



Silvanus Alvin

Universitas Multimedia Nusantara Corresponding email: <u>silvanus.alvin@umn.ac.id</u>

ABSTRACT

Online learning has grown in popularity in Indonesia, particularly among people looking to gain new skills or improve their existing knowledge. The COVID-19 epidemic has exacerbated this tendency by necessitating the use of remote learning approaches. This study aims to discover students' initial expectations when they enroll UMN and the reality after they become UMN online learning students The urgency of this research is based on the fact that the dropout rate at UMN is roughly 28%. Dropout may be harmful to both the individual student and the institution, thus it is critical to address the underlying reasons of dropout and develop effective ways to encourage student success and retention. The gap between expectation and reality is crucial to understand because it can influence the creation or modification of policies designed to protect students from dropping out. This qualitative research applies data collection using FGDs involving 40 UMN online learning students were surprised to learn about the SKKM policy, which they did not expect. The majority of students who are workers admitted that it was difficult to set aside time to do additional activities to collect SKKM points.

Keywords: UMN Online Learning Program, Student Retention, Student Attrition Rate, Distance Learning.

1. INTRODUCTION

In recent years, online learning has emerged as a popular mode of education delivery in Indonesia (Alvin & Dewi, 2022). The proliferation of digital technologies and the increasing accessibility of the internet have enabled educational institutions to offer online courses and programs to a larger number of students (Astawan et al., 2021). As a result, the popularity of online learning has grown significantly, particularly among those seeking to acquire new skills or enhance their existing knowledge. This trend is further bolstered by the COVID-19 pandemic, which has necessitated the adoption of remote learning methods as a means of maintaining continuity in education (Mansyur, 2020). The Ministry of Education and Culture (Kemendikbud) noted that 95 percent of universities in Indonesia have conducted learning from home. This is in accordance with Circular Letter Number 4 of 2020 concerning the Implementation of Education during the Emergency Period of the Spread of Covid-19 (Widyanuratikah, 2020). The total number of students who are pursuing their education online has also increased in recent years. For instance, entering early February 2023, there were 133 thousand people making admissions or registrations as prospective new students of the Open University (UT) for the even 2022/2023 semester. Through an official release the number of UT students has now touched 482 thousand students (Harususilo, 2023).

The potential of distance learning in getting many students makes many campuses finally decide to have online learning programs. One of the campuses that also opened a distance learning program is Universitas Multimedia Nusantara (UMN). UMN's Strategic

Silvanus Alvin

Communication Distance Learning Program is one of UMN's commitments in providing learning method services that innovatively equip students not only with theoretical knowledge, but also with direct practice (Heriani, 2020). The biggest challenge of distance learning is the retention rate of its students. Student retention in online learning university refers to the ability of an educational institution to keep students enrolled and engaged in their online courses and programs until they successfully complete their studies (Gaytan, 2015). Student retention is an important metric for online learning universities, as it impacts both the financial viability of the institution and the educational outcomes and success of their students.

The lack of accountability and structure in an online learning environment can also impact student retention (Bawa, 2016; Park & Yoo, 2021). In a traditional classroom-based environment, students are often required to attend class at a specific time and are held accountable for their attendance and participation. In an online learning environment, students may have more flexibility in terms of when they complete their coursework, which can lead to procrastination and a lack of motivation to stay engaged with the course material. If the university is unable to take care of its students by providing satisfactory services, then losing students can have serious negative implications. Smith's (2010) research states that the dropout rate of distance learning students is in the range of 40-80%. Meanwhile, at UMN, the dropout rate for online learning students is around 28 percent. Even though it is still in the average number, as a new study program that still needs students, this requires serious attention. Dropout rates in online learning universities can be higher than those in traditional classroom-based learning, as the lack of social interaction and community building, as well as the absence of a structured classroom environment, can make it more difficult for some students to stay engaged and motivated in their studies.

