

Student Responsibilities Towards Online Learning in Interactive Multimedia Courses

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ABSTRAK

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A B S T R A C T

Dalam pembelajaran online, sikap tanggung jawab diperlukan dalam proses pembelajaran. Dewasa ini, sikap tanggung jawab dalam diri mahasiswa berkurang. Penelitian ini bertujuan untuk melihat sikap tanggungjawab mahasiswa terhadap pembelajaran secara daring pada mata kuliah pengembangan multimedia interaktif. Penelitian ini adalah penelitian deskriptif, yaitu penelitian untuk memberikan uraian mengenai gejala, fenomena, atau fakta yang diteliti dengan mendeskripsikan tentang variabel mandiri, tanpa bermaksud menghubungkan atau membandingkan. Teknik pengumpulan data menggunakan angket Google Form. Populasi dalam penelitian ini adalah mahasiswa yang sedang menempuh mata kuliah Multimedia Interaktif sejumlah 167 responden. Data yang diperoleh dianalisis menggunakan teknik deskriptif presentase. Hasil penelitian ini di dapat bahwa sikap tanggung jawab yang sangat baik dalam pembelajaran Multimedia Interaktif secara daring adalah terkait terkait aspek ketepatan waktu dalam pengumpulan tugas dan mengetahui schedule perkuliahan, aspek melakukan revisi karya dan mengerjakan semua tugas secara mandiri, aspek dalam menggunakan ide yang orisinil dan tidak melakukan plagiarism karya. Sedangkan sikap tanggung jawab yang masih kurang dalam pembelajaran Multimedia Interaktif secara daring adalah terkait aspek partisipasi dalam diskusi forum kelas online dan memberikan saran atau masukan pada karya teman sejawat, aspek penggunaan karya ilustrasi/ gambar sendiri. Sehingga didapatkan hasil bahwa ada aspek-aspek sikap tanggungjawab yang terakit tanggung jawab sosial yang masih kurang, sedangkan tanggungjawab secara individu cukup baik.

In online learning, an attitude of responsibility is needed in the learning process. Today, the philosophy of responsibility in students is reduced. This study looks at the student's responsible attitude towards online learning in the interactive multimedia development course. This research is descriptive, namely, to describe the symptoms, phenomena, or facts studied by describing the independent variables without connecting or comparing—data collection techniques using a Google Form questionnaire. The population in this study was students taking Interactive Multimedia courses totaling 167 respondents. The data obtained were analyzed using a descriptive percentage technique. This study indicates that an excellent attitude of responsibility in online interactive multimedia learning is related to punctuality in collecting assignments and knowing the lecture schedule, revising work and doing all tasks independently, using original ideas, and not doing plagiarism works. At the same time, the attitude of responsibility that is still lacking in online interactive multimedia learning is related to aspects of participation in online class forum discussions and providing suggestions or input on colleagues' work, aspects of using illustrations/drawings themselves. So that we get the results that there are aspects of the attitude of responsibility related to social responsibility that is still lacking, while individual responsibility is quite good.

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1. INTRODUCTION

As we all know, during the COVID-19 pandemic, learning was carried out boldly; this was conveyed by Gared's statement stating that the Covid-19 pandemic caused online learning activities (Garad et al., 2021; Wahyuni et al., 2021). This is intended to prevent the transmission of Covid-19, which can cause death in humans (AlKhamaiseh, 2021; Lase et al., 2020). Schools are required to use an online learning system to study at home. This learning system is known as a learning system, which means that learning is done online, using learning applications or social networks (Astuti & Prestiadi, 2020; Handayani et al., 2021). An online learning system is through a personal computer (PC), laptop, or mobile phone connected to an internet network connection (Ding & Zhang, 2018; Khamparia & Pandey, 2017). Online learning is done online, but this learning can be done face-to-face with different locations through the conference feature (Aulia et al., 2018; Koh et al., 2009). Lecturers and students also experience this at the Department of Curriculum and Educational Technology,

State University of Surabaya. According to the profile of graduates in the Department of Educational Technology, the portion of media development production courses is quite a lot, around 35% of the total courses that students must take, one of which is the Interactive Multimedia Development course with learning outcomes, namely students have academic and practical abilities related to multimedia development. Interactive for Education and learning. A student must be able to have a sense of responsibility within himself. Students use this as capital to be able to become responsible individuals. When a pandemic occurs, learning is directed to online learning.

