



Research Article

© 2023 Ik-Soon Chung and Hyun-Cheol Choi.
This is an open access article licensed under the Creative Commons
Attribution-NonCommercial 4.0 International License
(<https://creativecommons.org/licenses/by-nc/4.0/>)

Received: 13 April 2023 / Accepted: 15 July 2023 / Published: 5 September 2023

University Students' Satisfaction and Evaluations of Distance Education for General Elective (GE) Subjects in a Korean University

Ik-Soon Chung

Hyun-Cheol Choi*

Chung-Ang University,
84 Heukseok-ro,
Dongjak-gu, Seoul,
South Korea

*Corresponding Author

DOI: <https://doi.org/10.36941/jesr-2023-0115>

Abstract

Globally, distance education has become one of the most popular trends in higher education after COVID-19. However, there is still a lack of research on how distance education can be applied to diverse higher education. This research focuses on General Elective (GE) subjects at a Korean university. Furthermore, this research focuses on Korean university students' evaluation of distance education. This research implemented a mixed method, including surveys ($n=184$) and interviews ($n=4$). Study results showed that distance online education for GE courses provided a flexible learning environment for students. In addition, Korean university students were highly satisfied with distance online education and were willing to take these GE courses. Korean university students further evaluated distance education as an effective way of providing GE subjects. However, the interview analysis showed some challenges of distance education. For example, a lack of real-time interaction between university instructors and students was one of the challenges. Also, a few students had difficulty completing online tasks when the course instructor did not provide regular announcements about assignment due dates. Finally, several implications are discussed for effectively implementing asynchronous online education for GE subjects in higher education.

Keywords: university students, asynchronous online learning, distance education, general elective(GE) subjects, higher education, mixed-methods study

1. Introduction

Distance education is a mode of education in which students can learn remotely from a physical location other than the traditional classroom or campus setting. It typically involves using technology, such as the Internet, to facilitate learning and communication between students and instructors (Ceylan et al., 2021; Lee et al., 2021). In this educational environment, university students can access course materials, submit assignments, participate in discussions, and receive instructor feedback through online platforms using Learning Management Systems (LMS). Thus, distance education allows university students to engage with course content and interact with instructors and

peers online without being physically present in a classroom or on campus (Liu, 2012; Liu et al., 2022). Distance education has become increasingly popular as technological advancements have made it more accessible and effective. Many universities and educational institutions offer online courses and degree programs, allowing students to pursue higher education from anywhere in the world. Many studies have focused on this topic due to COVID-19 (Gonzalez et al., 2020; Gopal et al., 2021).

General elective subjects refer to courses that university students can choose from in their higher education program (Ozer & Ustun, 2020). These courses are typically core curricula, allowing them to explore areas of interest or develop additional skills. Examples of general elective subjects include courses in humanities, social sciences, languages, etc. (Ghonim & Eweda, 2018). The availability of general elective subjects may vary by institution and program. However, students must consult their academic advisors to ensure they take the appropriate courses to meet their academic goals and graduation requirements. These GE courses are important for students to develop their academic performances as well-rounded personnel.

Although many studies have examined the research topics on distance education for university students, the previous has not yet examined diverse subjects and majors for the effectiveness of distance education (Ghonim & Eweda, 2018; Ozer & Ustun, 2020). Specifically, research on GE courses via distance education is relatively limited. Thus, this study aims to expand the scope of existing literature regarding distance education for GE courses. Specifically, this research aims to understand university students' satisfaction and evaluation with asynchronous online learning for GE subjects in a Korean university. Below is the research question.

RQ1: What are university students' satisfaction and evaluation towards asynchronous online learning courses for general elective courses in a Korean university?