Dropout can have negative consequences for both the individual student, who may not achieve their educational goals, as well as the institution, which may suffer financially and in terms of their reputation. Addressing the underlying causes of dropout and implementing effective strategies to support student success and retention are critical for online learning universities to ensure that all students have access to high-quality education and are able to achieve their academic goals. Apart from individual academic constraints, the student expectation factor is an important value to know so that students do not stop halfway or drop out (Bourdeaux & Schoenack, 2016). Therefore, this research seeks to find out the initial expectations of students when entering UMN and the reality when they become UMN online learning students. The gap between expectation and reality is important to understand because it can contribute to making or changing policies to keep students from dropping out.

2. LITERATURE REVIEW

Student's Expectation in Online Learning University

Online learners have unique expectations that differ from those of traditional classroom-based learners. By understanding and addressing these expectations, universities can create a positive and engaging learning experience for their online learners, resulting in increased student retention rates and improved student satisfaction. The first expectation of online learners is flexibility (Müller & Mildenberger, 2021). Students expect to be able to access course materials and complete assignments at their own pace and from any location with an internet connection. This is especially important for non-traditional students, such





as working adults or those with family obligations, who require flexibility in their schedules. The ability to balance coursework with other personal responsibilities is a key factor that attracts students to online learning. The second expectation of online learners is clear communication (Plummer et al., 2021). Online learners rely heavily on digital communication tools to stay connected with their instructors and peers. They expect instructors to be responsive to their questions and concerns, and to provide regular feedback on their progress. Students also expect clear and timely communication regarding course policies, assignment deadlines, and other course-related information.

The third expectation of online learners is high-quality course materials (Annamalai et al., 2022; Chaeruman, 2018). Students expect course materials that are engaging, interactive, and accessible. Multimedia content, such as videos, simulations, and interactive quizzes, are preferred by students, as they help to actively engage them with the course material. Students expect course materials that are up-to-date and relevant to their field of study. The fourth expectation of online learners is strong technical support (Peisachovich et al., 2020; Xu & Jaggars, 2013). Online learners expect to have access to user-friendly technology platforms that support their learning needs. They expect technical issues to be resolved quickly and efficiently, and technical support to be available 24/7. Students also expect technology platforms to be compatible with various devices and operating systems. The fifth expectation of online learners is opportunities for collaboration and interaction (Tasnim Wan Hussin et al., 2019). Although online learning is often considered a solitary experience, students still expect opportunities to collaborate and interact with their peers and instructors. They value discussion forums, group projects, and other collaborative activities that enable them to share their ideas and learn from others.

7 Factors of High Attrition Rates in Online Learning University

Although online learning has become increasingly popular in recent years due to its flexibility and convenience. It faces a big challenge and that is high attrition rates, which refer to the percentage of students who drop out of their online courses or programs before completion. In this essay, we will define high attrition rates in online learning universities and explore the reasons why they occur. High attrition rates in online learning universities are defined as the percentage of students who withdraw from their online courses or programs before completion (Bawa, 2016). The attrition rate is calculated by dividing the number of students who dropped out by the total number of students enrolled in the course or program. High attrition rates can vary depending on the institution, course, and program, but they are generally higher in online learning compared to traditional classroom-based learning. According to Bawa (2016) there are seven factors that determine high attrition rates in online learning program. Firstly, misconception relating to cognitive load. Online learning is a new platform for learners, but they still choose it based on several criteria and assumptions. Common assumptions related to online learning are that it will be less demanding on time, require less effort to manage workload, and will not disrupt the learners' lifestyle. Shay and Rees (Shay & Rees, 2004) research data indicate that students choose online courses based on considerations such as convenience, flexibility, opportunity to fuse their current lifestyles to their desire to study, availability of programs, and affordability.

