

The Role of Podcast as a Distance Learning Media during Covid-19 in Higher Education

Wiratri Anindhita¹, Elisabeth Nugrahaeni², Devie Rahmawati³, Mila Viendyasari⁴

Universitas Negeri Jakarta^{1,2}
Jl. Rawamangun Muka Raya No. 11, 13220, Indonesia
Universitas Indonesia^{3,4}
Pondok Cina, 16424, Indonesia
Correspondence Email: dhita.wiratri@gmail.com
ORCID ID <https://orcid.org/0000-0001-7033-0046>

ARTICLE INFORMATION

Publication information
Research article

HOW TO CITE

Anindhita, W., Nugrahaeni, E., Rahmawati, D., & Viendyasari, M. (2022). The Role of Podcast as a Distance Learning Media during Covid-19 in Higher Education. *Asia Pasific Journal of Management and Education*, 5(2), 74-86.

DOI:
<https://doi.org/10.32535/apjme.v5i2.1562>

Copyright@ 2022 owned by Author(s).
Published by APJME



This is an open-access article.
License:
Attribution-Noncommercial-Share Alike
(CC BY-NC-SA)

Received: 08,JUNE,2022
Accepted: 15,JUNE,2022
Published: 20,JULY,2022

ABSTRACT

The Covid-19 pandemic that hit the world has changed human life in all areas of life, including education. In education, learning and instruction are important to higher education students. Covid-19 affected learning design from face-to-face learning in the class become distance learning. Many things need to be fixed and updated in terms of materials and platforms used. The study's purpose is to analyze the role of distance learning media using podcasts in higher education. This study uses a descriptive qualitative method to show the need for distance learning innovation by using podcast media as an additional alternative platform to answer distance learning challenges. The results showed that the podcast system in the form of recordings made it easier for students to listen to the material presented by the instructor. Podcasts made students enthusiastic about learning during the Covid-19 pandemic.

Keywords: Covid-19, Distance Learning Media, Higher Education, Podcast.

INTRODUCTION

Education determines the development and realization of human resources. Therefore, in education, there are learning activities carried out to achieve certain goals. Entering the 21st century, students are required to have communication skills, collaboration, critical thinking and problem solving, as well as creativity and innovation. Therefore, it is necessary to have learning activities that are able to provide meaningful learning experiences and achieve learning objectives. One of the learning activities that are appropriate for the 21st century is distance learning. According to Qazi et al. (2021), learning using a distance system can be used as a suggestion to develop education for the public because the system is flexible, unlimited time, distance, and place. In addition, distance learning can also be used by many people from various geographical, social, cultural, and economic backgrounds (Abuhammad, 2020). The various advantages of distance learning also have several drawbacks, namely the quality of technology that cannot fully meet the needs of all levels of society, the interaction between students and teachers is not adequate, and the lack of experience in implementing distance learning (Kim & Park, 2021). Distance learning activities during the current pandemic are carried out online using several platforms (van Cappelle et al., 2021). Distance learning using the internet has been done since it cannot be separated from its advantages and disadvantages. Several obstacles occur during distance learning in terms of technology, students, and instructor (Mengistie, 2021). Research by Jowsey, Foster, Cooper-loelu, and Jacobs (2020) shows one of the obstacles is that students' technology does not always work well, it is used as a direct lecture tool. Besides that, barriers that often occur during distance learning include signal problems, computers or laptops, and internet quotas (Hofer, Nistor, & Scheibenzuber, 2021). Distance learning is usually done through online learning (Eisengart et al., 2021). Online learning uses the internet network with accessibility, connectivity, flexibility, and bringing up various learning interactions (Menkhoff et al., 2011). Therefore, online learning is electronic-based learning by utilizing a smartphone and computer network developed in the form of a web that is then expanded to a computer network, namely the internet (Chaturvedi, Vishwakarma, & Singh, 2021). This online learning is interactive because it has no restrictions on access so this learning can be done with relatively more time.

