ELT TEACHER PERCEPTION ON THE USE OF VIRTUAL REALITY AS LEARNING MEDIA

P. W. A. A. Putra[1], M. H. Santosa[2], I. N. P. H. Saputra[3]

[1,2,3] Unviersitas Pendidikan Ganesha
Singaraja, Indonesia

e-mail: putu.wahyu360@gmail.com, mhsantosa@undiksha.ac.id,
pasek_hadisaputra@yahoo.ac.id

Abstract

This research aimed to investigate the English teachers related with their perception towards virtual reality (VR) as learning media in SMA N 4 Singaraja. The research used a mixed method with an explanatory sequential design. They were 2 English teachers that taught X grade students as the sample of this study. The data were obtained using two instruments they were questionnaire and interview. Based on the validity and reliability checks, there were 6 dimensions used in order to develop statements in questionnaire and 3 of them were obtained from questionnaire to develop an interview guide. The result showed that the teachers' perception toward virtual reality in general was showed as very positive in general result. However, some challenges also appeared during the research, part of them appeared from the students that not quite well while operating the virtual reality device then, other challenges also came from the teacher while they were selecting the available material for the students as well as time-consuming during the preparation when virtual reality was implemented.

Keywords : Perceptions, Teachers, Virtual Reality

INTRODUCTION

The use of technology, in this case, it transformed and became a tools which could help the user perceive issues or even obtaining the knowledge around them with multiple points of view. According to Koehler (2015), TPACK (Technological Pedagogical and Content Knowledge) was a model to approaching, expressing as well as combining three main disciplines they were: first is technology, the second is the pedagogy and the last is content knowledge. Meanwhile, Sanje (2014) stated that, the way of the teacher delivers their material may different from others. It refers to the special appearance of the teacher's behaviors, performances, beliefs, needs or even the professionalizing of the teacher or their background knowledge about the classroom environment. At some point, the teaching style has a vital role in the student learning process. It happens because the learning process itself was the natural differences in learning patterns. Indeed, Zhou (2011) stated that the learning style could be define as the consistent ways of functioning which reflected the underlying causes of learning behavior. As a result, the learning styles from each person could internally depend on their characteristics, in order to understand the new information.

However, today's education should give students the opportunity to conduct themselves with heir interest-based with independent investigations, make the learning process are based on the students not only the teachers. Westberg (2017) stated that Authentic Learning

was a representation of instructional experience in which the students explore the real problem or events in purpose to make the learning relevant. Even more, authentic learning could positively give students a chance to increase their intrinsic motivation, as a result, authentic learning can somehow developing the students' creativity, as well as enhancing their productivity.

Furthermore, motivation was linked to psychological elements which the one that accommodates behavior and the choice-making. While engagement could be defined as energy that was linked with different activities and also tasks. In fact, learning should be fun and have a good flow and fun, for some reason El-Sherif (2016) stated that, fun could be a good reason for representing the outcomes of physical education. As well as the impact of the student who ranked fun could be the main objective in order to participate in physical education. The teachers also hoped that if the students were having class during the course their participation and some point their engagement would increase as well. In the definition of fun, it could be interpret as active involvement with others and a feeling of control, including the theme of fun and enjoyment which then conduct from both students and teachers.

In order to make teaching and learning more fun and enjoyable, the teachers should adapt to the latest technology exist in nowadays era. Since the students nowadays were advance and already familiar in the use of technology. According to Johnston (2017), Virtual Reality (VR) could enhance the learning process, as well as Virtual Reality, could have a main focus for technological, including the way it becomes technology-based and could possibly stimulate the environments by using the main device such as goggles. In addition Virtual Reality itself also comes with 3D graphics that could stimulate the situation for the user in order to enhance the user cognitive ability and learning. Resulting the user had experienced more about the world after they use the device. For some cases, the technology itself could possibly change the future of regular applications.