International Journal of Educational Review, Law And Social Sciences |IJERLAS E-ISSN: **2808-487X** | <u>https://radjapublika.com/index.php/IJERLAS</u>

Volumes 3 No.3 (2023)

Silvanus Alvin

However, when learners are not familiar with the online educational delivery system, they are more apt to be frustrated with the disparities existing between the longterm memories of their face-to-face course associations and the new realities of online learning. Additionally, online courses allow for less student-teacher interaction, as opposed to face-to-face, and learners tend to communicate with their instructors more to get help with a problem and less to take actual guidance to facilitate their learning. Secondly, social and family factors. The reasons for high attrition rates in online classes could be a combination of social factors, as well as the attitude, aptitude, and motivational threshold of the students. Family commitment and social obligations of the student could be contributing factors in low retention. Thirdly, motivational factors. High attrition rates in online classrooms can also be attributed to motivational factors. Because online courses are mostly self-directed and self-paced, motivation, or a lack thereof, can be a decisive factor in attrition. Motivation and responsibility are intimately connected to student retention in online programs. The overall course design, as well as the students' individual aptitude and attitude towards learning and technology, can all have a direct impact on motivation in online courses.

Fourthly, technological constraints and digital natives. The term "digital natives" is used to describe learners who may be familiar with popular technology but are not conformable with educational technology (Lindgren, 2017). Studies support this idea and indicate that student satisfaction related to the overall course design is a key concern and determinant in student retention. Online learners prefer to be online for accessing information, getting entertainment, and socializing. However, they do not possess the skills required to use technology for learning. Almost all participants were familiar with sites such as Facebook and YouTube, but were less conversant with teaching/learning technologies such as wikis, blogs, Google Docs, Movie Maker, and Photoshop. Additionally, they were unfamiliar with concepts of cloud computing. This can lead to students dropping the course before they have the opportunity to become comfortable in the online learning. Fifthly, lack of instructor understanding of online learners. many instructors in online learning may lack a clear understanding of their online learners. They may not fully appreciate the unique challenges and opportunities presented by online learning, such as the need for clear and timely communication, the importance of feedback and support, and the need for engaging and interactive online content. The lack of instructor understanding of online learners can have a negative impact on the success of online courses. For example, online learners may become disengaged, frustrated, and demotivated if they feel that their instructors do not understand their needs and challenges. They may also struggle to adapt to the online learning environment, which can lead to poor performance and high attrition rates.

Sixthly, faculty limitations of using technology. While the use of technology has become essential in many areas of education, some faculty members may struggle with incorporating technology into their teaching practices. This is particularly true for digital immigrants, or individuals who grew up without technology and may struggle to adapt to new digital tools and techniques. One of the main challenges faced by digital immigrants is a lack of familiarity with digital tools and techniques. Many digital immigrants may not have grown up using computers or other digital devices, which can make it challenging for them to learn new technology. They may also be hesitant to use technology in their teaching, either due to a lack of confidence or a belief that traditional teaching methods are





more effective. Lastly, institution limitations to training faculty. Effective use of technology in education requires instructors to have a certain level of knowledge and expertise in the use of technology. However, not all institutions provide adequate training and resources to their faculty members to help them effectively integrate technology into their teaching practices. One of the main limitations that institutions face is the lack of resources available for training faculty members. This can include a lack of funding for professional development opportunities, limited access to technology integration. Without these resources, it can be challenging for institutions to provide the necessary training and support to their faculty members to help them effectively use technology in their teaching. Bawa's (2016) factors of the attrition rate is still too general. In the context of UMN, further in-depth and contextual research is needed.

3. RESEARCH METHODS

This research is considered as qualitative study, because it uses social phenomena as its research objects. Additionally, the nature of this research is exploratory because the phenomena being studied is one for which there is currently a dearth of knowledge as well as suitable explanations (Hennink, 2014). This research employs Focus Group Discussions (FGD) for effective data gathering. According to Hennink (2014), FGD are interactive discussions between participants about a particular subject that are facilitated by a moderator, take place over a predefined period of time, and are done to gather different points of view on the study topic. FGDs are not a series of interviews conducted simultaneously. For Hennink (2014), the FGD process involves a discussion that is built on rationality and ultimately allows for a collective narrative that goes beyond personal views on the topic. In addition, where there are differences in views, FGDs can also be a means of social moderation rather than consensus building, as participants can share and confirm each other's views.