Before the pandemic, these courses were usually conducted in face-to-face classes, starting with demonstrations by the supporting lecturers. Students doing practicals were accompanied directly and monitored to what extent their knowledge and production skills were so that their learning achievements would appear in the processes and products produced by students. This is very different from the pandemic period because learning is done online. Online learning in this course is through two interactions, namely through synchronous and asynchronous. Synchronous online includes providing material by demonstrating how/technical design through sharing screens and students paying attention, assigning students to do works and sharing screens for consultation. Most students find it challenging to interpret every learning material they get (Kristanto et al., 2021; Sadikin & Hamidah, 2020). While online asynchronous is used for collecting assignments through a learning management system, discussions are also held or peer reviews of fellow students' work completing group learning, giving materials. This is supported by research related to online learning that can be done with several applications such as Google Classroom, Google Meet, Edmundo, and Zoom (Erni et al., 2020; Mpungose, 2021). Students have the flexibility to study during online learning and can study anytime and anywhere without being limited by space and time (Ding & Zhang, 2018; Solehana et al., 2019). Students can also interact with teachers simultaneously, using video calls or live chat.

When a pandemic occurs and requires universities to switch to online learning, learning must migrate to online learning (Mariono et al., 2021; Pujilestari, 2020). Although there is no direct face-to-face meeting, the student production process can be carried out from their respective homes and monitored through online learning interactions both synchronously and asynchronously. This will be seen in student responsibility towards implementing online learning of the Interactive Multimedia Development course. The affective domain determines one's learning success (Dwijavani, 2019; Erni et al., 2020). People who do not interested in certain subjects find it difficult to achieve optimal learning success. Someone interested in a topic is expected to achieve optimal learning outcomes. Therefore, all educators must be able to arouse the interest of all students to attain predetermined competencies. Responsible people always show perseverance, diligence, and seriousness in dealing with the various matters. There are several indicators of responsibility as follows (Fitriyani et al., 2020). Doing the job well, Responsible for the actions taken, Completing work on time. One of the fundamental principles is that learning should be student-centered. Throughout their studies, students are positioned as active learners. Characteristics of successful online learning are as follows: Relevant and well-designed challenging activities Adequate and timely feedback from instructors Adequate and convenient interaction between students Active involvement in easy-to-use knowledge construction and robust navigation system, Deep learning is encouraged through the design of questions and links to resource-initiated thinking, Student learning can be selfdirected according to student needs, Student autonomy is encouraged as students take responsibility for their learning. If related to this research, characteristic number seven indicates that online learning can also increase students' responsible attitudes.

The attitude of responsibility in students is very much needed in online learning. Based on the definition put forward by several experts regarding the philosophy of responsibility, it is deemed necessary for a learner at the elementary school to university level to have an attitude of duty in the learning process. (Cahyati, 2018; Churiyah & Sakdiyyah, 2020). So the researcher wants to see how the philosophy of student responsibility in learning Interactive multimedia development courses is carried out online based on indicators, namely Collecting assignments on time according to agreed deadlines Carrying out each stage of the project according to the syntax and schedule that has been made, Responsible ethically related to the product produced as a result of the project, Responsible for the overall learning process that has been mutually agreed upon and Fostering a responsible attitude of students towards the information collected.

2. METHOD

This research is descriptive, namely, to describe the symptoms, phenomena, or facts studied by describing the independent variables without connecting or comparing. This study seeks to define variables based on indicators and descriptors of research variables (Wulandari & Purwanta, 2021). This study reveals the attitude of student responsibility in online learning of the Interactive Multimedia Development course during the pandemic. The research was conducted at the Education Technology Study Program, State University of Surabaya. The population used in this study were 4th-semester students who took the Interactive Multimedia

Development course. The targets in this study were 167 students. To determine the attitude of students' responsibility towards learning, the researchers used a questionnaire data collection technique in the form of a google form which was distributed to students. The answers to the questionnaire given to 167 students were then analyzed. The data obtained from the questions in the google form are qualitative to measure the data. The instrument grid is presented in Table 1.

Table	1.	Instrument	Grid
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No.	Aspect		Indicators
1	Time Responsibility	a.	I collect assignment on time according to the mutually agreed deadline
		b.	I know the schedule of learning stages that are set in the online learning that I follow
2	Responsibility for social	a.	I participate in online class discussion forums
	interaction activities	b.	I give suggestions, feedback, and comments on the work of my colleagues
3	Responsibility for the task	a.	I revise my work according to input and suggestions from lecturers and colleagues
		b.	I work on all my projects independently
4	Learning enthusiasm	a.	I enthusiastically participate in interactive multimedia learning
5	Plagiarism	a.	I use my illustrations or drawings
		b.	I use original ideas for interactive multimedia design concepts that I produce
		c.	I do not plagiarize interactive multimedia works

A transformation from qualitative to quantitative data is carried out by giving each instrument item's score for each answer. The researcher used a category system using a scale to measure the data. The scoring is done with the following conditions: a) the alternative answer "always" is given a score of 4 b) the alternative answer "often" is given a score of 3 c) the alternative answer "rarely" is given a score of 2 d) the alternative answer "never" is given a score of 1, by negating hesitation or neutral in response. The scale uses only good and bad items, excluding moderately good, those that are somewhat lacking, and those that are neutral. Then the data obtained were analyzed by descriptive percentage.