2. Literature Review

Asynchronous online learning has gained immense popularity in the past few years, especially in higher education. The COVID-19 pandemic accelerated its adoption as universities and colleges moved their courses online to ensure safety measures. Asynchronous online learning allows students to access course material and complete assignments at their own pace, offering a flexible learning experience. The effectiveness of distance education in higher education has suggested that asynchronous online learning can be as effective. For instance, several studies have found that, on average, students who took distance education courses performed better than those who took face-to-face courses (Rahiem, 2020; Zarei & Mohammadi, 2022).

Distance education can be a valuable option for university students looking to complete general elective subjects. One of the main advantages is that these GE courses allow university students to explore a wide range of subjects and fields of study (Budiman, 2013; Iglesias-Pradas et al., 2021). For example, Budiman (2013) examined university students' writing courses using Skype to check students' perceptions and satisfaction. Study results indicated that students were mostly computer literate and could access the Internet from personal laptops or mobile phones anytime. Generally, the students were positive about distance education via Skype utilization. In another study, Iglesias-Pradas et al. (2021) examined university students' academic performance via distance education. The results showed increased students' academic performance in distance education and supported the idea that organizational factors can contribute to successfully implementing remote teaching and learning.

However, studies have also shown some challenges associated with distance education during COVID-19 (Dilmaç, 2020; Ozer & Ustun, 2020). For instance, Dilmaç (2020) examined university students' views on distance education through art and design courses. Study results showed that university students might lose motivation and not meet their socialization needs during COVID-19. In another study, Ozer and Ustun (2020) examined evaluations and recommendations of university students who took distance education in the fine music arts. The authors concluded that distance education is less efficient than face-to-face education because students with limited opportunities should receive the necessary technological support. The result showed that the students want to

continue their education face-to-face in the post-pandemic period.

In elective subjects, students may have different expectations and preferences for distance education depending on the subject matter and their learning styles. For example, some students may prefer the flexibility of online learning for more self-paced subjects, while others may prefer in-person instruction for more hands-on or interactive subjects. In addition, student satisfaction with distance education can vary depending on various factors, such as the quality of the course materials, the effectiveness of the teaching methods, the level of engagement with the instructor and classmates, and the overall course organization and structure. Therefore, it is important for universities to continuously evaluate and improve their distance education offerings to ensure that they meet the needs and expectations of their students.

Based on the previous literature on this topic, it is necessary to highlight the importance of the effectiveness of distance education. However, the success of distance education implementation in higher education depends on several factors, such as the quality of instruction by course instructors, the flexible usage of educational technology, the level of students' self-directed learning skills, and timely support with feedback by the university institutions (Ceylan et al., 2021; Cole et al., 2014). Previous studies show that distance education for GE courses could be an effective option, but its success must consider individual students' online learning backgrounds and circumstances. Therefore, exploring university students' evaluations and satisfaction with distance education in higher education is crucial as many universities try to provide GE courses via asynchronous online education format. Therefore, this study aims to expand the scope of distance education for GE courses.

3. Methodology

3.1 Study Participants

The research context for this study is W University, located in Seoul, South Korea. The university is a private university in Korea's capital city. Distance education means asynchronous online education for general elective subjects in a Korean university. Among university students participating in the asynchronous online courses, 186 voluntarily joined the course exit survey. Among the final survey participants, 99 identified as male and 87 as female. These students were juniors (n=59) and seniors (n=73). In addition, many students earned a GPA of 3.5 or higher. Table 1 shows the demographic data of survey participants.

Table 1. Demographic data of survey participants

Category		Frequency (N=186)	Percent (%)
Gender	Male	99	53.2
	Female	87	46.8
Grade	Freshman	11	5.9
	Sophomore	43	23.1
	Junior	59	31.7
	Senior	73	39.2
GPA	Less than 3.0	12	6.5
	3.0 - 3.5	38	20.4
	3.5 - 4.0	54	29.0
	more than 4.0	82	44.1

Table 2 shows the background information on university students' participation in asynchronous online education. The survey included information about the medium of taking distance education, the location of online courses, how they watch the online courses, what learning materials were provided, etc.