Before conducting the FGDs, the researcher set some criteria for the participants. First, FGD participants must be active students of UMN's Online Learning Program. Second, students who are eligible to become participants are those who have attended lectures for at least one semester. This criterion thus negates the participation of new students. Third, the proportion of gender (male and female), batch (Batch 1 - Batch 4), age (<=25 years old and >=25 years old), experience (fresh graduate and currently or previously working), and domicile (inside and outside Jakarta, Bogor, Depok, Tangerang, Bekasi). As of December 2022, there are 120 active students in the UMN Online Programme. There were 40 pupils that met the criterion out of the total. The participants were then separated into four groups. As a result, the study team held four independent focus groups. Because the participants were not in the same area, the FGDs were held online using Zoom from February to April 2023. Each FGD lasted 100 minutes on average.

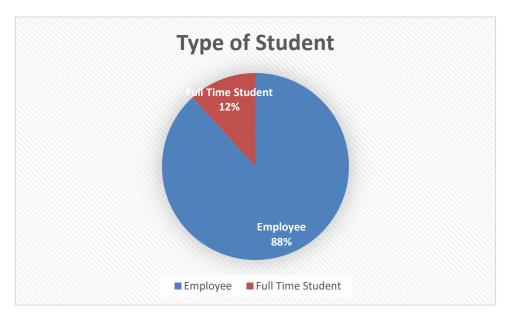
International Journal of Educational Review, Law And Social Sciences |IJERLAS E-ISSN: **2808-487X** | <u>https://radjapublika.com/index.php/IJERLAS</u>

Silvanus Alvin

4. RESULTS AND DISCUSSION

In an online learning university, there are generally two types of students: full-time workers and full-time students. Each of these groups of students has unique characteristics and challenges that they face as they pursue their academic goals.

Full-time workers who pursue online learning may be doing so in order to advance their careers or to gain new skills that will enable them to transition to a new field. These students are often highly motivated and have a clear idea of how their academic pursuits will benefit their professional lives. Meanwhile, full-time students who pursue online learning, on the other hand, are often focused primarily on their academic goals. These students may be pursuing their degrees online in order to have more flexibility in their schedules or to take advantage of a wider range of course offerings than they would be able to access at a traditional brick-and-mortar university. The majority of students in the UMN online learning program are employees. There is only a small percentage who are full-time students.



Source: Author's Analysis (2023)

In this section, it will be divided into two parts. First, this research will review the reasons for online learning and reasons for choosing UMN. Next, this research will review the gap between expectations and realities felt by online learning students.

Reasons to Study at UMN

Based on the data obtained, students choose to study at UMN because of the big name of the university itself. UMN is a campus under the auspices of Kompas Gramedia Group (KG Group), one of the largest companies in Indonesia engaged in mass media by P.K. Ojong and Jakob Oetama. Not only that, UMN also received awards at the national level given by the Higher Education Service Institution (LLDIKTI) Region III.





Table 1. List of UMN Awards in 2023

No	Awards		
1	Private Universities with the Best Quality Governance		
2	Private Universities with the Best Social Media		
3	Private Universities with the Most Indonesian International Student Mobility Awards (IISMA) Program Participants		
4	Private Universities with An "A" Accreditation		
5	Private Universities with Orderly PDDikti Reporting with an achievement of 100 percent until the Even Semester of 2022		

Source: Caesaria (2023)

The promotion of UMN Online learning carried out in its sister media, Kompas TV, is also one of the convincing added values. The following is a statement from a participant named Angga, an Indonesian citizen who lives in Portugas and is currently taking distance learning courses at UMN.

