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KNOWLEDGE, ATTITUDE, AND PRACTICE (KAP) SURVEY ON ONLINE LEARNING AMONG UNIVERSITY STUDENTS IN MALANG

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Abstract. This study is a Knowledge, Attitude, and Practice (KAP) survey on online learning among university students in Malang. This study is an advanced study conducted in the beginning of the implementation of online learning during covid-19 pandemic era. In the end of its implementation and after the official letter from ministry of education and culture number 4, 2021 regarding the allowance of limited face-to-face learning in university, this study might be useful in the development of Indonesian education in the future of digitalization era. This study is tried to examine student's understanding, their assessment, and their practice of online learning during its implementation. The respondent of this study are 395 students from five universities in Malang. The result of this study stated that all students have understood the meaning of online learning that in line with scholars' definitions. There are also many platforms that have known by students such as Google meet, Zoom, University's e-learning, Schoology, Jitsi, Webex, Spada Dikti, Big Blue Button, Discord, and so forth. Regarding student's assessment, Students have identified the advantages and disadvantages of online learning. The advantages are; flexibility, increasing student's technological ability, safety from covid-19, and ease of access while the disadvantages are; lack of material understanding, internet network problem, physical Fatigue, psychological problem, and internet quota. In the practical area, google meet, zoom, and whatsapp are the most often used by lecturer. Those platforms are also identified by students as the most effective media for online teaching and learning process.

Keywords. KAP Survey; online learning; university students

A. INTRODUCTION

The study on online learning has become one of serious concerns of many researchers in various countries in the world. It has been studied from multiple perspectives with different methodologies and approaches. It's also studied in every level of school i.e. primary school up to university level. In primary school, the implementation of online learning has become a huge problem for teacher in the Netherland (Meeter, 2021). In higher education and university level, online learning has both positive and negative impact for teachers and students around the globe. Majority of studies argued that the negative impact is bigger than the positive. During the online learning, university students in Afghanistan and Vietnam felt that they got nothing in a year of online learning (Noori, 2021; Thi et al., 2020). Online learning also gave an impact in decreasing student motivation (Pasion et al., 2021; Tan, 2020). In the other hand, online learning also increased student's stress, frustration, boring, and anxiety (Baber, 2020; Khan, 2021; Kim & Park, 2021; Maqableh & Alia, 2021). For some students, the biggest problem in online learning is time management which is balancing between life and education (Maqableh & Alia, 2021; Zizka & Probst, 2021). the absence of teacher-student interaction in online learning has also become another negative impact of this type of learning (Khan, 2021; Maqableh & Alia, 2021; Rana, 2021).

Those negative impacts happened during the implementation of online learning in this pandemic era.

The negative impact of online learning implementation getting bigger especially in the developing country because of network connection problem and financial limitation for supporting online learning (Istijanto, 2021; Maqableh & Alia, 2021; Noori, 2021; Rana, 2021; Sia & Adamu, 2021; Thi et al., 2020). While in the developed country, the problem just happened on teacher and students' time management issues without considering the internet connection or even financial limitation (Chang et al., 2021; Webb et al., 2021; Zizka & Probst, 2021). According to all studies above, all researchers argued that the online learning still doesn't meet student satisfaction in both developing and developed country. Although, some researches stated that teacher and students are ready in facing the online learning (Adams & Chuah, 2021; Paliwal, 2021), the readiness did not determine satisfaction of the implementation.