Unfortunately, the barriers to distance learning are from the technology above, but other obstacles experienced are also skills. Even though the era is modern, not all people can operate sophisticated technology in this modern era. However, according to research by Chang, Wang, Lin, Cheng, and Chiang (2021), students tend to view that the effectiveness of learning in online classes is better than learning in physical classes. On the other hand, they tend to view that the convenience and fairness of physical exams in class are better than online exams. We have to realize that lack of mastery of technology makes students frustrated and depressed, resulting in reduced motivation in studying (Sailer, Schultz-Pernice, & Fischer, 2021). The existence of distance learning makes some students have to adapt to the situation. According to Gandolfi, Ferdig, and Kratcoski (2021), the advantages of online learning are unlimited time, there is still much free time, and saving transportation costs. Therefore, the online learning process is essentially a communication process, namely, delivering messages from the source of the message to the recipient through certain channels or media (Bunting, af Segerstad, & Barendregt, 2021). The communication process must be created and realized through message delivery activities, exchanging messages or information from each instructor to students. The message or information

conveyed can be in the form of knowledge, expertise, ideas, and experiences (Kilinc et al., 2016).

The advancement of information and communication technology brings changes and progress in various sectors, especially in education (Dabbagh et al., 2016). The role of information and communication technology in education is very important and can provide convenience to instructors and students in the learning process. During the Covid-19 pandemic, all learning activities at the university have to be carried out at home since the condition does not support the circumstance. Therefore, teachers use an online learning system. This case results in the inhibition of a learning process, namely a mismatch of expectations from the learning process because when someone sees the conditions in the field, learning using an online system is not as effective as when carrying out classroom learning (Maloshonok & Terentev, 2017). Therefore, teachers must use learning that can produce a learning process that follows the expected goals.

However, it is not only about adapting but also about innovating. The innovation carried out here is to provide alternative learning methods to students to broaden their horizons in the field of technology in following the teaching and learning process. In addition, anticipate student boredom with the applied learning methods. In this era of developing technology rapidly, many new media have emerged, such as podcasts, which are currently widely used. This podcast media has even spread among public figures (Hill, Nelson, France, & Woodland, 2012). In the learning process, instructors and students need good communication. The communication process strongly influences communication effectiveness in the environment from the communicator to the communicant (Gallardo-Echenique, de Oliveira, Marques, & Esteve-Mon, 2015). From the technical implementation, this process is carried out to get feedback from the communicant. The ability to convey messages well, be a good listener, and use the media is effective communication. Therefore, podcasts are a learning tool that provides learning needs (Jarvis & Dickie, 2010).

The Covid-19 pandemic requires lecturers and students in the university to be able to adapt to technology (Rizvi & Nabi, 2021). So communication courses also experience changes in learning methods. Communication relates to human behavior and satisfaction with the fulfillment of the need to interact with each other. Podcasts are broadcasts in the form of voice recordings from hosts (people who speak in podcasts) that discuss certain topics (Hill et al., 2012). According to Gallardo-Echenique et al. (2015), the podcast learning process can be an alternative good communication process for students and lecturers. By using podcasts as a medium and source of learning, students are expected to improve their ability to convey messages and become good listeners. Thus, Jarvis and Dickie (2010) suggest that podcasts are a learning tool that can meet the learning needs of the communication process. Podcasts are considered a force to break the social cohesiveness that exists in society.

However, the passage of time and the social changes that occur make communication styles change. This change is due to the speed of technological development which has an impact on the presence of new media. According to McQuail, it is difficult to place new media in terms of ownership and power over which the content and flow of information are being controlled. So that the new media is considered a force to disintegrate the social cohesiveness that exists in society. However, in education, this new media has a basic communication relationship that is closely related to allocation, conversation, consultation, and

registration. In communication science, new media is important to improve the quality of communication. Intercultural communication occurs between message producers and message recipients with different cultural backgrounds. Intercultural communication includes communication involving communication participants who represent personal, interpersonal or groups with emphasis on differences in cultural backgrounds that affect the communication behavior of the participants. Since the covid-19 pandemic, cross-cultural communication learning must be adapted to distance learning methods.

Lecturers must also be able to innovate in the learning process. This is done so that students have a learning method that is not monotonous so that it broadens students' horizons and makes it easier for students to absorb knowledge. Learning methods or lectures with podcast media in the future can be used as an alternative to making lectures more dynamic (Wood & Breach, 2021). The use of podcasts here in the learning process is very important. For this reason, distance learning using podcasts is a new innovation that needs to be developed in order to add alternative platforms (Adams & Blair, 2014).