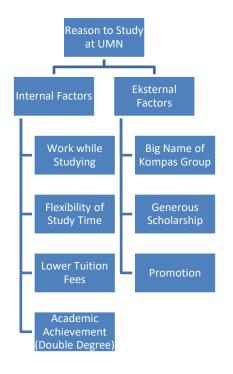
A brief chronology in the middle of the pandemic, I had just returned from Europe, I had nothing to do, and I happened to watch TV again on Kompas TV, there was a program like an advertisement that was interviewed there, there was Mbak Helga (Head Department of UMN Online Learning Program) again being interviewed by Kompas, it was the first time in December I think before Christmas or after Christmas I forgot. From there there was information, so I tried to register and I didn't know what the concept of PJJ or digital learning in Indonesia was like, maybe with the advertisement explained on Kompas TV there was no demo but I tried it and finally it met my expectations (Angga, 2023, in FGD).

Besides UMN's sister company Kompas Group, its outstanding achievements, and promotions in various Kompas media, another reason for the interest in joining UMN is the generous scholarship offer.

I wanted to study while working, save time, and be able to study online from anywhere. And then why did I choose UMN because I was also looking at several universities, and it just so happened that in UMN also in terms of scholarships, yes, it was quite interesting (Selvina, 2023, in FGD).

Silvanus Alvin

From the data processing and analysis, it can be concluded that there are two general factors, both internal and external influences that influence a person to become a student at UMN online learning. The following is a summary table.



Source: Author's Analysis (2023)

Both internal and external factors play an important role for individuals to make a choice to study at an online learning college. If one factor is overlooked, there is a chance that the decision to enroll in UMN may not be made.

Gap Between Expectation(s) & Reality

Online learning programs have become increasingly popular in recent years, with many students opting to pursue their education through online platforms. However, there is often a significant gap between the expectations that students have when entering an online learning program and the reality of their experience. One of the main expectations that students have when starting an online learning program is the flexibility and convenience that it offers. Online learning programs are often marketed as a way for students to balance their academic pursuits with other responsibilities such as work, family, or personal commitments. Students expect to be able to complete coursework on their own schedule and from any location with an internet connection. Additionally, students often expect that online learning programs will be more affordable than traditional, on-campus programs.

However, the reality of online learning programs may not always meet these expectations. While online learning programs do offer flexibility, they also require a high level of self-discipline and time management skills. One of the activities that is beyond the





expectations of the students and is very time/energy-consuming in UMN is the fulfillment of the student activity credit unit element (Satuan Kredit Kegiatan Mahasiswa-SKKM). Based on UMN's SKKM Handbook, each student must fulfill at least 20 points of SKKM points and fulfill 100% in each field. SKKM points as one of the requirements student graduation. Based on its composition, the SKKM is divided into three areas.

No	Area	Percentage	Description
1	Scientific and Reasoning	30%	includes all activities that activities that provide additional knowledge, such as seminars, webinars, workshops, etc., both in accordance with the student's field of science and outside of field of study
2	Talents and Interests	20%	includes all activities to support and develop students' talents and interests such as competitions and competitions, exhibitions of work, competitions and performances in the field of art (design, photography, and research)
3	Community Service	20%	includes all activities of both social activities for the benefit of the community, both on and off campus, such as and off-campus activities, such as Blood Donation, visits and activities at orphanages
4	Organization and Personality Development	30%	Includes all activities related to organizational or committee work, and as a participants in 5 mandatory programs organized by the UMN Student Affairs

Table 2. SKKM Point in UMN

Source: UMN SKKM Handbook (2023)

Regarding the SKKM policy, some participants gave a following statement.

My expectation is that in UMN there is a special place for online learning students, where we can get access to points to fulfill the SKKM. I was like, 'why are we told to collect organizational points?' But we are also confused about what organization to join because most of us are already working (Muhammad Yudistira, 2023, in FGD).