Table 2. Background information on Online Courses

Category	Frequency (N=186)	Percent (%)
Medium of online education		
Smartphones and Smart Pads	44	23.7
Desktop or laptop	142	76.3
Location of taking online classes		
Home	126	67.7
School	17	9.1
Cafe	14	7.5
Others	29	15.6
Watching online courses		
I watched the entire online course at once	125	67.2
I only watched the online lecture in one session	35	18.8
I only watched the online lecture in three separate sessions	17	9.1
I watched the online lecture in three or more separate sessions	9	4.8
Online lecture viewing time		
I watch online lectures according to the real class time	25	13.4
I watch online lectures in the morning time (0:00 - 12:00)	11	5.9
I watch online lectures in the afternoon time (12:00 - 24:00)	150	80.6
Learning activities		
Using notice board	114	61.3
Specific task on the topic	154	82.8
Online quiz	110	59.1
Online discussion	126	67.7
Opinion gathering/voting	37	19.9
Chatting	37	19.9
Group activities	41	22.0
Online lecture materials		
Text description	140	75.3
Attachment formats	153	82.3
URL	75	40.3

3.2 Data Collection and Data Analysis

Based on previous studies, the survey was modified from the original survey to fit this research topic (Adnan & Anwar, 2020; Almusharraf & Khahro, 2020; Aguilera-Hermida, 2020; Jeong & Chung, 2023; Lee et al., 2021). In addition, the original survey questions were modified for this research's context and participants. The survey had a 5-point Likert scale, ranging from (1) strongly disagree to (5) strongly agree, to evaluate Korean university students' satisfaction with several statements related to distance education for GE courses in the university. After the survey, four students voluntarily participated in the individual interview to describe their detailed experiences. The interview timeline for each interview lasted about 40 minutes. There was no penalty for not participating in this research. Also, there was no compensation for research participation. All research participation was voluntary. Concerning quantitative data analysis, SPSS 26 was used for descriptive statistics. For qualitative data analysis, thematic analysis was used to analyze the interview data. Table 3 shows the information of interview participants.

Table 3. Interview Participants

Participant	Gender	Majors	Academic years	The previous online course experience
Participant 1	Female	Business	Sophomore	Yes
Participant 2	Female	Sociology	Junior	No
Participant 3	Male	Fashion and Design	Junior	Yes
Participant 4	Male	Sports and Science	Senior	No

4. Results

4.1 Survey Results

The survey results are as follows. First, Korean university students' perceptions and attitudes toward asynchronous online education for GE courses were positive. Specifically, Korean university students could actively participate in distance online classes (4.62±.799). Also, they reported that they actively participated in the online learning activities according to the instructors' suggestions (4.50±.773). The Korean university students also reported that the course instructors developed the online courses systematically.

Additionally, the Korean university students showed high evaluations of the course instructors. First, the course instructors properly provided content based on distance education characteristics (4.44±.763). In particular, Korean university students responded the course instructors offered an appropriate teaching method for achieving learning goals (4.34±.735) and an effective teaching method to promote learner participation (4.34±.856). Second, the university students showed that asynchronous online education for GE courses was a flexible teaching and learning method. The survey showed that LMS included proper guidance for checking learners' participation and progress (4.28±.837). For example, students could stop, play, and re-watch the instructional videos whenever they wanted (4.75±.575) and learn at their own pace (4.66±.785).

Third, the university students reported the interaction could be achieved in asynchronous online education for GE courses through LMS. More specifically, online interaction included the interactions between learners and learners (3.75±1.275) and instructors and learners (4.13±.983). Furthermore, Korean university students reported that asynchronous online education for GE subjects provided accurate and prompt information to learners (4.44±.704).

Finally, university students were highly satisfied with asynchronous online education for GE courses and were willing to take these online courses again next semester (4.37±.871). In addition, they evaluated synchronous online education for GE courses as effective in achieving the course goal (4.35±.852). Finally, university students reported overall positive about learning (4.37±.862), and online education was a valuable experience (4.37±.867). Table 4 shows the descriptive statistics of survey results.