LITERATURE REVIEW

Distance Learning Media

In its implementation, there are several important factors that must be considered so that the distance learning system can run well, namely the level of attention (concentration) confidence, experience, creativity in carrying out the learning process, understanding of using the internet or e-learning, and the ability to interact with others. college student. Research results from Alia et al. (2022) show that in the distance learning process, Zoom is an alternative media for managing face-to-face online classes. But there are still limited features for users. On the other hand, the advantage of using a distance learning system is that it can be used as a means to develop access to education for the general public because the system is flexible, not limited by time, distance, and place (Mengistie, 2021). Besides that, in learning students often face challenges to understand the material because the learning media deviates from the content of the subject. The use of media as an intermediary for delivering information has become more varied, easy to understand, and interactive. The use of distance learning media trains students' learning independence and helps the learning process (Togas et al., 2021). Therefore, distance learning provides quality learning services with a massive and open nature to reach students.

Podcast and Learning Media

The digital technology built into this new media is to make it easier to access information on the media quickly (Fajriyah et al., 2020). The effectiveness of podcasts as information dissemination is carried out without having to get feedback that causes changes in actions, podcasts as media only help to distribute information to the right target. By looking at the effect of podcast media on listeners, it will be known the success of the message distribution process from the media. Adams and Blair (2014) show that podcasts are used as a means to concretize abstract knowledge so that students can access and share those concepts in a meaningful way. Thus, the use of podcasts is not only a disseminator of information but also a learning medium. Mobasheri and Costello (2021) explained that podcasts are portable digital audio files that have become media in learning activities in higher education.

RESEARCH METHOD

This study aims to analyze podcast media as an alternative platform innovation for distance learning. Therefore, in this study, we used a descriptive qualitative approach. The research method used in this research is a case study. This case study was a study of the specificity and complexity of a single case and seeks to understand the case in a particular context, situation, and time (Yin, 2011). We collaborated with 20 students from the Department of Communication at Universitas Negeri Jakarta. Participants were selected based on research needs, namely communication students who were taking cross-cultural communication courses. One of the researchers is a lecturer in cross-cultural communication who develops podcasts on the learning process. So that data collection through observation is carried out during the learning process. To avoid subjectivity, the researcher conducted in-depth interviews with two lecturers of cross-cultural communication regarding the use of podcast media in the learning process. In addition, in-depth and structured interviews were conducted to see the role of podcasts on students' enthusiasm for online learning.

This interview was carried out in four stages. So that each stage of the interview was conducted with five students each. This is due to government regulations that do not allow crowds. Interviews were conducted in an open room (university) and followed health protocols. The topic of the issues raised is related to podcast-based learning. This is in line with Lune and Berg's (2017) generally in-depth interviews that are carried out face to face because at the time of the interview, it is not only spoken words (verbal) that are of concern but also body posture (non-verbal) that can be a source of information. Interviews were conducted for 60 minutes using interview guidelines, namely podcast sound quality, podcast material and content, understanding of podcasts, and student experiences using podcasts. Researchers also carried out triangulation to test the validity of the data. Triangulation was carried out on sources of information, research journals, reference books, and existing data. The analysis process begins with examining all available data from interviews and observations written down in field notes and arranging them into categorized units (Bowen, 2009). After the overall data analysis, the final results were collected and carried out using a qualitative descriptive technique. The data obtained is then analyzed, described, analyzed, interpreted, and then arranged in units, categorizing the data, then the researcher checks the validity of the data and ends with interpreting the data (Yin, 2011). After the data was collected, the researcher carried out the data reduction process. The presentation of the data was carried out by researchers using interpretive analysis.

RESULTS

Distance Learning during Covid-19

Learning during the Covid-19 pandemic has been conducted online. Various distance learning methods are used so that teaching and learning activities from both school and college levels can run effectively and as much as possible. The use of platforms that are just the same is the cause of student boredom in learning. For this reason, we conducted interviews with lecturers on cross-cultural communication to analyze the distance learning carried out during Covid-19.