Silvanus Alvin

The problem of SKKM for those of us who work is this, we are full-time workers, and of course we are more apathetic, especially to organizational issues or to community institutions, what can we do for the community. Well, yesterday I joined the Still Go Green event, now there is a program for environmental awareness SKKM, if I'm not mistaken. Well, that's on weekdays, now if for example I go to campus on Saturdays or weekends, there are definitely no people there and I don't have the opportunity to take part in any SKKM program (Erick Pawuh, 2023, in FGD). So far, I have participated in collecting SKKM but only the webinar. But for organizations, or talents and interests, it's a bit difficult for UMN students. So I hope that if possible, it should not be equalized with regular students because of distance constraints and some work (Sekar Pertiwi, 2023, in FGD).

The majority of online learning students did not expect to have to fulfill the SKKM as one of the requirements to graduate and get a bachelor's degree. In the FGD process, there was a natural consensus that online learning students encourage a special division to handle SKKM and review the total points of SKKM so that it is not equalized with regular students.

5. CONCLUSIONS AND RECOMMENDATIONS

Online learning has become a popular mode of education delivery in Indonesia, particularly among those seeking to acquire new skills or enhance existing knowledge. This trend is further bolstered by the COVID-19 pandemic, which has necessitated the adoption of remote learning methods. The biggest challenge of distance learning is the retention rate of its students. At UMN, the dropout rate for online learning students is around 28%. This research seeks to find out the initial expectations of students when entering UMN and the reality when they become UMN online learning students. The gap between expectation and reality is important to understand because it can contribute to making or changing policies to keep students from dropping out. This study has identified that the majority of UMN's online learning student come from a full time worker. The most important details in this findings are the two factors that influence a person to become a student at UMN online learning: internal and external influences. Internal factors include UMN's sister company Kompas Group, its achievements, and promotions, while external factors include the generous scholarship offer. Both internal and external factors are important for individuals to make a decision to enroll in UMN, and if one factor is overlooked, the decision may not be made.

This study has found that generally most of the student felt that there was a difference between expectations and reality when studying at UMN online learning, especially in fulfilling the SKKM as one of the requirements to graduate and get a bachelor's degree. In response to this, there needs to be a responsive response from the internal campus team. For example, the marketing team can inform about this SKKM policy and not only focus on offering flexibility in lecture time. In addition, from the management side, it is necessary to discuss more deeply for 20 SKKM points whether it needs to be lowered or not for online learning students.





ACKNOWLEDGEMENT

The researcher would like to thank Universitas Multimedia Nusantara for the support provided

