Virtual Reality Methods in Teaching Front Office Practices Post Covid-19 Pandemic (Case Study in Hotel Management Study Program)

Veronica Halim[1], Joseph Aldo Irawan[2], Emik Rahayu[3], Izza Ulumuddin Ahmad Asshofi[4]

[1,2,3,4] Dian Nuswantoro University
[1]313202000323@mhs.dinus.ac.id

KEYWORDS	ABSTRACT
Teaching Methods Virtual Reality Front Office	The rapid development of technology in the 4.0 era forced all activities to switch from conventional activities to digital activities. This has also penetrated the world of education, one of which is at Dian Nuswantoro University Semarang. As a university that upholds technological developments, of course UDINUS wants to design an idea to help the teaching and learning process to be more optimal. Teaching methods on an international scale have begun to use VR (Virtual Reality) media as a learning method. One example of the application of this technology can be used in front office courses because it can be done online. This research uses a qualitative descriptive method assisted by data collection through a literature study. The results of this study will find out how to apply learning methods to the front office and what practices can be done through VR media. Thus, UDINUS can optimize the use of technology in lecture activities and be able to attract international interest.

INTRODUCTION

The world of education during the current pandemic is a hot topic of discussion. All of this is based on changes in the teaching and learning process that are affected by the ongoing pandemic. Lecturers or teaching staff who have never previously done online or virtual learning are forced to change the conventional way of learning to online or virtual learning (Irawati, 2020). This is a big obstacle for some lecturers in Indonesia when they have to change their teaching methods or methods from conventional to (offline) to online. For example, at Bina Darma University where in the implementation of the online teaching and learning process, there are several obstacles experienced by lecturers or teaching staff such as: facilities and infrastructure, student responses related to the teaching and learning process, and supporting technology in the implementation of the virtual teaching and learning process (Sari, 2020). The second example is the application of virtual learning at Darma Cendika Catholic University also experienced problems where lecturers complained about the ongoing online learning system because it resulted in student saturation in participating in online learning, decreased student scores, decreased student loyalty, and faculties could not compete with competitors (Irawati, 2020).

Many complaints about the online teaching model that occur today, not only from the teaching staff, but also from students who feel the difficulty of this online method. All of this is due to the difficulty of learning methods that from the beginning used the teacher method as a center, now forced by an all-online situation, where students must play an active role in the KBM process. All of this has a considerable influence because the learning model applied in Indonesia requires visual appearance to easily understand something. The choice in the teaching and learning process, which previously used a lot of Teacher Centered Learning (TCL), during the pandemic which forced the situation to be in an online teaching method that forced teaching staff or lecturers to have to change their way of teaching to Student Centered Learning (SCL) which is also an obstacle to its long-term implementation if without supporting tools or infrastructure. Therefore, the VR (Virtual Reality) learning method emerged which was engaged by the above problems so that it began to be applied in the teaching and learning system in the world of education. The use of VR itself in the KBM process

(Teaching and Learning activities) is still rarely used en masse by all universities, but there have been experiments at the elementary and secondary school levels that state that learning using VR media has an influence on learning outcomes (Pamungkas, 2020). The VR learning method itself has many benefits in its use in the KBM process, judging from the results of research (Pratama, 2019) it was found that students' desire to explore VR applications in the KBM process and the delivery of material could be fun and better understanding of students. After it was known, the many advantages of KBM using VR media, an overview of the use of VR in KBM for vocational schools was born, which was tested in the front office field of Dian Nuswantoro University Semarang. In the presentation process, it was found that there were several formulations in the form of how it was implemented in vocational schools such as front office practice at Dian Nuswantoro University Semarang and what needs to be prepared to help the implementation process in the needs of front office practice at Dian Nuswantoro University Semarang.