Since it was new in this country the author was hoping that the use of Virtual Reality could become a trigger for the teacher in order to discover more about the various ICT tools that had a potential for future learning. Therefore, it is very important to investigate about perception of Virtual Reality (VR) as learning media in school, because some of the research also give some result that also argue and positively trust that Virtual Reality will represent more about the context related to the material given by the teacher for the students and yes if there was an issue appear, it would become a challenge for author and also the future researcher in order to make this research more advance and better at some point.

Thus, this research purposed to identify about the teachers perception while using virtual reality as a leaching media, hopefully this new media would become a better or even an alternative choice for teachers to teach English language with a simple usage. Another, this device could also be a better help for students since this kind of device could help them in learning English language and also increase their engagement while it was implemented.

In order to represent a scientific study, several theories used in which related with this research. First of all, According to Furberg (2010) perception explain as the way of perceiving, extracting, and evaluating the stimuli in the cognition by involving experience and beliefs which result as opinions or point of views based on their own perspective. Mostly, perception is containing similar elements such as the way of how human perceiving something, including human senses, human experiences, and human reaction to their environment. However, perception also can be explained as a mechanism of how human perceiving something or object using their senses according to their experiences in order to react and give their insight to a certain thing.

It represents that, perception is basically emphasized on how human get involve with his environment, as well as the way of they understand the knowledge then represent them by using their own point of view. However, understanding on how the students were impressed by the Virtual Reality used during the teaching and learning process, will give another benefit for the researcher. It can somehow

become a huge improvement of the media that is used inside the classroom.

Meanwhile, Alan (2011) stated that there were three main components of perception, they were, first the perceiver which was mean as the person who was experiencing the perception, the perception by this point could be their previous memories related with the present material which was lead them to the next component of perception. The second component was situation, by the term of situation it somehow represent the situational factor around the user such as location, climate or in this point the classroom when the teacher do the teaching for the students.

For the next component it was target, the target itself represented the user personal interpretation after they were experiencing about something.

Meanwhile the virtual reality theories also use from various expert in order to represent a scientific study. Gadelha (2018) stated that Virtual Reality (VR) was kind a device that represent a condition that allowed the user to interact with the object as free as they want. It also came with several components related with the virtual reality they were; first, experience, by this point the experience could be represent as the user feeling after they were using virtual reality and then interact with the object. Second, it was imagination, by this point vr device could represent an object that could increase the user imagination, at some point it also help the user to understand deeply about the material given, in short, the object that being observed by the user while they were inside the virtual world. The third component it was interaction, it meant that vr could help the user to interact with the object that they were observed or interact with, this device would allowed the user to freely observed the object like grabbing them, rotating them, or even playing with them as free as they want.

Also, Minocha (2017) stated that Virtual Reality, was a single user experience, in purpose to make the user become avatar of their own, as well as allowing them to explore the 3D virtual environments also in the mixed reality environment with their own free will as avatar. It made the user free to explore or even interact with the virtual world using virtual reality device.

Meanwhile, Nemec (2017) stated that, Virtual Reality is the tool that provides the user with illusions or even the fictional worlds, made the user see clearly the world which was represent by virtual reality in virtual world. By this case, virtual reality could somehow provide the user with 3D animation that represent about something related with the virtual world while the user was in the virtual world.

Fuchs (2011) stated that, Virtual Reality could give a user a representation of realistic images, sounds, and other sensation which was replicate the real situation or environment. It made the user to explore the environment more freely because they could explore the information not only based on the view but, the object also could be explore from their sound which was also represent the object.

In addition, according to Ghavifekr (2015) the connection between information, communication, and technology (ICT) in education was emphasized on the use of computer-based communication into daily classroom instructional process. As long as the relation of preparing the students for the nowadays digital era, and made the teachers as the main role or the key players in the way of using ICT in their daily classroom. Since the teachers' were not yet capable of using a complex device, a guidance could somehow necessarily for them in order to operate the device properly. For some reasons, some a reliable device were also needed in order to represent a complete learning experience

However, the main purpose or the aim of technology itself was to improve and increase the quality, accessibility and also the cost-efficiency. Next, the terminology of technology itself also refers to benefits from networking the learning which usually in single-step become ongoing and continuous steps which fully support the teaching and learning processes as long as the information resources for both student and also teachers.