Moreover, the positive impacts on the implementation of online learning are existed in the easiness of technology used and the content (Khan, 2021; Thi et al., 2020), flexibility (Khan, 2021; Webb et al., 2021), effectiveness and safety from covid-19 (Magableh & Alia, 2021), and also facilities provided by country and institution supporting the online learning [(Chang et al., 2021; Webb et al., 2021; Zizka & Probst, 2021). Recently, some researchers have tried to reduce the negative impact of online learning by conducting some researches. As an effort to increase student's motivation during the online learning, a study proposed an interactive learning. The interactive learning can be achieved if teachers developed their communication competence (Paliwal, 2021; Zizka & Probst, 2021). The interactive online learning can also increase the teacher-student's interaction. In the other hand, useful e-learning platform can also important in increasing student participation. The anxiety, boring, stress, and frustration appeared if there is no social interaction and participation of student in the online learning. So that, the social interaction and the usefulness of e-learning are need as an effort to decrease the psychological problem during the online learning in the pandemic era (Baber, 2020), (Nikou, 2021). Those efforts of some researchers are just able to minimize the negative impact without erasing all the negative impacts facing by teacher and students in the implementation of online learning.

By the data, we can directly conclude that online learning cannot substitute the offline learning. Many researchers are in line with this statement because even in the digitalized country, the problem still appear in the online learning (Chang et al., 2021; Webb et al., 2021). So that, offline or face-to-face teaching and learning is still better that the online environment (Khan, 2021) and it cannot substitute by the online teaching and learning forever (Rana, 2021). or at least, combination of online and offline learning (blended learning) could be the most proffered modes of learning for students in the digitalized era (Nikou, 2021). Even the online cannot substitute the offline, the pandemic situation gave teacher and student no choices in continuing their learning. So, with all the negative impacts, online learnings are still needed to be implemented in the covid-19 pandemic era. The study of online learning nowadays is not merely examined the negative impact anymore, but more to the evaluate the implementation in order to develop the better online learning for facing the 21th century and 5.0 industrial revolution around the world.

As conducted by researchers in all countries in the world, Indonesian researchers are also studied the implementation of online learning in Indonesia. Students in Southeast Asia Universities including Indonesia are ready in facing the online learning except some demographics profile areas [16]. Uneven internet network in Indonesia has become one of the causes of students unreadiness in facing online learning. This statement is also supported by some studies that confirmed the online learning ineffectiveness in term of network, facilities, financial, and psychological factor (A'yun & Sujiwo, 2021; Dwi C et al., 2013; Putra & Anjani, 2020; Sumarsono et al., 2020). Despite the above statement, according to Indonesian students, online learning has also decreasing their understanding on the material (Putra & Anjani, 2020), and increasing their psychological stress (Maulana & Iswari, 2020). The challenge also faced by teachers because of their material explanation is not optimal and needed more adaptation (Algiovan & Roza, 2020; Febrilia et al., 2020).

However, some Indonesian institutions have prepared a solution regarding problems that might faced in online learning. Some institutions have provided and developed university-based e-learning platform. As new developed platform, students found the complexity and difficulty in operating that platform (Setiono, 2021). So that, this new platform is also considered not optimal. However, Interestingly, another study confirmed that students in Indonesia are enthusiastic in facing online learning even though with low understanding (Putra & Anjani, 2020). Otherwise, another survey which is conducted by KPAI (Komisi Perlindungan Anak Indonesia/Indonesian Child Protection Commission) stated that Indonesian students are feel unhappy and uninterested on experiencing online learning 1. Around 76,7% from 1700 respondent feel that unhappy feeling from primary to higher education students. The unhappy feeling enriched by the heavy task given by teachers, internet data cost, and minimal interaction with teacher.

Based on above data, both Indonesia and foreign countries are preferring an offline learning rather than online. But, the above data are mostly taken in the beginning of covid-19 pandemic era when teachers, students, and universities are having minimum preparation and when they are experiencing shock condition of adapting a new mode of learning that never experienced before which called online learning. After a year of implementation, the data might be different. After solving some problems faced in the beginning of implementation, and after the implementation of the newest developed platform, and after the issuance of official letter regarding limited face-to-face learning allowance2, this survey will enrich the data on student's knowledge, attitude, and practice on online learning which have been experienced for approximately a year. This study will examine university student's knowledge on online learning, their experience in attending online learning as well as the advantages and disadvantages they feel, and also their satisfaction, evaluation, and assessment on online learning in their own university. The result of this study will comprehensively affect the future application of online learning among university students.