METHOD

The research method used in writing this scientific paper is a qualitative descriptive method and is assisted by documentation techniques. According to Arikunto in Thabroni (2021) descriptive research is research intended to investigate circumstances, conditions or other things that have been mentioned, the results of which are presented in the form of research reports. According to Sugiyono in Trianto (2015) the document is a record of events that have passed.
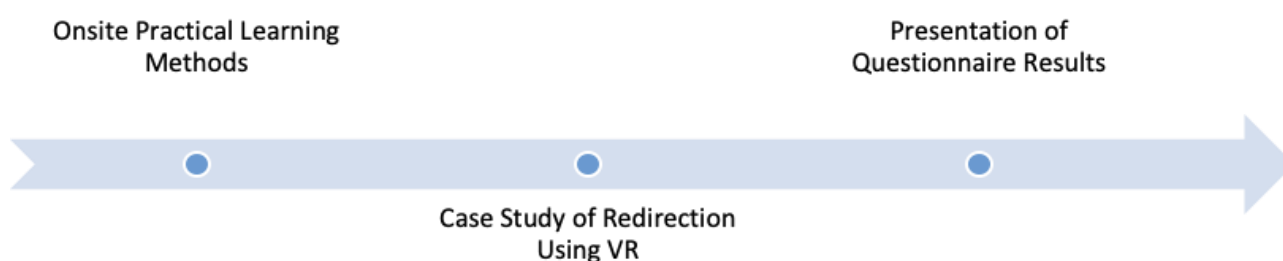

Onsite Practical Learning Methods

Presentation of Questionnaire Results

Case Study of Redirection Using VR

Figure 1. Research Method
Source: Researcher, 2022

RESULTS AND DISCUSSION

Virtual Reality

The use of the term virtual reality (VR), in this day and age is no stranger to hearing. Virtual reality has been widely used in various fields that help human life in today's modern era. VR itself is a modern technology that is one of the pavers of the road to the future digitalization era. According to Yudi (2014) Virtual-Reality is a technology that has made a big difference to the history of human thinking and is currently a trend to help improve the quality of performance and products. The vr realization process relies on several senses possessed by humans such as the sense of sight, sense of hearing and sense of touch. It aims to get the maximum VR usage experience.

The process of using the five senses is able to help VR users to feel a real experience even though it is only a digital-visual. The images produced by VR are usually 3-D models which are very clearly visible like real objects in the real world. VR, according to Pamungkas (2020), has important parts that help vr systems to function optimally, including:

1. *Input Device*

   This input device is part of the initial process of using a VR system where in this process, the user will use a tool that has been made according to the needs of using the VR system to be used appropriately. Usually the input device can be a 3D mouse, joystick, pointer, and many others.

2. *Virtual Reality Engine*

   VR Engine itself can usually be interpreted as a computer, where the function of this computer is to receive, process, and store data. In addition, the computer also functions as an interface between users in the network using input-output devices in the process of using it through certain programs / application systems.

3. *Output Device*

   The output device is a tool used to receive signals from previous processes and output previously sent realities that have been processed in the form of images, audio, and so on so that the user's sensing can be perfectly aroused.

Utilization of VR in FO Teaching

The use of VR in the world of education has begun to be echoed since the existence of this pandemic, all of which are sought as a way out for educators so that the teaching and learning process is not hampered. However, in the reality of the field, there are still several problems faced in the world of education in Indonesia, including (Angrayni, 2021):

1. Low service in the field of education in Indonesia.
2. Low quality of education in Indonesia.
3. Low quality of higher education in Indonesia.
4. Low literacy skills.

Coupled with economic constraints and different supporting technology infrastructure in each region, it is also an obstacle in education in Indonesia (Lubis, 2020). Therefore, VR technology emerged that is suitable for assisting in the KBM process where VR produces intensive visualization of information. The application of VR enhances the experience of real and pseudo-space collaboration as a contribution to education (Kusumadewi, 2019). The existence of this virtual reality-based learning media has a very attractive appearance and is the latest application in the world of technology (Supriadi, 2019) able to support the interest in learning from students to better understand the lessons given.

VR itself in vocational learning can be utilized optimally, because vocational learning requires practices, not just theory. This is what makes the use of VR in the world of vocational education will greatly help KBM according to its needs. The hologram program, which is included in one of the VR programs, will be excellent among students because it makes it easier to capture the lessons given. How to use Virual Reality (VR) technology is quite simple only with the help of smartphones and google cardboard which are sold at a fairly affordable price (Ariatama, 2021). Now, after the help of modern technology in the form of VR, what is left is how to implement it for the world of education in vocational schools so that it is optimally useful and does not invite financial losses.