3. RESULT AND DISCUSSION

Result

Based on a questionnaire in the form of a google form that has been distributed to 167 students taking interactive multimedia development courses, data is obtained as in table 3.1, regarding the assessment of the attitude of responsibility, which is translated into five aspects, namely Aspects related to responsibility for deadlines for collecting assignments and lecture schedules, Aspects of social responsibility related to participation in class discussion forums and appreciation of the work of colleagues/peer reviews, Aspects of guilt for working on assignments related to revising work and independence in doing assignments, Aspects related to enthusiasm or motivation in participating in learning, and Aspects of plagiarism related to the use of illustrations, original ideas and do not do plagiarism works. Of the 167 respondents, all have filled out the google form. When viewed from the data collected, there is a tendency for some aspects of the attitude of responsibility to have a low process rate or below 50%, namely in the element of social responsibility related to enthusiasm or motivation in participating. Meanwhile, in the responsibility for time and the task, the plagiarism aspect of respondents filling in "always" is relatively high, more than 50%.

Regarding responsibility for collecting assignments on time, 83.2% of respondents stated that they continuously collect duties on time, and 61.1% of respondents indicated that they knew about the learning stages that the lecturer had set. 38.3% of respondents always participate in online discussion forums in class, but only 9% of respondents always provide suggestions and input. Regarding revision of assignments according to information from lecturers and friends, 65% of respondents always do it, and 79.6% of respondents do project work independently. When the learning took place, 40.7% of students were very enthusiastic about following it. On the plagiarism aspect, 32.9% of respondents used illustrations of their work, 64.7% of students did the final project design concept independently and did not plagiarize multimedia works.

Discussion

The analysis results show that some aspects of the attitude of responsibility are excellent, and some are lacking. Aspects related to responsibility for deadlines for collecting assignments and lecture schedules are good because almost 50% of respondents answered "always" because developing an attitude of responsibility in learning will train students to become aware of their duties and obligations. This is by the opinion (Cavanagh et al., 2020; Magnus et al., 2020) that project-based learning has learning benefits, including fostering a student's attitude of responsibility towards the information collected. Aspects of social responsibility related to participation in class discussion forums and appreciation of the work of fellow students are still lacking because more than 50% of those who answer are always less than 50%; this can be caused by students feeling reluctant or feeling bad if they have to criticize the work of their friends, actually this is less good because constructive criticism is needed as a form of responsibility for participation in online learning. Cooperative and interactive learning strategies are the most effective. Multimedia technology support positively impacts the learning process (Abdul et al., 2020; Majid et al., 2012). Teachers should use academic self-efficacy and learning engagement in online learning. Perception receives input from students regarding the evaluation of learning for students. Perceptions can change to see the continuity of online learning in the future. So this must be familiarized for the sake of continuous interaction between students in the online learning environment. 3) Aspects of responsibility for carrying out tasks related to revising works and being independent in doing assignments are good because more than 50% of those who answer "always" are. This can be seen in the interactive multimedia works produced by students, which are pretty good to meet the criteria for good interactive multimedia, as stated by Walker & Hess. (Arsyad, 2004) said that quality learning multimedia must meet the following requirements: (1) the quality of the content and objectives, which include: accuracy, importance, completeness, balance, attractiveness, fairness, and suitability to the student's situation; (2) instructional quality, which includes: providing learning opportunities, providing assistance for the learning, motivating quality, instructional flexibility, relations with other teaching programs, quality of tests and assessments, can have an impact on students, can have an impact on teachers and their learning; and (3) technical quality, which includes: readability, ease of use, quality of display/impression, quality of handling student responses, quality of program management, and quality of documentation.