B. METHODS

This survey used both quantitative and qualitative approach. The quantitative data was gathered from online questionnaire via google form regarding knowledge, attitude, and practice of online learning among university students in Malang while the quantitative data gathered through online interview with respondents in order to get in-depth data and confirmation regarding their answer on online questionnaire. This KAP survey was conducted in 5 universities in Malang; UIN Maulana Malik Ibrahim Malang, Universitas Brawijaya, Universitas Negeri Malang, Universitas Islam Malang, and Universitas Muhammadiyah Malang. There are 395 respondents participated in this survey. The survey was conducted in the period of September to October 2021. The data collected in this survey has its limitation. The location just limited in Malang and just taken in 5 universities by considering the time and researcher range limitation.

C. RESULT & DISCUSSION

1. Respondent Profile

The total respondents of this survey are 395 students from 5 universities in Malang. The gender of respondent is dominated by female with 286 (72%) person and male with 109 (28%) people. Commonly, the semester of respondents is varied. Most of them are sitting in the first semester (58%). The third semester are 15% of the respondent, the fifth semester are 11%, and the seventh semester are 16% from all respondents. In this case, researcher do not choose certain semester with average sample because of their experiences of online learning are the same (in their lower semester or even the lower level of education). Moreover, the respondents will be asked their knowledge, attitude, and practice on online learning they currently experienced. So that, the semester will not influence their answer and the validity of the data.

¹ For further reading and the complete descriptive data, see https://bankdata.kpai.go.id/infografis/surveipelaksanaan-pembelajaran-jarak-jauh-pjj-dan-sistem-penilaian-jarak-jauh-berbasis-pengaduan-kpai

² The official letter issued by ministry of education and culture can be accessed through this link https://dikti.kemdikbud.go.id/pengumuman/penyelenggaraan-pembelajaran-tatap-muka-tahun-akademik-2021-2022/

2. Student's Knowledge on Online Learning

The survey indicated that all respondents are understand on online learning. The data showed that there is no respondent who do not understand the mean of online learning. The result of interview is also indicated the same. Some of respondent have already understand the real meaning of online learning after their direct experience on it. This is different with the beginning of its implementation. Some respondents do not understand the meaning of online learning as well as its way of implementation. The direct experience helps them deeply understand the essence of online learning.

The definitions attached by respondents are also varied. but, no definition which does not match with scholars definition of online learning. In line with some scholars, respondent also use variety of terms explaining online learning. Some of respondents are defining it as a virtual learning, others defining it as a distance learning, and also of them whom synchronize online learning as e-learning. Some student's definitions also interesting because they define online learning as a joyful learning and another defining it as a boring mode of learning. The reason behind that answers are also varied. Some indicated that joyful learning because the teacher and students have a high tension of interaction and no big barriers faced by both teacher and students while respondent who defines online learning as a boring mode of learning because there is no such interaction and faced big barriers of its implementation like network connection problem.

Some other definitions stated by respondents are in line with scholar's definition of distance learning. Respondent who defines online learning as a mode of learning that implemented from student's home and can be implemented anywhere and anytime are matching the distance learning stated by Kim & Park (Kim & Park, 2021) and Istijanto (Istijanto, 2021). The respondents whom define online learning as the utilization of electronic media such as handphone, laptops, and others, also the utilization of internet connection for teaching and learning are also in line with e-learning definition stated by N. Thi (Thi et al., 2020). Others whom define online learning based on its tool of learning is in line with scholar who defines online learning as the used of variety of internet-based supporting technologies such as zoom, google meet, whatsApp video, youtube, etc (Khan, 2021). The other respondents are defining online learning differently like by its advantages and disadvantages, the utilization of social media, and so on. The researcher has summarized all the respondent's answer in Figure 1.

Online learning is....