Table 4. Descriptive statistics of survey results

Category	Question	M	SD
Perceptions and attitudes towards online education	1. I actively participated in online learning activities.	4.26	.799
	2. I completed pre-tasks and post-task about online classes.	3.62	1.143
	3. I joined the online learning activities by the instructor.	4.50	.773
	4. I actively expressed my opinion to the course instructor via LMS.	3.43	1.221
	5. The syllabus contains detailed information about online learning for this course.	4.36	.828
	6. The instructor offered an appropriate evaluation method to achieve the course's learning goals.	4.34	.735
	7. The instructor offered course content based on the characteristics of online classes.	4.44	.763
	8. The instructor offered an effective teaching method to promote participation in online learning.	4.34	.856
	9. The pre-lecture videos contained the proper speed of the instructors, volume, and clarity to suit the learners.	4.33	.835
	10. I always had access to the LMS.	4.33	.898
	11. The LMS for online classes was consistent and flexible.	4.25	.904
	12. Online classes included explanations of learning methods.	4.26	.895
	13. LMS included guidance and inspection of learner progress.	4.28	.837
	14. I could participate in online classes regardless of the device.	4.35	.865
	15. Online learning provides flexible learning.	4.45	.721
	16. Learners could stop and play the video whenever they wanted.	4.75	.575
	17. Learners were able to learn at their own pace.	4.66	.785
	18. The LMS has a high accessibility of learners.	4.44	.784
	19. The interactions between learners and learners made the LMS smooth.	3.75	1.275
	20. The interactions between instructors and learners made the LMS smooth.	4.13	.983
	21. In the distance education class, the course instructor offered accurate and prompt information to learners.	4.44	.704

Category	Question	M	SD
Satisfaction with online education	1. Online learning was effective in achieving the course goal.	4.35	.852
	2. Online learning provided a valuable learning experience.	4.37	.867
	3. Learning experience through online courses was positive.	4.37	.862
	4. I want to continue taking online classes if given the chance.	4.37	.871

4.2 Interview findings

The researchers recruited individual interview participants to expand the understanding of university students' satisfaction and evaluations of distance education. The interview data analysis showed several themes, including the flexibility of distance education, self-directed is the key to success for distance education, and appropriate support by the course instructors. Firstly, interview participants responded that they prefer to take distance education courses for GE subjects due to the flexibility of the course timeline. Furthermore, although university students liked to take F2F courses for their majors, for GE courses, they liked to take these via distance education. Here are some interview transcripts from the interviews.

I think more GE courses in the university could be done via distance education format. It gives me a flexible schedule to do other activities on campus. Distance education is better, especially since the course content is lecture-driven with theories. Furthermore, if all courses are F2F, I cannot work part-time to earn tuition fees (Student 4).

In my major courses, we have many field practicum components. Thus, I prefer to take F2F courses. However, for GE courses, it could be a distance education format. Moreover, due to COVID-19, many GE courses were transformed into online courses. So, MOOC courses are good for me (Student 1).

Interview participants pointed out that their self-directed learning ability is the key to receiving a good grade and succeeding in distance education courses. In addition, all participants mentioned their own experiences on how to meet the course assignment deadline and check LMS regularly.

Self-directed learning skills are key to success in distance education courses. I have to check LMS regularly to see if I miss something on my assignments. I am seeing some of my classmates fail distance education courses because they forgot to check the due dates of assignments in the LMS (Student 3).

Interview participants also mentioned that the course instructors should be able to provide a learning guide in each week's LMS so that students quickly understand what they need to do in that specific week. Although most of them were busy taking many course hours, the learning guide that the instructor provided could make a study on time. Also, sending a text message with an announcement could be one of the ways to prevent students from failing the distance education course.