Since Covid-19, learning activities have changed to online-based. At first, I was surprised because it has not been able to adapt. However, after six months had passed, I started following the flow of the distance learning

process. The key is to dare to innovate. In addition, cross-cultural communication courses are also conducted using the Zoom application and Google Classroom. Usually, students are given the task of doing media analysis through platforms and social media. The learning media used are limited to Zoom and Whatsapp. Unfortunately, many students haven't opened the camera during the lesson yet. (Vania, Lecture, 2021).

In order to maintain the research code of ethics, we use pseudonyms for both teachers and students. Vania is a senior lecturer who has been a lecturer for more than 25 years. The change in learning methods from face-to-face to distance learning took him by surprise. However, Vania only needed six months to adapt. Although according to him, as a lecturer, he must dare to innovate and open himself to new media. Education becomes a learning process in which there is a network of information from educators to students (Papadakis et al., 2020). The information process will form an active interaction to improve the way of thinking and change patterns of behavior for the better.

In my opinion, learning during the COVID-19 pandemic is a challenge in itself. Because, as a student, I must have a sufficient quota, a good internet signal, and a supportive home environment. This happened to me while studying via Zoom. When the presentation related to cross-cultural communication materials, a loud noise disturbed concentration outside the house. (Anastasia, Student, 2021).

Anastasia is a student of communication studies year two who is currently carrying out cross-cultural communication learning activities. The interviews showed that during distance learning, problems were encountered mainly due to environmental conditions. This shows that students need learning media that can make it easier to understand the material.

Besides Zoom, Google Meeting is the other learning activity I do. Unfortunately, Google Meet does not have a data saver feature during a call. In the absence of this feature, we have to prepare many data when chatting using Google Meet. Moreover, when explaining the material by using PowerPoint, they often experience problems while sharing screens. (Aminah, Lecture, 2021).

Aminah is a new lecturer who has taught in the communication science study program for five years. The results of the interview with Aminah show that apart from zoom, Google Classroom is also experiencing problems. So other alternative learning media are needed.

In my opinion, learning through Zoom consumes the internet quota. So, in one day, there are three to four courses that must use zoom. Often the internet signal at home is not supported. So, the material explained by the lecturer must be re-studied independently. (Aldo, Student, 2021).

It can be seen that Aldo has difficulty understanding the material if the internet signal at home turns off. Using zoom too often also makes the internet quota wasteful. Even so, Aldo has been trying to learn independently. Then we introduce podcasts during the lessons. The public has widely used this podcast to listen to news, knowledge and share recorded knowledge. It can be repeated because it was already downloaded at the beginning. This can be a distinct advantage of

podcasts compared to radio. Students can listen to Podcasts while waiting for the train while eating breakfast and other moments and insert them into their gadgets for more practicality. During the third meeting, the researcher explained podcasts to the students in Vania and Aminah's class. Students are directed to download Spotify and search for a podcast entitled KOMPAS (Komunikasi by Podcast). Then, the students were given the task to record important points in the discussion conducted by podcasts for 15 minutes. Next, learning begins via zoom for 30 minutes for a question and answer session. Closing activity, students are directed to make podcasts according to the theme instructed by the lecturer. This theme relates to cross-cultural communication. Each class is 40, so one group is divided into five people/group. Students listen to the results of podcasts made according to the material at the fourth to sixth meetings. Then proceed with a discussion via zoom or Google Meets. After the sixth meeting, we conducted interviews to analyze using podcast media as an alternative learning. "In my opinion, the podcasts used are very easy for us in the learning process. Because we are communication students, the materials and assignments improve our ability to adapt to new media. Learning becomes more varied and not monotonous." (Sesa, student 6, 2021).

I feel much more comfortable using a variety of learning media. So that we do not just make presentations through PowerPoint, but on the contrary, we can create our learning resources according to the direction of the lecturer. In addition, increasing cooperation with friends. (Rudi, student 8, 2021).

Listening to podcasts related to material created by friends is very interesting. In addition, my friends and I can increase our creativity in making scripts that match the learning theme. The material raised is related to cross-cultural communication in our environment. Besides listening to podcasts, we also learn to understand the various communications that exist in the community, especially with friends in class. (Ania, student 12, 2021).