METHODS

The researcher applied mixed-method from Creswell (2012). In the research, the explanatory sequential design was used. By this point the data for this research was collected

with two main phases. For the first phase the data was obtain by using questionnaire as the instrument in purpose to collect the quantitative data, then after that, the second phase was interview, this was used for collecting the qualitative data of this research, it also purposed to supporting the quantitative data which was obtained from the first phase. The details was followed:

Diagram 3.1 Explanatory Sequential Design (Creswell 2012)
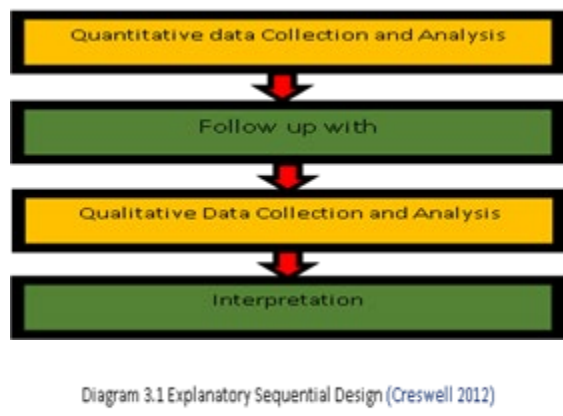
Furthermore, the subject of this study were two English teachers in senior high school, who was taught the same grade, it was students on x grade. Meanwhile the objects of this study were teacher perception while using virtual reality device as learning media. And if the data was not yet supported, more additional data would be obtain from the other subject.

In addition, for this research, the quantitative data from this research would be analyzed using ideal mean score from Candiasa (2010) then after that for the qualitative data the researcher would be using Interactive Model Analysis obtain from Miles and Huberman (1994). In order to make the method explained well, the researcher used a research matrix in order to make the information well-arranged and structured. The matrix in in the following.

Table 1. Research Matrix

	Research Matrix			
No	**Research Question**	**Method**	**Instrument**	**Data Analysis**
1	How do the English	Survey	Questionnaire	Ideal Mean Score

	teachers perceive the use of Virtual Reality as a learning media? What potential problems will teacher face when			Candiasa (2010)
2	learning English aided by Virtual Reality as a learning media?	Interview	Interview Guide	Interactive Model Analysis Miles and Huberman (1994)

FINDINGS AND DISCUSSION

The findings were obtained from the

Table 2. Teachers Perception in Using Virtual Reality

No	Subject	Mean Score	Qualification
1	Teachers Perception	100.5	Very Positive

questionnaire and also interview from teachers. For the first phase a printed questionnaire was distributed in order to obtain the data. The questionnaire contained with 28 items and it was distributed to 2 total number of teachers.

Based on the findings that was analyzed using ideal mean score, the qualification showed that the teacher mean score was 100.5 and qualified as Very Positive.

Teachers perception related to the use of virtual reality as learning media, showed the number by 100.5 which means, the general score of teachers perception was qualified as very positive. At some point the data form questionnaire also then analyzed based on their

dimensions, in which they were total of 6 dimensions, the dimensions were, perceive, situation, target, experience, interaction as well as imagination dimensions. For the overall

Table 3. Teachers Mean Score of All Dimensions

No	Dimension	Mean Score	Qualification
1.	Perceive Dimension	25	Positive
2.	Situation Dimension	18.5	Positive
3.	Target Dimension	18	Positive
4.	Experience Dimension	9	Positive
5.	Interaction Dimension	10	Very Positive
6	Imagination Dimension	7	Very Positive

result, it would be represented on Table 3.