Front Office Teaching and Learning Activities at UDINUS Semarang

Teaching and learning activities in the UDINUS hospitality management study program were carried out conventionally before the pandemic. In connection with the emergence of the pandemic, the entire learning

model is gradually heading towards the direction of online. This is a challenge for lecturers who have to create new learning models so that students continue to get lessons that are in accordance with their achievement targets. The learning models offered by the lecturers are also very varied and interesting, such as (Dima, 2021):

1. Webinar method with hotel FO activists (Sharing Session)

   The implementation of this webinar method is sought to increase the interest of students to want to explore this course. The resource persons concerned are both from alumni and someone who has more experience in the FO field.

2. Method Role play as a guest and FO Attendant

   The use of the role play method itself is a teaching method where students are required to be able to play a role in these teaching activities. The process of this method will be to assess the soft skills of each individual student in application in the field.

3. Online teaching via KULINO (UDINUS Student Online Lecture Website)

   The use of the platform that has been provided by UDINUS itself to facilitate the provision of information and teaching and learning activities in the form of collecting assignments and attendance for both lecturers and students.

4. Distance Learning Methods Through Google Sites, LMS, Zoom, Gmeet Applications

   The use of digital media as a medium for teaching online hammering digital platforms as above is the right choice during a pandemic. In addition to the convenience offered, there are also many interesting advantages so that the selection of digital platforms is increasingly in demand for learning media. Referring to the teaching and learning activities process of Front Office courses, students gave quite varied responses in responding to the teaching methods used by lecturers when teaching front office courses.

This is evidenced by the results of the questionnaire tested in class 3.1 class of 2021. The results of the questioner include:

1. FO practical learning method: 95% (19 students) chose offline, and 5% (1 student) chose online, most students chose to learn offline for the deepening of FO material, because offline learning is more understandable and captured by students.

2. Percentage value of practical activities in UDINUS: 65% (13 students) stated that practical activities were good, and 35% (7 students) stated that practical activities were not good.

3. Getting to know VR (Virtual Reality): as many as 70% (14 students) stated that they are familiar with VR technology, and as many as 30% (6 students) do not know VR technology.

4. Presentation of students who want to use VR as a learning method: 85% (17 students) want to use the learning method with VR, and 15% (3 students) do not want to use the learning method with VR.

5. Use of VR in remote FO practice: 85% (17 college students) want to use VR for remote FO Practice, and 15% (3 students) do not want to use VR for remote FO Practice.

Based on the results of the questionnaire, it shows that the score for offline FO practice learning methods is 95% (19 students) which shows that students are more interested in participating in FO practice offline. While the percentage value of practical activities in UDINUS of 65% (13 students) stated that practical activities were good, most of the students as many as 70% (14 students) were familiar with VR technology. As many as 85% (17 students) want to use learning methods with VR, and want the use of VR for FO practice remotely, this shows the practice model is an option for teaching.

The implementation of KBM which is now valid in a hybrid manner (full offline only applies to vocational education) itself because the pandemic has been pursued as well as possible by UDINUS Semarang and has a positive response, these learning activities using the SCL method have proven successful based on research

results that show students are more active and participatory in the learning process using the SCL method (Muzakki, 2021). Referring to the responses of 32 students from the four questioner schemes presented had positive results, although it was still found in scheme number two, as many as 25% of students preferred to learn theory. Most students choose to use the SCL method of practice because it is easier to understand the teaching, but for students who choose for theory, it is found that they are more suitable using the TCL method. The habit of being led by lecturers to find out the teaching material is still a habit for related students. The majority of students who choose the SCL practice method feel that this method makes it easier for them to understand the theory and spurs them to be able to process the soft skills they have indirectly. The process of implementing the SCL method itself online was still found to have obstacles during teaching and learning activities such as:

1. Signal difficulty.
   This signal problem is a common problem caused by several factors such as: providers, the surrounding environment (tall buildings or remote forest), the strength of signal capture towers and many others.
2. Attract students at the beginning of the semester to be interested in FO learning.
   Efforts to foster interest in FO learning can be said to be still rarely in demand due to the lack of related track records in the outside world. This makes ordinary students who don't know the benefits they offer less interested.
3. Student habits for off camera.
   Habits that are formed due to a sense of insecure and other activities outside the KBM process during the activity that make the habit of off cam appear to get around the class. Although such actions are basically inappropriate actions.