Seeing the results of student statements shows that podcasts can be used as an alternative learning medium. In addition, this podcast media shows that while the sources of information were limited in the old model, there were many sources of information in the new model (Wood & Breach, 2021). Changes can also be seen in student learning motivation which increases because it is interesting with varied learning models. One perspective of intercultural communication emphasizes that the purpose of intercultural communication is to reduce the level of uncertainty about other people. Gudykunst and Kim (as cited in Datu et al., 2021) show that people we do not know always try to reduce uncertainty through accurate forecasting of interpersonal relationships. However, this podcast media fosters communication.

Podcast for Distance Learning in Higher Education

According to Vraga and Tully (2016), the entire communication process ultimately depends on achieving the communication objectives, namely the extent to which the participants give the same meaning to the messages exchanged. In other words, podcast alternatives do not mean replacing existing learning media but adding alternative learning tools (Jarvis & Dickie, 2010). In addition, in group task activities, there is communication carried out—both online and offline.

Table 1. Student Response to Podcast

Question	Yes	No
Are you interested in using Podcasts as an alternative learning media?	15 (75%)	5 (25%)
Do you find it easy to understand cross-cultural communication material through podcasts?	12 (60%)	8 (40%)
Are you interested in making Podcasts back?	17 (85%)	3 (15%)
Do you agree if Podcasts are used in other courses?	8 (40%)	12 (60%)

Table 1 shows that 75% of students are interested in podcast learning media. However, there are still 40% of students who have not understood the material through podcasts. In addition, 60% of students disagree if podcasts are used in other courses. "*Not all courses in the field of communication are appropriate when using Podcasts. There are some materials that are not appropriate.*" (Vania, lecture, 2021).

Technological developments that are increasingly sophisticated now and are referred to as part of the industrial revolution 4.0 have made the learning process not have to be face to face in the classroom. Students can do many activities at one time (multitasking), so in this case, an Audio Podcast-based learning media is needed. Thus, the results of this study indicate that the interaction between lecturers and students in understanding a material can be facilitated by learning media. Learning media is a tool that can be used as an intermediary in a learning process so that learning can be easily conveyed (Bearman, Lambert, & O'Donnell, 2020). Lecturers as a teacher cannot only use the lecture method without using learning media.

DISCUSSION

Based on the research results conducted on students, before podcast technology, students' favorite platform was the first zoom, followed by google meet as their second favorite platform. For students, the use of the zoom platform in teaching makes it easier for them to digest the course and better understand the teacher's explanations and google meet, which has the same function. However, both platforms have their own strengths and weaknesses in addition to zoom and google meet, which are distance learning platforms (Basilaia & Kvavadze, 2020). The choice of various platforms does not always make students comfortable when distance learning takes place. The condition of online learning can not be denied that students experience a decrease in motivation for learning. Many aspects cannot be obtained from the online learning process by studying directly in the lecture hall. The interaction between lecturers and students directly is undoubtedly different from the virtual screen.

In addition, the condition of online lectures makes students less focused on lectures. For example, many students listen to lectures while lying down, eating, or while traveling by motorbike or other transportation. Even though there is a class schedule, online lectures make students who should attend lectures at home, did not implement it properly. Students who are having events outside are still

attending lectures even though they are not at home. The problems that occur during online learning are addition to a decrease in student motivation to learn and a lack of discipline in studying and attending properly (Rafiee & Abbasian-Naghneh, 2019).

Through distance learning innovation with podcast media, it is found that students become enthusiastic in the learning process. The platform used so far has not changed so that students become bored. As is well known, podcasts have become a new medium for conveying information in audio, which is a trend among the public. With the emergence of podcasts as an alternative platform for distance learning, students are motivated again to attend lectures (Sparrow et al., 2020). Technology that is a trend and rife among young people is of particular interest for students to enthusiastically welcome lectures. Distance learning by using podcasts, make the students digest the material presented easily. Students are able to listen to the materials repeatedly (Hoskins, 2013).

Meanwhile, the delivery of material using the podcast platform makes students flexible in learning. Students can repeat the material taught while doing other activities. Its audio nature makes the material delivered by the lecturer easy to understand. Students can repeat the material when they do not understand it. In addition, material through the podcast platform can also be played with any media. This is an era where mobile phones are tools that cannot be separated from our hands, especially for students (Al-Adwan et al., 2018).