One course instructor kindly sent us a weekly announcement message via LMS. When I checked it, I did what I had to do that week. Also, a study guide was provided to regularly check the schedule and deadline. This kind of small support by the instructor was really helpful (Student 2).

5. Discussion

This research examined Korean university students' evaluations of distance online education for general elective subjects in a Korean university. Study results are followed. First, Korean university students' evaluations of asynchronous online education for GE courses were positive. Specifically, they participated in distance online education actively. Second, Korean university students responded that they participated in the online learning activities suggested by the course instructors accordingly. Third, Korean university students mentioned that the GE course instructors provided online learning content based on characteristics of asynchronous online education. These results are

consistent with previous studies of several advantages of asynchronous online education for GE subjects. For example, it is concluded that university students' online learning evaluations can be measured by effective online teaching and learning methods and strategies (Bolliger & Halupa, 2018). Within this setting, learners must use specific online platforms independently or collaboratively. Regarding GE courses in university, distance education could be a more effective way for students to complete the required subjects (Budiman, 2013).

Second, Korean university students answered that asynchronous online education for GE subjects was a consistent format and flexible learning method. University students mentioned that the LMS for distance education offered clear explanations of online courses, and the LMS included clear guidance for learners. University students could stop, play, and re-watch instructional videos whenever they wanted and learn at their own pace. These results are similar to the previous study's findings. For instance, the previous literature has shown that distance online education can provide higher access to quality education for university students living in rural or remote areas (Rovai & Downey, 2010). In terms of flexibility, many studies have pointed out the importance and benefits of distance education for university GE courses (Iglesias-Pradas et al., 2021).

Thirdly, Korean university students were highly satisfied with asynchronous online education for GE subjects. Also, study participants were willing to take online GE courses again. They evaluated asynchronous online learning as effective in achieving the online course goal. They also mentioned that taking distance education courses was a valuable learning experience. These results also match previous literature dealing with distance education. For example, various factors, including the quality of online instruction, the usage of proper educational technology, and the support by the institution, can greatly influence the effectiveness of distance education for GE subjects (Xu & Jaggars, 2013).

However, the interview data some challenges of online learning. If the course content is practice-based, including field practicum and experience, students prefer a F2F course with an on-site instructor. Thus, it is concluded that students like a blended learning curriculum that provides a flexible course format by the university and administration. The previous studies on the limitations of distance education also support these findings. One of the main challenges of distance education is the lack of face-to-face interaction between students and instructors, which can lead to feelings of isolation and reduced engagement (Rohayani, 2015). These study findings suggest that the mixture of F2F and distance education should be carefully designed by the course instructors considering many factors, such as course types, students' learning preferences, and learning styles.

6. Conclusions

Asynchronous online learning has several benefits, such as flexibility, accessibility, and convenience, making it an ideal option for students with personal or work-related commitments. However, it also presents challenges, such as the lack of face-to-face interaction and potential technical difficulties. The effectiveness of asynchronous online learning for general courses in higher education depends on several factors, such as the course design, the instructor's teaching style, and the student's level of engagement. Therefore, designing online courses incorporating active learning strategies and promoting student engagement and interaction is essential to ensure their effectiveness (Grynyuk et al., 2022; Moustakas & Robrade, 2022).

Globally, distance education has become one of the most popular trends in higher education after COVID-19. However, there is still a lack of research on how distance education can be applied to diverse higher education. This research focuses on General Elective (GE) subjects at a Korean university. Furthermore, this research focuses on Korean university students' evaluation of distance education. This research implemented a mixed method, including surveys (n=184) and interviews (n=4). Study results showed that distance online education for GE courses provided a flexible learning environment for students. In addition, Korean university students were highly satisfied with distance online education and were willing to take these GE courses. Korean university students

further evaluated distance education as an effective way of providing GE subjects. However, the interview analysis showed some challenges of distance education. For example, a lack of real-time interaction between university instructors and students was one of the challenges. Also, a few students had difficulty completing online tasks when the course instructor did not provide regular announcements about assignment due dates. Finally, several implications are discussed for effectively implementing asynchronous online education for GE subjects in higher education.