The difficulties above, are commonly heard, but it is a challenge for the lecturer to change the above obstacles towards a better direction in the future in the process of time travel.

VR Implementation in Front Office Practical Courses

UDINUS Semarang University is the best private campus in Semarang, Central Java. The campus is known for being a pioneer in the modern use of digital media in the implementation of its education for students. The use of VR in UDINUS itself has actually been used for virtual campuses which can be accessed via the following link: https://tour.dinus.ac.id/ this method was used as a way to get to know the campus virtually for students at past campus introduction events. UDINUS has proven that the use of VR is the right choice of path for its learning media in the current post-pandemic period.

Similarly, its implementation should begin to be developed into the teaching and learning process to make it easier for students to understand every learning provided by lecturers. Based on the learning materials in the front office department in the UDINUS curriculum, it was found that there are several sub-chapters in practical teaching that are suitable for using VR media such as: greeting the guest , check-in process, concierge practice, guest relation practice and others. The way to implement the above practice model to use VR are:

1. Each student enters the available program and chooses a role according to their choice.
   This activity is the initial stage to gather students before starting the program simultaneously so as not to be left behind in following the class that takes place.
2. Scanning personal data to facilitate the movement of individual gestures.
   This data scanning process is used usually to create a special ID that can be used privately by related students during their class hours to facilitate the KBM process.
3. The use of google cardboard to facilitate vision media and to freely move in a role.

With these tools, the user experience will be more perfect and present more comfort during KBM activities.

4. *Lecturers who act as masters, can provide tests related to cases in the program that has been provided.*
   At this stage, it can be a tool for lecturers in the program so that the assessment process can be carried out in real-time and the results can be seen directly by related students if needed.

5. *These activities can be recorded and can later be reviewed together so that they become good learning materials*
   The help of this record mode can help for the process of reviewing the learning outcomes of each student and can be used as teaching material also for the future so as not to repeat the same mistakes in the future.

For preparations that must be considered by the teaching lecturer, among others, are

1. Good internet network.
   To get a good internet network, it can be helped by using a provider that supports it in their respective areas so that it can support the KBM process to run smoothly.

2. Software or programs that help practice through VR.
   The preparation of the program or software itself is the basis of all KBM processes because this KBM process is very dependent on the program to be able to implement the VR method.

3. Good voice capture in the form of voice recognition to facilitate the practical process.
   The use of hearing aids and input devices for voice is the key to helping the smooth running of kbm activities of the VR method so that at the time of log-in can be assisted with the mode.

4. Hardware in the form of VR glasses and controllers.
   The use of tools in the form of VR glasses and controllers themselves is used to achieve maximum user experience and create a real-world atmosphere in order to get real-world experience through the virtual world.

5. Adequate storage space to store large enough data.
   In connection with the amount of memory required to use and create VR programs, the service provider of this program, which is UDINUS, is expected to provide enough space to allow many users simultaneously to access when KBM activities take place later.

6. Adequate use of the device.
   The use of this adequate device is used to support a series of supporting media when using the VR method in the KBM process. VR itself usually has standard specs that must be met in order to be said to be feasible to access the VR programs provided later.

CONCLUSION

The transition of TCL learning methods to SCL in the post-pandemic period has resulted in many new methods in the KBM process, especially those that occurred at UDINUS Semarang. The change is heading in a good direction, especially in the front office practice course which is the subject of research. Although there are still obstacles in it in general, the current way of teaching has proven to be good. In order to support the KBM process to the fullest, the idea of using the VR method emerged as a way out of innovation in teaching methods that can be applied to front office practice at UDINUS Semarang. This transition preparation is able to help lecturers achieve the maximum achievement targets of each individual student because it is assisted by many ways to learn through the VR media. The implementation of distance learning itself will be made easier by the existence of VR media for each student so that they will get the same capacity in practical teaching. In the discussion above, it is also explained about the stages to use VR as a learning method along

Halim, Veronica, etc., (2022). Virtual Reality Methods in Teaching Front Office Practices Post Covid-19 Pandemic (Case Study in Hotel Management Study Program). *STRUKTURAL (Seminar on Translation, Applied Linguistics, Literature, and Cultural Studies).* 1 (01), 454—461.

with what needs to be considered by the lecturer concerned so that the preparation process to the front office KBM process at UDINUS Semarang can run as it should. Thus, VR can really be implemented optimally in the field of education and become a long-term investment model for the world of education.