Distance learning using the podcast platform does not always have advantages in its use (Churiyah et al., 2020). Based on the results of interviews with students, they accepted the presence of podcasts as an alternative platform. However, many students are not familiar with podcast technology. The term stuttering technology is still attached to some students even though they are classified as millennial students who are technology literate. Many students are not familiar with podcasts and do not know how to download and use this podcast media. So when podcasts become an alternative platform for distance learning, they often cannot keep up. The current pandemic period requires being able to adapt to all situations and conditions. Especially in education, innovation, in this case, is needed, so that distance learning activities become more colorful. Indirect learning activities are undeniable indeed very dynamic and interactive (Ho et al., 2010).

CONCLUSION

However, when faced with the current situation and conditions that have to switch to digital and all-technology, both lecturers and students could adapt it. Virtual distance learning does not always have its drawbacks. On the one hand, the advantages obtained are the efficiency of everything. Students also need direct face-to-face motivation so that verbally and non-verbally, both lecturers and students can feel, unlike in the virtual world where there are often obstacles or noise. At the time of distance learning, all technology has been given by the government to make it easier for learning activities.

However, these technologies have their respective advantages and disadvantages. Innovation is needed here so that distance learning activities can take place properly. As we know the problems that occur during distance learning, we often encounter obstacles such as difficult signals, expensive quotas, and limited technological facilities. This problem cannot be ignored because it concerns

the future of the nation's next generation. Students need knowledge even though during the pandemic, they cannot learn directly face to face. Alternative platforms are urgently needed at this time to minimize platform constraints that previously existed. With the number of distance learning innovations, students will be diverse in receiving learning. This is to avoid boredom or disinterest, or loss of interest in student learning. Teachers and lecturers must also have the courage to make innovations that arouse students' enthusiasm for learning. The research results on students show that platform innovation can ward off student boredom with monotonous learning conditions or the same platform. With the distance learning innovations, students can also learn technology. The limitation of this research is that the trials conducted in podcasts have been on a small scale. Therefore, future research is expected to be able to develop podcasts for other alternative learning media. In addition, it can conduct large-scale trials.

ACKNOWLEDGMENT

This study is funded by the Research Institution and Community Service of Universitas Negeri Jakarta (2021).

DECLARATION OF CONFLICTING INTERESTS

The authors declare no conflict of interest.

REFERENCES

- Abuhammad, S. (2020). Barriers to distance learning during the COVID-19 outbreak: A qualitative review from parents' perspective. *Heliyon*, 6(11), 1-5. doi: 10.1016/j.heliyon.2020.e05482
- Adams, R. V., & Blair, E. (2014). The learner-generated podcast: Engaging postgraduate engineering students in a mathematics-intensive course. *Research in Post-Compulsory Education*, 19(2), 132–146. doi: 10.1080/13596748.2014.897502
- Al-Adwan, A. S., Al-Madadha, A., & Zvirzdinaite, Z. (2018). Modeling students' readiness to adopt mobile learning in higher education: An empirical study. *International Review of Research in Open and Distributed Learning*, 19(1), 707–722.
- Alia, N. N., Antasya, N. A., Aireen, N. E., Amy, N. N., & Malthane, B. R. (2022). Students' perceptions of Zoom video conferencing platform during the Covid-19 Pandemic: A case of Malaysian University. *Asia Pasific Journal of Management and Education*, 5(1), 51-64. doi: 10.32535/apjme.v5i1.1427
- Basilaia, G., & Kvavadze, D. (2020). Transition to online education in schools during a SARS-CoV-2 Coronavirus (COVID-19) Pandemic in Georgia. *Pedagogical Research*, 5(4), 1-9. doi: 10.29333/pr/7937
- Bearman, M., Lambert, S., & O'Donnell, M. (2020). How a centralised approach to learning design influences students: A mixed methods study. *Higher Education Research and Development*, 40(4), 692-705. doi: 10.1080/07294360.2020.1792849
- Bowen, G. A. (2009). Document analysis as a qualitative research method. *Qualitative Research Journal*, 9(2), 27–40. doi: 10.3316/QRJ0902027
- Bunting, L., af Segerstad, Y. H., & Barendregt, W. (2021). Swedish teachers' views on the use of personalised learning technologies for teaching children reading in the English classroom. *International Journal of Child-Computer Interaction*, 27(2), 1-9. doi: 10.1016/j.ijcci.2020.100236
- Chang, J. Y. F., Wang, L. H., Lin, T. C., Cheng, F. C., & Chiang, C. P. (2021).