Online learning is a mode of learning that implemented from student's home in order to help government reducing the spreading of corona virus disease

Online learning is type of learning that utilized electronic media such as handphone, laptops, and others

Online learning is the utilization of internet connection for teaching and learning process

Online learning is the utilization of electronic devices using internet connection for teaching and learning

Online learning is a mode of learning that can be implemented anywhere and anytime

Online learning is a boring mode of learning

Online learning is a mode of learning that implemented using internet connection without direct interaction

Online learning is a learning system with no face-to-face/interaction between teacher and student Online learning is very joyful learning

Online learning is a type of learning that allow students meet in virtual classes without attending in offline classes

Online learning is a learning that implemented with social media

Online learning is a way of learning using online media such as zoom or another video conference platform

Online learning is a type of learning that has positive and negative impact for teacher and student Online learning is a flexible, lack of task, and simple

Figure 1. Respondent's Answer

Student's knowledge on online learning platform are varied. From the most popular platform among students like zoom to the lowest utilization like webex and discord. Almost 100 of respondent are knowing their university e-learning like e-learning UIN Malang, e-learning

Universitas Islam Malang, Sipejar Universitas Negeri Malang, Virtual Learning Management (VLM) Universtas Brawijaya, and LMS Universitas Muhammadiyah Malang. All the platform known by respondents are presented Figure 2.

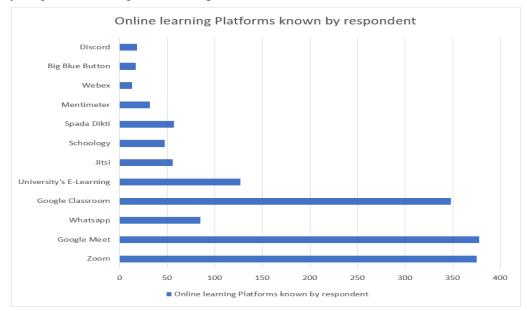


Figure 2. The Online Platform

3. Student's Attitude on Online Learning

Students' attitude is an effort to examine their respond toward online learning. The data of student's attitude displayed that google meet, whatsapp, zoom, and google classroom as the most effective media used in the online teaching and learning process. It's because those video conference like google meet and zoom are provided two-way communication between teacher and students and whatsapp has a low consumption of internet data.

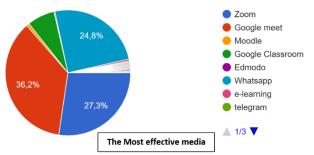


Figure 3. Student's Attitude on Various Platform

Moreover, although students have identified the most effective media used in online learning, around 63.3% of students stated that they have difficulties in understanding the material, 30.4% of them have no difficulties, and 6.3% of students experienced betterment of their material understanding through online teaching and learning process than the offline mode of learning. Another data showed that almost 60% of students feel that the assignment given by lecturers are overmuch. In the other side, 52.9% of students declared that they feel bored during online learning, and 47.1% are enjoying it. Among those whom enjoying the online learning, 23% of them are willing to continue it even covid-19 has disappeared from Indonesia, while 42% of students are still consider offline learning is the best mode of learning to them. The other 35% are prefer the flexible learning rather than full offline or online leaning as a respond of technological era. The study gathered by Khan (Khan, 2021) and Rana (Rana, 2021) which stated that face-to-face learning is better than the online learning is agreed by 52.9% respondent in this research, while the study conducted by Nikou (Nikou, 2021) are similar with 35% of the respondents which stated that combination mode of learning as the best method of teaching and learning considering its advantages.