7. Recommendations

The effectiveness of distance education for general elective subjects depends on several factors (Novikov, 2020). For instance, effective communication and interaction between students and instructors are crucial for building a supportive online learning community and promoting student participation and engagement. Thus, considering the necessary support and resources for university students is essential for successful implementation and student success in distance education courses. Furthermore, this study suggests that university instructors should actively involve students in learning progress via LMS to prevent students' failure to complete tasks on time. Thus, the course instructors create an online learning community where students must have accountability for their learning participation and engagement to complete successful distance education.

8. Limitations

The study results from this research could be meaningful for understanding university students' asynchronous online education for general elective subjects. However, the data were collected and provided in a specific context. Therefore, the results from this study could not be generalized to the whole population and various online GE courses for worldwide university settings. In other words, the results could be different for different majors and online GE courses with different student populations. Thus, future studies should explore a more diverse context and a large population of GE subjects to expand the scope of this research topic. Lastly, the student sampling is based on a convenience sampling of accessible university students to participate in the study. Therefore, a random approach in a broader context can reveal other significant factors for future research.

References

- Adnan, M., & Anwar, K. (2020). Online learning amid the COVID-19 pandemic: Students' perspectives. *Journal of Pedagogical Sociology and Psychology*, 2(1), 45-51. <http://www.doi.org/10.33902/JJSP.2020261309>
- Almusharraf, N., & Khahro, S. (2020). Students' satisfaction with online learning experiences during the COVID-19 pandemic. *International Journal of Emerging Technologies in learning*, 15(21), 246-267. <https://doi.org/10.3991/ijet.v15i21.15647>
- Bolliger, D. U., & Halupa, C. (2018). Online student perceptions of engagement, transactional distance, and outcomes. *Distance Education*, 39(2), 212-233. <https://doi.org/10.1080/01587919.2018.1476845>
- Budiman, R. (2013). Utilizing Skype for providing learning support for Indonesian distance learning students: A lesson learned. *Procedia-Social and Behavioral Sciences*, 83, 5-10. <https://doi.org/10.1016/j.sbspro.2013.06.002>
- Ceylan, S., Şahin, P., Seçmen, S., Somer, M. E., & Süher, K. H. (2021). An evaluation of online architectural design studios during the COVID-19 outbreak. *Archnet-IJAR: International Journal of Architectural Research*, 15(1), 203-218. <https://www.emerald.com/insight/2631-6862.htm>
- Chung, E., Subramaniam, G., & Dass, L. C. (2020). Online learning readiness among university students in Malaysia amidst COVID-19. *Asian Journal of University Education*, 16(2), 46-58. <https://doi.org/10.24191/ajue.v16i2.10294>
- Cole, M. T., Shelley, D. J., & Swartz, L. B. (2014). Online instruction, e-learning, and student satisfaction: A three-year study. *The International Review of Research in Open and Distributed Learning*, 15(6). <https://doi.org/10.19173/irrodl.v15i6.1748>
- Dilmaç, S. (2020). Students' opinions about distance education to art and design courses in the pandemic process. *World Journal of Education*, 10(3), 113-126. <https://doi.org/10.5430/wje.v10n3p113>