In order to represent clearly about these findings, the researcher also use a diagram that was used for represent the findings from each dimensions, the diagram would be represent as follows:
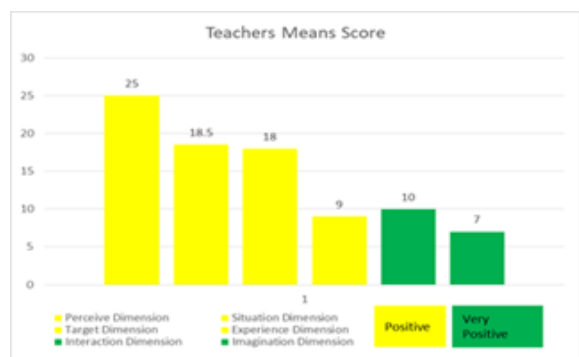

Diagram 2. Teachers Means Score

From six total dimensions, they were four dimensions that categorized as positive based on the table of criteria of mean score. It showed that the teachers had positive perceptions related to the used of Virtual Reality as learning media. Although the overall dimensions were already positive, the researcher found that there was some inconsistency in the response according to the respondent during the interview. However, some of dimension also showed a mean score with significant number and those dimensions were categorized as very positive qualification based on the table of mean qualification, those dimensions were Interaction dimension and Imagination dimension.

However, in order to find more data, the researcher developed the three important dimensions marked previously based on their qualification. The three dimensions are experience, imagination, as well as interaction dimension. The three main dimensions were then developed in to an interview guide in order to gain some specific data. Those dimensions and statements are as follows.

1. Experience means that virtual reality could represent a topic that allowed the students to recognize their findings inside the virtual world using virtual reality and then increasing their knowledge and allowing them to experiencing a new kind of things.
   The statements were:

   a. *Have you ever heard about VR (Virtual Reality) before?*
   b. *Based on your view, how do students feel when learning assisted by VR (Virtual Reality)?*

2. Imagination, with variety of source such as animation, video and interactive games, vr could able to enhance the user experience, involving their senses as well as made the user understand about the material completely.
   The statement was:

   a. *Do you think that learning by using VR (Virtual Reality) can help students develop their imagination?*

3. Interaction, by this term, vr could give user chance to explore more the object freely, like touching, grabbing, throwing as free as they want, the user also had a

full control about the device which was allowing them to do whatever they want with the device while observing the object.

The statements were:

a. *Do you think with VR (Virtual Reality) as a teaching for students it can help the students to dig up more information?*
b. *Based on your view, the use of VR (Virtual Reality) as a teaching can make students explore the material provided from various perspectives?*

The Result of the Interview from The Teachers

During the interview session, they were five questions were asked. Those were developed based 3 dimensions which was experience dimension, interaction dimension, and imagination dimension. The interview was involved 2 teachers in total as interviewees in order to gain more data. In this phase several data was gathered from the students by using interview, also several found also would be explained as follow:

The Interview Result of Experience dimension

In this dimension, the question was made by three statements from the dimension in the questionnaire which related to teachers inside the classroom.

a. The questions from statement number 1 of teachers interview from experience dimension

The statement was: *Have you ever heard about VR (Virtual Reality)?* Based on the questions from the statement one in this dimension, part of the teachers from the interview response that they were ever heard about virtual reality before and a little bit familiar with the term of virtual reality, but the other teacher response that it was the very first time for him of heard about virtual reality because usually this teacher only using the conventional media for teaching.

"I had heard the term VR (Virtual Reality), yes, but I was not too knowledgeable about that. Also I had never been use it in learning" (T1; #51)

It was also added by Teacher 2:

"If it was Virtual Reality maybe this was the first time I had ever heard, even using it in classroom. Because what I usually used just standard media, and the general public was like that" (T2; #56)

b. The questions from statement number 2 from teachers interview from experience dimensions

The statement from the interview was: *Based on your view, how do students feel when learning assisted by VR (Virtual Reality)?* Based on the questions from the statement one in this dimension, most of the teachers who were interviewed stated that the student might be eagerly joining the classroom because the new technology used as a media could motivate them, made feeling enthusiastic in order to participate the class. Besides, since the use of technology is really close to them, this also could stimulate them to join the class.