REFERENCE

- Alvin, S., & Dewi, H. L. C. (2022). Gen-Z dan Masa Depan Pembelajaran Jarak Jauh. In Merangkul Ragam Capaian Akreditasi Unggul di Era 5.0: Eksistensi Insan Komunikasi di Era Digitalisasi (pp. 111–120). Salemba Humanika.
- Annamalai, N., Ab Rashid, R., Harb Alqaryouti, M., Eddin Sadeq, A., Al-Smadi, O. A., & Kumar, J. A. (2022). Online Teaching Practicum in Malaysia in the Time of COVID-19 Pandemic. *Frontiers in Psychology*, 13. https://doi.org/10.3389/fpsyg.2022.871971
- Astawan, I. G., Widiana, I. W., & Arafik, M. (2021). Pedati Model Online Learning in University. Journal of Education Technology, 5(4), 663. https://doi.org/10.23887/jet.v5i4.41124
- Bawa, P. (2016). Retention in Online Courses. SAGE Open, 6(1), 215824401562177. https://doi.org/10.1177/2158244015621777
- Bourdeaux, R., & Schoenack, L. (2016). Adult Student Expectations and Experiences in an Online Learning Environment. *The Journal of Continuing Higher Education*, 64(3), 152–161. https://doi.org/10.1080/07377363.2016.1229072
- Caesaria, S. D. (2023). UMN Raih 5 Penghargaan Terbaik Rakorda LLDikti III 2023. Kompas.Com. https://www.kompas.com/edu/read/2023/03/24/084047671/umn-raih-5-penghargaan-terbaik-rakorda-lldikti-iii-2023?page=all
- Chaeruman, U. A. (2018). MODEL DESAIN SISTEM PEMBELAJARAN BLENDED: Prosedur Merancang Pembelajaran Blended Mata Kuliah Daring dan Terbuka SPADA Indonesia. PASCASARJANA UNIVERSITAS NEGERI JAKARTA. https://lmsspada.kemdikbud.go.id/pluginfile.php/125638/mod_resource/content/1/PE DATI_-_Model_Desain_Sistem_Pembelajaran_Blended1.pdf
- Gaytan, J. (2015). Comparing Faculty and Student Perceptions Regarding Factors That Affect Student Retention in Online Education. *American Journal of Distance Education*, 29(1), 56–66. https://doi.org/10.1080/08923647.2015.994365
- Harususilo, Y. E. (2023). Optimistis Terus Bertambah, UT Sebut Awal Februari 2023 Jumlah Camaba Capai 133.000. Kompas.Com.
- Hennink, M. M. (2014). Understanding Focus Group Discussions. Oxford University Press.
- Heriani. (2020). Kuliah di UMN Digital Learning Balikpapan, Ditempah Jadi Pebisnis ala Drakor Startup. Tribunnews. https://kaltim.tribunnews.com/2020/12/22/kuliah-diumn-digital-learning-balikpapan-ditempah-jadi-pebisnis-ala-drakor-startup
- Lindgren, S. (2017). Digital Media & Society. Sage Publication.
- Mansyur, A. R. (2020). Dampak COVID-19 Terhadap Dinamika Pembelajaran Di Indonesia. *Education and Learning Journal, Vol. 1, No*, 113–123.
- Müller, C., & Mildenberger, T. (2021). Facilitating flexible learning by replacing classroom time with an online learning environment: A systematic review of blended learning in higher education. *Educational Research Review*, *34*, 100394. https://doi.org/10.1016/j.edurev.2021.100394
- Park, H. S., & Yoo, S. J. (2021). Early Dropout Prediction in Online Learning of

Silvanus Alvin

854

University using Machine Learning. JOIV: International Journal on Informatics Visualization, 5(4), 347. https://doi.org/10.30630/joiv.5.4.732

- Peisachovich, E., Da Silva, C., Penhearow, N. J., Sombilon, E. V, & Koh, M. (2020). Implementing Virtual Simulated Person Methodology to Support the Shift to Online Learning: Technical Report. *Cureus*. https://doi.org/10.7759/cureus.8864
- Plummer, L., Smith, L., Cornforth, E., & Gore, S. (2021). Teaching psychomotor skills in a virtual environment: An educational case study. *Education Sciences*, 11(9). https://doi.org/10.3390/educsci11090537
- Shay, M., & Rees, J. (2004). Understanding why students select online courses and criteria they use in making that selection. *International Journal of Instructional Technology and Distance Learning*, 1(5). http://www.itdl.org/Journal/May_04/article03.htm
- Smith, B. G. (2010). *E-learning technologies: A comparative study of adult learners* enrolled on blended and online campuses engaging in a virtual classroom [Capella University]. https://www.learntechlib.org/p/115478/
- Tasnim Wan Hussin, W. N., Harun, J., & A. Shukor, N. (2019). A Review on the Classification of Students' Interaction in Online Social Collaborative Problem-based Learning Environment: How Can We Enhance the Students' Online Interaction? Universal Journal of Educational Research, 7(9A), 125–134. https://doi.org/10.13189/ujer.2019.071615
- Widyanuratikah, I. (2020). *Hampir 100 Persen Perguruan Tinggi Terapkan PJJ*. Republika. https://sindikasi.republika.co.id/berita/q8kyzq430/network
- Xu, D., & Jaggars, S. S. (2013). The impact of online learning on students' course outcomes: Evidence from a large community and technical college system. *Economics of Education Review*, 37, 46–57. https://doi.org/10.1016/j.econedurev.2013.08.001