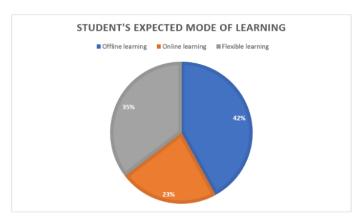


Figure 4. Student's Expected Mode of Learning

As part of student's assessment on the implementation of online learning, they have identified the positive and negative impact of the implementation. The positive impacts seen as advantages and negative seen as disadvantages. The advantages of online learning according to the university in Malang are; flexibility (39%), Increasing student's technological ability that will be useful for their future (14%), safety from covid-19 because of no physical interaction (11%), ease of access (9%), enjoyable (9%), the availability of material review for video-based learning (5%), and others. The advantages are mostly similar with Thi et.al., (Thi et al., 2020), Maqableh (Maqableh & Alia, 2021), Khan (Khan, 2021) and Webb (Webb et al., 2021). The disadvantages of online learning are; Lack of material understanding (35%), Internet network problem (16%), Physical Fatigue (14%), Psychological problem (10%), internet quota big consumption (10%) and so on. All those mentioned in advantages and disadvantages also found in other research conducted by other researchers except physical fatigue, and internet quota big consumption that just found in this research.

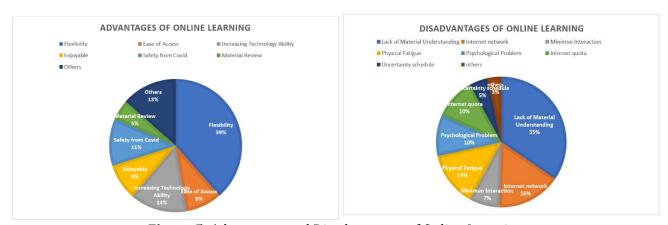


Figure 5. Advantages and Disadvantages of Online Learning

4. Student's Practice on Online Learning

Student's practice is an effort to examine the practice of online learning implementation through student's perspective. This chapter will inform readers on the condition of internet connection in student's home as well as the media mostly used by lecturer during online teaching and learning process. Surprisingly, most of students in 5 universities in Malang are having home with good internet connection (both Wi-Fi and data connection). 70% are having good internet connection, and 13.2% are having very good internet connection. Unfortunately, there are 14.4% students whom are having bad internet connection, and 2% of them with very bad internet connection. Students with good and very good internet connection also having problem with

uncertainty very good connection and power outage. Responding that, students believed that everything will comes up with a problem.

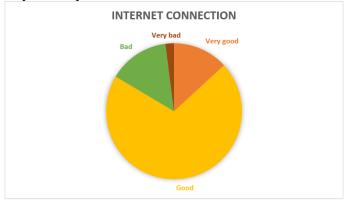


Figure 6. Student's Internet Connection

Moreover, after student's identification of the most effective media to be implemented during online learning, surprisingly the most often media used by lecturer are the same. Google meet, zoom, and whatsapp are the most media used by lecturers according to 360 students, continued by university's e-learning and google classroom. This result confirmed that lecturers have analyzed the effectiveness of some online platforms till meet students and teacher needs. This analysis is a step forward for the betterment of Indonesian education.

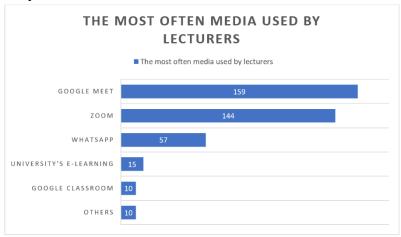


Figure 7. The Most Often Media Used by Lecturers

D. CONCLUSION

This KAP survey showed that all respondents have understood the deep meaning of online learning. Its proved by the definitions stated by respondents which have multifarious. Some of them define online learning as a mode of learning that implemented from student's home and can be implemented anywhere and anytime. Other defines online learning as the utilization of electronic media such as handphone, laptops, and others, also the utilization of internet connection for teaching and learning. Some student's definitions also interesting because they define online learning as a joyful learning and another defining it as a boring mode of learning. Respondent also use variety of terms explaining online learning. Some of respondents are defining it as a virtual learning, others defining it as a distance learning, and also of them whom synchronize online learning as e-learning. There are also many platforms that have known by students such as Google meet, Zoom, University's e-learning (e-learning UIN Malang, e-learning Universitas Islam Malang, Sipejar Universitas Negeri Malang, Virtual Learning Management (VLM) Universitas Brawijaya, and LMS Universitas Muhammadiyah Malang), Schoology, Jitsi, Webex, Spada Dikti, Big Blue Button, Discord, and others. Regarding student attitude, all respondents have identified the advantages and disadvantages of online learning. All advantages