"Yes, in my opinion, when they are given Virtual Reality they are very enthusiastic, also very excited because maybe this is a new thing for them too, related to this technology, it must be very close to their lives" (T1; #52)

It was also added by Teacher 2:

"In general, if the student uses the normal one, it is normal. But if there is something new and also more interesting, surely the attraction of the first student is a definitely stronger focus on something new" (T2; #57)

At some point, Virtual Reality could represent a detail view of place or even something with 360 degrees view angle make the object freely observed from different view angle, and also since the words would never be enough to deliver the material to the students but with Virtual Reality all the point that going to be delivered to the students would be delivered clearly to them using this kind of technology. And here the statement which can be seen through part of the interview below:

> "Yes of course, very well yes, because if we only imagine something only with words or maybe with ordinary pictures, maybe learning becomes not too full delivered. But when using tools like VR (Virtual Reality) wow it's amazing, plus they could also see things up to 360 degrees, everything even to sea life which is an extraordinary mystery, but when using VR (Virtual Reality) everything could be seen real." (T1; #53)

It was also added by Teacher 2:

> "In my opinion, because of it, VR could give an attraction to the students because it was also delivering something new for students" (T2; #57)

Furthermore, the teachers believed that, the use of Virtual reality could help them to teach the students as well as help them to deliver a real view about something which the students themselves were never going to that place before. Here was the part of the interview:

> "Yes, I think, considering that VR can help them see things clearly, for example, like marine life, which can then be seen clearly with 360 degrees" (T1; #53)

It was also added by Teacher 2:

> "Yes, in my opinion, since VR was certainly new for students it would be more interesting for them so that the focus of students will definitely be better." (T2; #57)

The Interview Result of Imagination dimension

In this dimension, the teachers were asked about how the way the students imagine the concept while using virtual reality as a learning media.

a.   The Question from statement number 3 from the interview related to imagination dimension

The statement from the interview was: *Do you think that learning by using VR (Virtual Reality) can help students develop their imagination?* According to this statement, several responses were found during the interview and most of them were agreed that Virtual Reality could represent a real object which could later develop their point of view related to the place or something.

> "It is very possible, because with real objects given by VR, of course, they can explain more about things they can when using VR (T1; #53)

It was also added by Teacher 2:

> "Oh, yes, it is clear, because, first if they are already interested in a matter of focus there is also certainly able to develop what is in the students themselves, the desire to learn becomes stronger." (T2; #58)

Another findings also said that, Virtual Reality could give a clear information, it because while Virtual Reality was being used, the students would be allowed to explore everything inside the Virtual World freely, that would make them be able to explore the material and construct the information based on their personal point of view, which was very genuine from them.

"And based on my point of view, I think that was possible, given that this technology by this case VR could help them to explain even more information" (T1; #52)

It was also added by Teacher 2:

"For example, when there is something new, it will certainly be a trigger for them to ask questions and make further activities easier because they are already interested in it." (T2; #58)

The Interview Result of Interaction dimension

In this dimension, the teachers were asked about how the way of the students make a kind of interaction by using Virtual Reality as a learning media while in the Virtual World

a. The question from statement 4 of the interview from interaction dimension

The question was made from the statement in the interview which was: *Do you think with VR (Virtual Reality) as a teaching for students it can help the students to dig up more information?* Based on the result based on the interview with the teachers, most of the teachers agreed that Virtual Reality could provide the students with a moving object which later on that will help the students to understand the material given by the teacher clearly during the process of learning. And here is the part of the statements from the interview:

"In my opinion I can believe that in VR reality I see all the things that are there can be seen clearly and can even be seen clearly from all angles" (T1; #55)

It was also added by Teacher 2:

"Obviously, because of that, all the desires of students were revealed and the curiosity of students was also very big towards something new, something more interesting, something better attractiveness must be there, which later will be

many questions that arise from students own." (T2; #59)

b. The question from statement number 5 of the interview from interaction dimension:

The statements: *Based on your view, the use of VR (Virtual Reality) as a teaching can make students explore the material provided from various perspectives?* Then, most of the teachers stated that, they agreed with the statement, which was about the way Virtual Reality help the students to discover more information related from the material given. And for the response it would be displayed below:

"Yes, very yes, it was very helpful, because back again, that was what technology was used for, what human beings or human ability to portray with limited ordinary vision made everything limited. But with VR (Virtual Reality) the information obtained could be deeper, more complete information, and also more extensive." (T1; #54)

It was also added by Teacher 2:

"Obviously, because of that, all the desires of students were revealed and the curiosity of students was also very big towards something new, something more interesting, something better attractiveness must be there, which later will be many questions that arise from students own." (T2; #59)

However, all of the teachers agreed that, Virtual Reality could help them to represent the knowledge given by the teacher because Virtual Reality could help them by providing more about the information related to the material. Virtual Reality could also give them full information related to the material given by supporting them with a real view about place or even something. In some cases, several

students also would not be able to demonstrate their knowledge because some of them are somehow had their own way to demonstrate their information which was based on their personality. It can be seen on the following statements:

> "Yes of course, maybe when assisted with advanced technology, the information that they gain can be more comprehensive because they have been helped by this technology, however, their ability to demonstrate knowledge gained by their passages will differ depending on their respective ways." (T1; #55)

It was also added by Teacher 2:

> "Yes automatically from the teacher first will try to answer all questions raised due to their interest earlier, with the questions from students in addition to the students themselves exploring, the teacher can also explore deeper which can later be developed to explore the material deeper in order to answer things students ask. So the material presented will be more widely explored so that it will automatically be like that." (T2; #60)

CONCLUSION AND SUGGESTION

They were two teachers that become the source of data to this related dimension, they were all teaching the X grade of senior high school in certain school at Singaraja. According to the mean score with total of 6 items on questionnaire, which was perceive dimension, situation dimension, target dimension, experience dimension, imagination dimension and also interaction dimension. the mean score represented as positive qualification, which means that all of teachers agreed that virtual reality (VR) could give a positive impact on the learning for the students as well giving the teacher better choice in order to give material for the students.

At some point, several challenges were also found from the 3 dimensions related to the use of virtual reality as a learning media they were experience dimension, imagination dimension, as well as interaction dimension. at this point, the challenges were found during the research, first of all related with the first dimension, since the virtual reality become a new kind of technology for teacher, it made the teacher hard to operate the device at the first time when virtual reality was first introduced to them, but after a few moments of guidance, the problem was solved because the teacher can now able to operate the device properly.

Another case also came when the students in the virtual world, by this point, when the students using virtual reality in the virtual world, the teacher somehow hard to observed the students movement while inside the virtual world, make the teacher not so sure that the students really learned about the material or they were all just learned something which not become the main focused on this study. By this point, the problem was solved by giving some clear instructions for the students in order to guide them to the main focused of the material in the virtual world, as a result, the material will represent clearly to the students.

Virtual Reality could also give the students a chance to explore more about the material clearly, allowing them to observe so many f things that will lead them to build a deeper understanding, enrich their knowledge while inside the virtual world. Meanwhile a further investigation related with challenges faced by the teachers could be good issue for further research related with the used of virtual reality for teaching English language.

REFERENCES

Alan S. & Gary J. (2011). Perception, attribution, and judgment of others. Organizational behavior: Understanding and managing life at work Vol. 7

Banjar, I. D. A. O. V. J., Santosa, M. H., & Adnyani, L. D. S. (2020). Virtual reality for English learning. In M. H. Santosa (Ed.). Denpasar. Nilacakra Publisher.

Candiasa, I. (2010). Statistik Univariat dan Bivariat disertai aplikasi SPSS. *Singaraja: Unit Penerbitan Universitas Pendidikan Ganesha*.

El-Sherif, J. L. (2016). The value of fun in physical activity. Strategies, 29(2), 3–8. doi:10.1080/08924562.2015.1133353

Fahik, T. (2020). ENGLISH TEXTBOOK : A CULTURE-BASED ANALYSIS. 27(1), 55–64.

Fuchs, P., Moreau, G., and Guitton, P. (Eds.). (2011). Virtual reality: Concepts and technologies. Boca Raton: CRC Press.

