allow them to learn in a fun way.

The students noted that Metaverse helped improve their learning experience by making it more fun. Another said it increased their focus on the instructions and visual understanding. However, five students who participated in the study claimed that the platform provided them with no benefits.

Some of the students claimed that using Metaverse hurt their learning experience. They said it made it hard to focus and could distract them from their studies. Three of them stated that it could also affect their relationships. One student noted that it could affect their eyesight because it blocks their vision. Another student said they need more connectivity to prevent them from using the platform efficiently.

#### **5. Discussion**

The researcher seeks to discover what sets the platform apart and how it perceives its utility. The study was conducted on 50 high school students from Jordan from 2021 to 2022. Using a mixed-method approach, the researcher collected data on the students. Interviews were also conducted after the study. The researchers then tried to answer the questions about the impact of the metaverse platform on the learners' language learning experience.

The study revealed that most students who used the platform had never used it before. Over 70% said they would like to learn a language using it, and more than half said it would let them have fun while learning. The researchers also conducted a 5-question survey to learn more about the platform's various features. According to the students, Metaverse improved their learning experience by making it more fun. It also helped them focus on visual understanding and instructions. However, some of them claimed that it did not benefit them. Some students noted that it made it hard to focus and keep their studies in order. They also said that it distracted them from their relationships. Another student said that they needed more connectivity to use the platform efficiently.

The objective of this study was to find out what young learners think about the efficiency of using Metaverse platforms in language learning and to analyze the various technological changes that have occurred in the field of language learning. ~~In order~~ To gain a deeper understanding of the effects of these changes on the students, various interview forms and questionnaires were used. The study results revealed that students had yet to use the Metaverse before. This is because they need to learn about its various features and are not used to its effectiveness in the classroom. Another reason why they do not use it is that it is not widely used. More research should be done on its effectiveness in teaching and learning (Park & Kim, 2022).

Due to the widespread use of the Metaverse by various technology companies and social media platforms, it has started to attract a wider audience. This has become apparent in computer engineering and other similar areas (Huh, 2022). The study results revealed that most students wanted to use the Metaverse in their classrooms. They believed it would provide them with a meaningful and permanent learning experience. In addition, they said that it would make the classroom fun and encourage them to participate in the classroom (Lee et al., 2022). It will also help them develop their skills in using this technology (Ortega-Rodríguez, 2022).

Metaverse's multiple functions will allow it to quickly gain widespread attention within the education sector. Although students hesitate to use the Metaverse in their studies, they believe it can be used in specific courses. They also noted that it could be used effectively in other fields, such as Education, business, and e-commerce. Virtual and Augmented Reality are two of the most recent innovations in the field of Education (Jovanović & Milosavljević, 2022).

It is also believed that the Metaverse can be utilized in various fields related to these technologies. Although the platform's initial applications were mainly focused on the entertainment industry, it has also been widely used in various academic fields (Lee et al., 2022). For instance, the concept has been used in various subjects, such as music and literature. According to Akour, the Metaverse can be used in various fields, such as mathematics, engineering, aircraft instruction, and more. It is expected to play a vital role in defense, aviation, and health, which will soon become part of our daily lives (Yang et al., 2022).

The study also revealed that the students think the Metaverse can help them improve their knowledge of a subject. They noted that it could also make the content more enjoyable and encourage them to participate in the classroom. They believe that the platform will be used in higher Education shortly. Despite the Metaverse's ethical and technical limitations, it is still considered a valuable tool for boosting student motivation. The study also revealed that the students think the Metaverse can help them improve their knowledge of a subject. They noted that it could also make the content more exciting and encourage them to participate in the classroom. It was also found that the platform can help students increase their curiosity and improve their learning process.

The students also believe that the Metaverse can be used as a support tool for distance learning. It can help them improve their understanding of a subject by allowing them to interact with it at any time and place. The students claimed that the Metaverse could also help improve the classroom's efficiency by increasing students' interest and attention. It can also teach dangerous and expensive topics that augmented reality cannot show.