- 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. doi: 10.1016/j.jds.2021.07.016
- Chaturvedi, K., Vishwakarma, D. K., & Singh, N. (2021). COVID-19 and its impact on education, social life and mental health of students: A survey. *Children and Youth Services Review*, 121, 1-6. doi: 10.1016/j.childyouth.2020.105866
- Churiyah, M., Sholikhan, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia education readiness conducting distance learning in Covid-19 Pandemic situation. *International Journal of Multicultural and Multireligious Understanding*, 7(6), 491. doi: 10.18415/ijmmu.v7i6.1833
- Dabbagh, N., Benson, A. D., Denham, A., Joseph, R., Al-Freih, M., Zgheib, G., Fake, H., & Guo, Z. (2016). Learning technologies and globalization. doi: 10.1007/978-3-319-22963-8
- Datu, J. A. D., Ping Wong, G. S., & Rubie-Davies, C. (2021). Can kindness promote media literacy skills, self-esteem, and social self-efficacy among selected female secondary school students? An intervention study. *Computers and Education*, 161. doi: 10.1016/j.compedu.2020.104062
- Eisengart, J. B., Esler, A. N., Ellinwood, N. M., Hudock, R. L., King, K. E., Klein, T. L., Lee, C., Morton, J., Stephens, K., Ziegler, R., & O'Neill, C. (2021). Issues of COVID-19-related distance learning for children with neuronopathic mucopolysaccharidoses. *Molecular Genetics and Metabolism*, 134(1), 68-76. doi: 10.1016/j.ymgme.2021.06.012
- Fajriyah, L., Wardoyo, C., & Putri, S. F. (2020). Implementation of media mind mapping and powerpoints as a media in increasing student learning motivation. *Asia Pasific Journal of Management and Education*, 3(3), 59-63. doi: 10.32535/apjme.v3i3.968
- Gallardo-Echenique, E. E., de Oliveira, J. M., Marques, L., & Esteve-Mon, F. (2015). Digital competence in the knowledge society. *Journal of Online Learning and Teaching*, 11(1), 1-16.
- Gandolfi, E., Ferdig, R. E., & Kratcoski, A. (2021). A new educational normal an intersectionality-led exploration of education, learning technologies, and diversity during COVID-19. *Technology in Society*, 66. doi: 10.1016/j.techsoc.2021.101637
- Hill, J., Nelson, A., France, D., & Woodland, W. (2012). Integrating podcast technology effectively into student learning: A reflexive examination. *Journal of Geography in Higher Education*, 36(3), 437–454. doi: 10.1080/03098265.2011.641171
- Ho, L. A., Kuo, T. H., & Lin, B. (2010). Influence of online learning skills in cyberspace. *Internet Research*, 20(1), 55–71. doi: 10.1108/10662241011020833
- Hofer, S. I., Nistor, N., & Scheibenzuber, C. (2021). Online teaching and learning in higher education: Lessons learned in crisis situations. *Computers in Human Behavior*, 121. doi: 10.1016/j.chb.2021.106789
- Hoskins, B. J. (2013). Is Distance Learning Transformational? *Journal of Continuing Higher Education*, 61(1), 62–63. doi: 10.1080/07377363.2013.759488
- Jarvis, C., & Dickie, J. (2010). Podcasts in support of experiential field learning. *Journal of Geography in Higher Education*, 34(2), 173–186. doi: 10.1080/03098260903093653
- Jowsey, T., Foster, G., Cooper-loelu, P., & Jacobs, S. (2020). Blended learning via distance in pre-registration nursing education: A scoping review. *Nurse Education in Practice*, 44. doi: 10.1016/j.nepr.2020.102775
- Kilinc, E., Kilinc, S., Kaya, M. M., Baser, E. H., Turkuresin, H. E., & Kesten, A.