Furberg, E. (2010). How do students' perceptions of their education change over time?. *Autumn Semester 2010.*Umea University

Gadelha, R. (2018). Revolutionizing education: the promise of virtual reality. *Childhood Education*, *94*(1), 40–43. https://doi.org/10.1080/00094056.2018.1420362

Ghavifekr, S., Athirah, W., Rosdy, W., & Teaching, W. A. W. (2015). Teaching and learning with technology : effectiveness of ICT integration in schools teaching and learning with technology : effectiveness of ICT integration in schools.

Jesica Vanessa, H., & Ni Komang Arie, S. (2019). Using Short Films for Teaching English While Building Characters. Lingua Scientia, 26(1), 33. https://doi.org/10.23887/ls.v26i1.18846

Johnston, E., Olivas, G., Steele, P., Smith, C., & Bailey, L. (2017). Exploring pedagogical foundations of existing virtual reality educational applications: a content analysis study. *Journal of Educational Technology Systems*, 004723951774556. https://doi.org/10.1177/0047239517745560

Koehler, J. M. (2015). Context and technological pedagogical content knowledge (tpack): a systematic review. *Journal of Research on Technology in Education*, 187-190.

Made Aryawan, A. (2017). Authentic Materials for Biology Students: a Need Analysis in

Esp Teaching. Lingua Scientia, 24(2), 87. https://doi.org/10.23887/ls.v24i2.18811

Miles, M., Huberman, M., & Saldana, J. (1994). Qualitative data analysis: An expanded sourcebook. Retrieved from https://www.google.com/books?hl=en&lr=&id=U4lU_-

Miles, MB. & Hubeman, AM. (1994). Qualitative data analysis (second edition). Thousand Oaks, CA: Sage Publication.

Minocha, S., Tudor, A.-D., & Tilling, S. (2017). Affordances of mobile virtual reality and their role in learning and teaching. *HCI 2017: Digital Make Believe - Proceedings of the 31st International BCS Human Computer Interaction Conference, HCI 2017*, *2017-July*. https://doi.org/10.14236/ewic/HCI2017.44

Nemec, M., Fasuga, R., Trubac, J., & Kratochvil, J. (2017). Using virtual reality in education. ICETA 2017 - 15th IEEE international conference on emerging e-learning technologies and applications, proceedings. https://doi.org/10.1109/ICETA.2017.8102514

Prasetya, I. W. A. ., Putra, I. N. A. J., & Budasi, I. G. (2019). Teachers' Perception in Using Technological Pedagogical Content Knowledge in Teaching English. Lingua Scientia, 26(2), 60–68. https://doi.org/10.23887/leju.v2i1.20273

Putu Tressya, S., Sudirman, S., & I Putu Indra, K. (2017). the Effect of Using Word Clap Game on the Vocabulary Mastery. Lingua Scientia, 25(1), 1. https://doi.org/10.23887/ls.v25i1.18814

Sanje, G. (2014). The effects of teaching style and internet self- efficacy on instructors' attitudes toward online education in higher education. *4*(7), 35–43.

Santosa, M. H., Putra, M. A. M, Banjar, I. D. A. O. V. J., & Permana, I. K. A. P. A. (2020). Developing virtual reality-based English learning media for teaching young learners in EFL context. In F. Dewi (Ed.).

Can technology enhance language learning? Revisiting the real practices (pp. 9-18). Indonesia Enhanced Language Learning.

Setyawati, N. M. Y., Adnyani, L. D. S., & Piscayanti, K. S. (2018). the Analysis of Efl Learning Strategy of the Visually Impaired Junior High School Students in Slb Negeri 1 Denpasar. Prasi, 13(2), 23. https://doi.org/10.23887/prasi.v13i2.164 49

Westberg, K. L., & Leppien, J. H. (2017). Student independent investigations for authentic learning, 41(1), 13–18. https://doi.org/10.1177/1076217517735 354.

Zhou, M. (2011). Learning styles and teaching styles in college english teaching. *International Education Studies*, *4*(1), 73–77.