REFERENCES

Angrayni, A. (2021). *EDUCATIONAL PROBLEMS IN INDONESIA*. Padang.

Aritama, S., Adha, Mohammad. M. A., Rohman, Hartino, A. T., & Ulpa, E. P. (2021). The Use of Virtual Reality (Vr) Technology as an Effort to Escalate Interest and Optimize in the Online Learning Process During a Pandemic. *Semnas FKIP* . Lampung: Lampung University.

Irawan, J. A. (2021, December). *Teaching Method in Front Office at UDINUS Semarang*. Semarang.

Irawati, D. Y., & Jonatan. (2020). Evaluation of the Quality of Online Learning During the Covid-19 Pandemic: A Case Study at the Faculty of Engineering, Darma Cendika Catholic UniversityEvaluation of the Quality of Online Learning During the Covid-19 Pandemic: A Case Study at the Faculty of Engineering, Darma Cendika Catholic University. *Jurnal Rekayasa Sistem Industri* , *9*(2), 135–144.

Kusumadewi, N., Nurizki, A. F., Pratama, A. B., & Zukhaira. (2019). MVR ABBAS : MULTIMEDIA VIRTUAL REALITY GAME SPEAKING ARABIC FOR JUNIOR HIGH SCHOOL STUDENTS. *Arabi: Journal of Arabic Studies*, *4*(1), 45–54.

Lubis, W. (2020). ANALYSIS OF THE EFFECTIVENESS OF LEARNING IN DISTANCE LEARNING (PJJ) DURING THE COVID-19 PANDEMIC. *JURNAL PENDIDIKAN BAHASA DAN SASTRA INDONESIA*, *5*(1), 132–141.

Muzakki, M. N. S., Daryono, Damayanti, A. M., & Mujiwati, Y. (2021). THE EFFECTIVENESS OF THE STUDENT-CENTERED LEARNING METHOD IN THE LEARNING MANAGEMENT SYSTEM AT PGRI WIRANEGARA UNIVERSITY. *NATIONAL SEMINAR: OPPORTUNITIES AND CHALLENGES OF DIGITAS LEARNING IN THE INDUSTRIAL ERA 4.0 TOWARDS THE 5.0 ERA*, 263–272.

Pamungkas, D. S. (2020). *THE EFFECTIVENESS OF VIRTUAL REALITY AND AUGMENTED REALITY MEDIA ON THE LEARNING OUTCOMES OF GRADE IV STUDENTS IN SCIENCE SUBJECTS AT SDN MLATIHARJO 01 SEMARANG*. Semarang.

Pratama, I. M. Y., Sindu, I. G. P., & Santyadiputra, G. S. (2019). Virtual Reality Application Development Knowing Various Objects Around the House in English (Case Study: SD Cerdas Mandiri Denpasar). *KARMAPATI* , *8*(3), 544–553.

Sari, A. P. I., & Mayrita, H. (2020). VARIATIONS IN INDONESIAN LANGUAGE LEARNING FOR BINA DARMA UNIVERSITY STUDENTS DURING THE PANDEMIC. *Bina Edukasi*, *13*(2), 66–75.

Supriadi, M., & Hignasari, L. V. (2019). Pengembangan Media Virtual Reality Pada Muatan Pelajaran IPA Kelas VI Sekolah Dasar. *JTP - Jurnal Teknologi Pendidikan*, *21*(3), 241–255. https://doi.org/10.21009/jtp.v21i3.13025

Thabroni, G. (2021, December 7). descriptive research methods. Retrieved October 21, 2022, from Serupa.id website: https://serupa.id/metode-penelitian-deskriptif/.

Halim, Veronica, etc., (2022). Virtual Reality Methods in Teaching Front Office Practices Post Covid-19 Pandemic (Case Study in Hotel Management Study Program). *STRUKTURAL (Seminar on Translation, Applied Linguistics, Literature, and Cultural Studies).* 1 (01), 454–461.

Trianto, M. (2015, June 12). RAYENDAR. Retrieved October 21, 2022, from Blogspot.com website: http://rayendar.blogspot.com/2015/06/metode-penelitian-menurut-sugiyono-2013.html