- (2016). Teachers' attitudes toward the use of technology in social studies teaching. *Research in Social Sciences and Technology*, 1(1), 59–76.
- Kim, S.-H., & Park, S. (2021). Influence of learning flow and distance e- learning 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 study Sin-Hyang. *Nurse Education in Practice*, 56, 1-6. doi: 10.1016/j.nepr.2021.103197
- Lune, H., & Berg, B. L. (2017). *Qualitative Research Methods for the Social Sciences* (9th ed.). London: Pearson.
- Maloshonok, N., & Terentev, E. (2017). The mismatch between student educational expectations and realities: Prevalence, causes, and consequences. *European Journal of Higher Education*, 7(4), 356–372. doi: 10.1080/21568235.2017.1348238
- Mengistie, T. A. (2021). Higher education students' learning in COVID-19 pandemic period: The Ethiopian context. *Research in Globalization*, 3. doi: 10.1016/j.resglo.2021.100059
- Menkhoff, T., Yian, T. T., Wah, C. Y., & Kee, W. Y. (2011). Engaging knowledge management learners through web-based ICT: An empirical study. *Vine*, 41(2), 132–151. doi: 10.1108/03055721111134781
- Mobasheri, A., & Costello, K. E. (2021). Podcasting: An innovative tool for enhanced osteoarthritis education and research dissemination. *Osteoarthritis and Cartilage Open*, 3(1), 1-5. doi: 10.1016/j.ocarto.2020.100130
- Papadakis, S., Vaiopoulou, J., Kalogiannakis, M., & Stamovlasis, D. (2020). Developing and exploring an evaluation tool for educational apps (E.T.E.A.) targeting kindergarten children. *Sustainability*, 12(10), 1–10. doi: 10.3390/su12104201
- Qazi, A., Qazi, J., Naseer, K., Zeeshan, M., Qazi, S., Abayomi-Alli, O., ..., Haruna, K. (2021). Adaption of distance learning to continue the academic year amid COVID-19 lockdown. *Children and Youth Services Review*, 126. doi: 10.1016/j.chilyouth.2021.106038
- Rafiee, M., & Abbasian-Naghneh, S. (2019). E-learning: Development of a model to assess the acceptance and readiness of technology among language learners. *Computer Assisted Language Learning*, 34(5), 730-750. doi: 10.1080/09588221.2019.1640255
- Rizvi, Y. S., & Nabi, A. (2021). Transformation of learning from real to virtual: an exploratory-descriptive analysis of issues and challenges. *Journal of Research in Innovative Teaching & Learning*, 14(1), 5–17. doi: 10.1108/jrit-10-2020-0052
- Sailer, M., Schultz-Pernice, F., & Fischer, F. (2021). Contextual facilitators for learning activities involving technology in higher education: The Cb-model. *Computers in Human Behavior*, 121. doi: 10.1016/j.chb.2021.106794
- Sparrow, R., Dartanto, T., & Hartwig, R. (2020). Indonesia under the new normal: Challenges and the way ahead. *Bulletin of Indonesian Economic Studies*, 56(3), 269–299. doi: 10.1080/00074918.2020.1854079
- Togas, P. V., Naharia, O., Manggopa, H., Rompas, P. D. T., & Oroh, R. (2021). Development of web-based digital system learning media. *Asia Pasific Journal of Management and Education*, 4(3), 22-34. doi: 10.32535/apjme.v4i3.1263
- van Cappelle, F., Chopra, V., Ackers, J., & Gochyyev, P. (2021). An analysis of the reach and effectiveness of distance learning in India during school closures due to COVID-19. *International Journal of Educational Development*, 85. doi: 10.1016/j.ijedudev.2021.102439

- Vraga, E. K., & Tully, M. (2016). Effectiveness of a non-classroom news media literacy intervention among different undergraduate populations. *Journalism and Mass Communication Educator*, 71(4), 440–452. doi: 10.1177/1077695815623399
- Wood, M., & Breach, S. R. (2021). Assessing the impact of a high impact practice: Implementing a criminal justice shared learning experience using the true crime podcast serial. *Journal of Criminal Justice Education*, 1–14. doi: 10.1080/10511253.2021.1912797
- Yin, R. K. (2011). *Qualitative research from start to finish*. New York: The Guilford Press.