It is also widely believed that the Metaverse can help students improve their understanding of complex subjects by allowing them to visualize their ideas in three dimensions. This technology could lead to the development of effective and efficient methods for Education. The students also noted that the Metaverse has various disadvantages and technical issues that prevent it from being

used effectively in Education. These include the lack of Internet access, the technical issues related to the application, and the hardware limitations (Hirsh-Pasek et al., 2022b).

Unfortunately, the Metaverse has various negative aspects. Some of these include its addiction to technology and screen addiction. It can also interfere with social life and prevent users from communicating properly (Yang et al., 2022). The students also noted that the malicious and unconscious use of the Metaverse could prevent them from learning. They said it could cause various problems in the classroom, such as noise and disorder.

When choosing the appropriate applications for the Metaverse, the developers must consider the features of the platform and the student level. To prevent these issues, it is essential that the developers thoroughly test the Metaverse's features and applications before they are used in the classroom. It is also recommended that the platform's infrastructure be brought to a level appropriate for the type of environment it is used in (Jovanović & Milosavljević, 2022).

The Metaverse

should also be used to present various concepts, especially expensive or intangible ones effectively. These negative aspects can prevent the Metaverse from being used effectively in schools and create problems for the teachers and students who use it. To ensure that the technology is used effectively, it is essential that the developers thoroughly remove these issues.

When choosing the appropriate applications for the Metaverse, the developers must consider the features of the platform and the student level. In addition, it is essential that the developers thoroughly test the Metaverse's features and applications before they are used in the classroom. This will help prevent potential issues and improve the experience of the users. In addition to expensive or intangible concepts, it is also recommended that the Metaverse be used to present other dangerous or costly topics.

### 5.1. Conclusion

This research aims to gather the students' opinions about the advantages and disadvantages of using Metaverse platforms when learning a language. It also aims to explore their concerns about the platform's practicality. The researcher will look into the features and perceived utility of the platform. The study results revealed that most students who used the Metaverse platform for the first time had yet to experience it. Over 70% of them would like to learn a new language with the platform, and more than half said it would allow them to have fun learning. To learn more about its various features, the researchers conducted a 5-question survey. Many of the students claimed the Metaverse platform negatively affected their learning experience. According to them, it makes it hard for them to keep focused, and it can distract them. Some of them also stated that it affected their relationships. Another student noted that they might need more connectivity to use it effectively.

### 5.2. Recommendations

The goal of this study was to find out what students think about the use of the Metaverse in language learning. It is important to note that the results of the study should be carefully evaluated by policymakers, researchers, and practitioners. Students and educators will use the study results to learn more about the various aspects of the Metaverse and how it can be used in educational settings. They will also be used to develop future studies. The Metaverse is still in its infancy and has yet to be widely used in educational settings.

In the future, researchers should conduct more studies to analyze the Metaverse's effects on variables such as retention, academic performance, and attitude. They will also be able to look into the factors that prevent the Metaverse from being preferred in Education. Besides this, future studies will be able to analyze the student's satisfaction with the technology by looking into their educational level and geographic region.

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### Appendices

#### Appendix A

#### Questionnaire

1. Gender:
  - Female
  - Male
2. Age :
  - 15
  - 16
  - 17
3. Have you ever used the Metaverse platform before?
  - Yes
  - No
  - Undecided
4. Would you like to learn a different language using the Metaverse platform?
  - Yes
  - No
  - Undecided

5. Do you expect the Metaverse platform to make learning a language more fun?
  - Yes
  - No
  - Undecided
6. In your opinion, which of the following statements is correct (you can choose more than one):
  - Metaverse platform can help me improve my knowledge of a language.
  - The content of the course can be more entertaining with the help of the Metaverse platform.
  - The use of Metaverse can boost the motivation of those who are seeking to learn a language.
  - Metaverse can be used in various courses at the high school level.
  - Shortly, the use of Metaverse will be widely used in classrooms.

### **Appendix B** **Interview**

**During the interview, students were asked to answer three questions.**

1. What are the advantages of using the Metaverse platform in language learning?
2. What are the disadvantages of using the Metaverse platform instead of real classrooms?
3. In what part of language learning can Metaverse be used?