- Ghonim, M., & Eweda, N. (2018). Investigating elective courses in architectural education. *Frontiers of architectural research*, 7(2), 235-256. <https://doi.org/10.1016/j.foar.2018.03.006>
- Gonzalez, T., De La Rubia, M. A., Hincz, K. P., Comas-Lopez, M., Subirats, L., Fort, S., & Sacha, G. M. (2020). Influence of COVID-19 confinement on students' performance in higher education. *PLoS one*, 15(10), 1-23. <https://doi.org/10.1371/journal.pone.0239490>
- Gopal, R., Singh, V., & Aggarwal, A. (2021). Impact of online classes on the satisfaction and performance of students during the pandemic period of COVID 19. *Education and Information Technologies*, 1-25. <https://doi.org/10.1007/s10639-021-10523-1>
- Grynyuk, S., Kovtun, O., Sultanova, L., Zheludenko, M., Zasluzhena, A., & Zaytseva, I. (2022). Distance learning during the COVID-19 pandemic: the experience of Ukraine's higher education system. *Electronic Journal of E-Learning*, 20(3), 242-256. <https://doi.org/10.34190/ejel.20.3.2198>
- Iglesias-Pradas, S., Hernández-García, A., Chaparro-Peláez, J., & Prieto, J. L. (2021). Emergency remote teaching and students' academic performance in higher education during the COVID-19 pandemic: A case study. *Computers in human behavior*, 119, 106713. <https://doi.org/10.1016/j.chb.2021.106713>
- Jeong, S.H., & Chung, J.Y. (2023). University students' satisfaction and evaluations of synchronous online learning for physical education courses. *Academic Journal of Interdisciplinary Studies*, 12(3), 33. <https://doi.org/10.36941/ajis-2023-0057>
- Lee, K., Fanguy, M., Lu, X. S., & Bligh, B. (2021). Student learning during COVID-19: It was not as bad as we feared. *Distance Education*, 42(1), 164-172. <https://doi.org/10.1080/01587919.2020.1869529>
- Liu, O. L. (2012). Student evaluation of instruction: In the new paradigm of distance education. *Research in Higher Education*, 53, 471-486. <https://doi.org/10.1007/s1162-011-9236-1>
- Liu, H., Zhu, J., Duan, Y., Nie, Y., Deng, Z., Hong, X., ... & Liang, W. (2022). Development and students' evaluation of a blended online and offline pedagogy for physical education theory curriculum in China during the COVID-19 pandemic. *Educational technology research and development*, 1-20. <https://doi.org/10.1007/s11423-022-10131-x>
- Moustakas, L., & Robrade, D. (2022). The challenges and realities of e-learning during COVID-19: The case of university sport and physical education. *Challenges*, 13(1), 9. <https://doi.org/10.3390/challe13010009>
- Novikov, P. (2020). Impact of COVID-19 emergency transition to online learning onto the international students' perceptions of the educational process at Russian universities. *Journal of Social Studies Education Research*, 11(3), 270-302. <https://www.learntechlib.org/p/217752/>
- Ozer, B., & Ustun, E. (2020). Evaluation of students' views on the covid-19 distance education process in music departments of fine arts faculties. *Asian Journal of Education and Training*, 6(3), 556-568. [10.20448/journal.522.2020.63.556.568](https://doi.org/10.20448/journal.522.2020.63.556.568)
- Rahiem, M. D. (2020). The emergency remote learning experience of university students in Indonesia amidst the COVID-19 crisis. *International Journal of Learning, Teaching, and Educational Research*, 19(6), 1-26. <https://doi.org/10.26803/ijlter.19.6.1>
- Rohayani, A. H. (2015). A literature review: readiness factors to measuring e-learning readiness in higher education. *Procedia Computer Science*, 59, 230-234. <https://doi.org/10.1016/j.procs.2015.07.564>
- Rovai, A. P., & Downey, J. R. (2010). Why some distance education programs fail while others succeed in a global environment. *The Internet and Higher Education*, 13(3), 141-147. <https://doi.org/10.1016/j.ihe.2009.07.001>
- 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>
- Zarei, S., & Mohammadi, S. (2022). Challenges of higher education related to e-learning in developing countries during COVID-19 spread: a review of the perspectives of students, instructors, policymakers, and ICT experts. *Environmental science and pollution research*, 29(57), 85562-85568. <https://doi.org/10.1007/s11356-021-14647-2>