and disadvantages of online learning have been found by other researchers except physical fatigue and internet quota big consumption that just found in this research. 63.3% of students stated that they have difficulties in understanding the material, 30.4% of them have no difficulties, and 6.3% of students experienced betterment of their material understanding through online teaching and learning process than the offline mode of learning. Another data showed that almost 60% of students feel that the assignment given by lecturers are overmuch. In the other side, 52.9% of students declared that they feel bored during online learning, and 47.1% are enjoying it. Moreover, In the practical area, Google meet, Zoom, and Whatsapp are the most often used by lecturer during online learning according to 360 students, and continued by university's elearning and google classroom. Those platforms are also identified by students as the most effective media for teaching and learning process. This research will contribute to the future of teaching and learning process and will be a recommendation for other researchers in conduction similar research with broader scope and respondents in order to get more comprehensive data.

E. REFERENCES

- A'yun, Q., & Sujiwo, D. A. C. (2021). Analisis Keefektifan Pembelajaran Matematika Online. *Laplace: Jurnal Pendidikan Matematika*, 4(1), 88–98. https://doi.org/10.31537/laplace.v4i1.466
- Adams, D., & Chuah, K. M. (2021). Students' readiness for e-learning during the COVID-19 pandemic in a South-East Asian university: a Rasch analysis pandemic. https://doi.org/10.1108/AEDS-05-2020-0100
- Algiovan, N., & Roza, A. S. (2020). P-ISSN 2355-004X. 7(2), 307-316.
- Baber, H. (2020). Social interaction and effectiveness of the online learning A moderating role of maintaining social distance during the pandemic COVID-19. https://doi.org/10.1108/AEDS-09-2020-0209
- Chang, J. Y., Wang, L., Lin, T., Cheng, F., & Chiang, C. (2021). ScienceDirect Comparison of learning effectiveness between physical classroom and online learning for dental education during the COVID-19 pandemic. *Journal of Dental Sciences*, 16(4), 1281–1289. https://doi.org/10.1016/j.jds.2021.07.016
- Dwi C, B., Amelia, A., Hasanah, U., Putra, A. M., & Rahman, H. (2013). Analisis Keefektifan Pembelajaran Online di Masa Pandemi Covid-19. *MATHEdunesa*, 2(1).
- Febrilia, B. R. A., Nissa, I. C., Pujilestari, & Setyawati, D. U. (2020). Analisis Keterlibatan dan Respon Mahasiswa dalam Pembelajaran Daring Menggunakan Google Clasroom di Masa Pandemi Covid-19. FIBONACCI: Jurnal Pendidikan Matematika Dan Matematika, 6(2), 175–184.
- Istijanto. (2021). The eff ects of perceived quality diff erences between the traditional classroom and online distance learning on student satisfaction: evidence from COVID-19 pandemic in Indonesia. 29(4), 477–490. https://doi.org/10.1108/QAE-08-2020-0098
- Khan, M. A. (2021). The impact of COVID-19 on UK higher education students: experiences, observations and suggestions for the way forward. 21(6), 1172–1193. https://doi.org/10.1108/CG-09-2020-0396
- Kim, S., & Park, S. (2021). Nurse Education in Practice Influence of learning flow and distance elearning satisfaction on learning outcomes and the moderated mediation effect of social-evaluative anxiety in nursing college students during the COVID-19 pandemic: A cross-sectional s. *Nurse Education in Practice*, 56(September), 103197. https://doi.org/10.1016/j.nepr.2021.103197
- Maqableh, M., & Alia, M. (2021). Children and Youth Services Review Evaluation online learning of undergraduate students under lockdown amidst COVID-19 Pandemic: The online learning experience and students' satisfaction. *Children and Youth Services Review*, 128(July), 106160. https://doi.org/10.1016/j.childyouth.2021.106160
- Maulana, H. A., & Iswari, R. D. (2020). Analisis Tingkat Stres Mahasiswa Terhadap Pembelajaran Daring Pada Mata Kuliah Statistik Bisnis Di Pendidikan Vokasi. *Khazanah Pendidikan*, 14(1), 17–30. https://doi.org/10.30595/jkp.v14i1.8479
- Meeter, M. (2021). Trends in Neuroscience and Education Primary school mathematics during

- the COVID-19 pandemic: No evidence of learning gaps in adaptive practicing results Martijn Meeter. *Trends in Neuroscience and Education*, *25*(October), 100163. https://doi.org/10.1016/j.tine.2021.100163
- Nikou, S. (2021). An analysis of students 'perspectives on e-learning participation the case of COVID-19 pandemic. 38(3), 299–315. https://doi.org/10.1108/IJILT-12-2020-0220
- Noori, A. Q. (2021). Heliyon The impact of COVID-19 pandemic on students 'learning in higher education in Afghanistan. *Heliyon*, 7(June), e08113. https://doi.org/10.1016/j.heliyon.2021.e08113
- Paliwal, M. (2021). Teacher readiness for online teaching-learning during COVID-19 outbreak: a study of Indian institutions of higher education. 18(3), 403–421. https://doi.org/10.1108/ITSE-07-2020-0118
- Pasion, R., Dias-oliveira, E., & Morais, C. (2021). *Impact of COVID-19 on undergraduate business students: a longitudinal study on academic motivation , engagement and attachment to university.* 246–257. https://doi.org/10.1108/ARJ-09-2020-0286
- Putra, R. P., & Anjani, R. A. (2020). Analisis Pemahaman Siswa Kelas 12 di SMAN 1 Cileunyi terhadap Pembelajaran Fisika Online Selama Pandemi Covid-19. *Jurnal Profesi Keguruan*, 4(1), 37–41.
- Rana, S. (2021). Exploring the student perspectives on the barriers of online learning during the COVID-19 pandemic: a qualitative study using interpretative phenomenological analysis. https://doi.org/10.1108/JARHE-02-2021-0075
- Setiono, S. (2021). Analisis Respon Mahasiswa dalam Pembelajaran Online Berbasis Aktifitas di Perguruan Tinggi. *Jurnal Pendidikan*, 9(2), 15–23. https://doi.org/10.36232/pendidikan.v9i2.1095
- Sia, J. K., & Adamu, A. A. (2021). *Facing the unknown: pandemic and higher education in Malaysia*. *10*(2), 263–275. https://doi.org/10.1108/AEDS-05-2020-0114
- Sumarsono, S., Informatika, T., Islam, U., Sunan, N., Yogyakarta, K., Depok, K., & Sleman, K. (2020). *Analisis Readiness Mahasiswa Baru Dalam Pembelajaran Daring.* 13(2), 179–188.
- Tan, C. (2020). The impact of COVID-19 on student motivation, community of inquiry and learning performance. https://doi.org/10.1108/AEDS-05-2020-0084
- Thi, N., Ho, T., Sivapalan, S., Pham, H. H., Thi, L., Nguyen, M., Pham, A. T. Van, & Dinh, H. V. (2020). Students 'adoption of e-learning in emergency situation: the case of a Vietnamese university during. 18(2), 246–269. https://doi.org/10.1108/ITSE-08-2020-0164
- Webb, A., Mcquaid, R. W., & Webster, C. W. R. (2021). *Moving learning online and the COVID-19 pandemic: a university response.* 18(1), 1–19. https://doi.org/10.1108/WJSTSD-11-2020-0090
- Zizka, L., & Probst, G. (2021). Teaching during COVID-19: faculty members' perceptions during and after an "exceptional" semester. https://doi.org/10.1108/JIEB-12-2020-0099