Aspects related to enthusiasm or motivation in learning is less than 50% who answered "always," indicating that students are more happy and enthusiastic about face-to-face lectures. Support online teaching methods and facilitate teaching and learning activities, but there is a very urgent need to weigh the pros and cons of technology and take advantage of its potential (McGarr & Ó Gallchóir, 2020; Sert & BoynueÄŸri, 2017). Students answered that online learning was not fun, requiring lecturers to find solutions for fun learning models. This learning model can be done in the online learning process. Lecturers think about what models can motivate students to be more involved in online learning. Targeted motivational design models encourage students to use technology to enhance inquiry-based learning experiences (Aulia et al., 2018; Stockdale et al., 2019). Aspek plagiarism terkait dengan penggunaan ilustrasi, ide orisinal dan tidak melakukan plagiarism karya cukup baik karena yang menjawab "selalu" lebih dari 50% responden. Thus, in searching for sources of information on the internet, students demonstrate an increased ability to research origin websites, critique evidence, and find reputable sources (McGrew, 2020). The ability to evaluate online content requires not only thinking about the nature and origin of information, contextual knowledge, and use of multiple sources but functional and critical digital skills and an understanding of the Internet and the digital environment. (Polizzi, 2020; Priatmoko et al., 2021). Moreover, students are equipped with ethics related to copyright in various production courses, including digital literacy courses, which discuss codes of ethics and plagiarism of works.

When a pandemic occurs and requires universities to switch to online learning, learning must migrate to online learning (Mariono et al., 2021; Pujilestari, 2020). Although there is no direct face-to-face meeting, the student production process can be carried out from their respective homes and monitored through online learning interactions both synchronously and asynchronously. This will be seen in student responsibility towards implementing online learning of the Interactive Multimedia Development course. The affective domain determines one's learning success (Dwijavani, 2019; Erni et al., 2020). People who do not interested in certain subjects find it difficult to achieve optimal learning success. Someone interested in a topic is expected to achieve optimal learning outcomes. Therefore, all educators must be able to arouse the interest of all students to attain predetermined competencies. Responsible people always show perseverance, diligence, and seriousness in dealing with the various matters. There are several indicators of responsibility as follows (Fitriyani et al., 2020). Doing the job well, Responsible for the actions taken, Completing work on time. One of the fundamental principles is that learning should be student-centered. Throughout their studies, students are positioned as active learners. Characteristics of successful online learning are as follows: Relevant and well-designed challenging activities Adequate and timely feedback from instructors Adequate and convenient interaction between students Active involvement in easy-to-use knowledge construction and robust navigation system, Deep learning is encouraged through the design of questions and links to resource-initiated thinking, Student learning can be selfdirected according to student needs, Student autonomy is encouraged as students take responsibility for their learning. If related to this research, characteristic number seven indicates that online learning can also increase students' responsible attitudes.

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4. CONCLUSION

An excellent attitude of responsibility in online interactive multimedia learning is related to aspects of punctuality in collecting assignments, knowing the lecture schedule, revising work, doing all tasks independently, using original ideas, and not plagiarizing works. While the attitude of responsibility that is still lacking in online interactive multimedia learning is related to aspects of participation in online class forum discussions, providing suggestions or input on colleagues', and the use of own illustrations/pictures. So that we get the results that there are aspects of the attitude of responsibility related to social responsibility that are still lacking, while individual responsibility is quite good. The conclusion of this study shows that learning with an online system does not reduce the sense of responsibility in students in attending lectures.

5. REFERENCES

- AlKhamaiseh, O. S. (2021). The Role of Educational Counselors in Developing Students' Acceptance of Online Learning during COVID 19 Pandemic in Jordan: Educational Counselors and Students' Acceptance of online Learning. *Journal of Educational and Social Research*, 11(3), 20. https://doi.org/10.36941/jesr-2021-0048.
- Ansari, J. A. N., & Khan, N. A. (2020). Exploring the role of social media in collaborative learning the new domain of learning. *Smart Learning Environments*, 7(1), 1-16. https://doi.org/10.1186/s40561-020-00118-7.
- Arsyad, A. (2004). Media Pembelajaran. PT Raja Grafindo Persada.
- Astuti, A. D., & Prestiadi, D. (2020). Efektivitas Penggunaan Media Belajar Dengan Sistem Daring. Prosiding Web-Seminar Nasional (Webinar) "Prospek Pendidikan Nasional Pasca Pandemi Covid-19" Fakultas Ilmu Pendidikan – Universitas Negeri Malang, 129–135. http://fip.um.ac.id/wpcontent/uploads/2020/10/E-Prosiding-Semnas-FIP-20juni20-1.pdf.
- Aulia, E. V., Poedjiastoeti, S., & Agustini, R. (2018). The Effectiveness of Guided Inquiry-based Learning Material on Students' Science Literacy Skills. *Journal of Physics: Conference Series*, 947(1). https://doi.org/10.1088/1742-6596/947/1/012049.
- Cahyati, N. (2018). Penggunaan Media Audio Visual Terhadap Karakter Tanggung Jawab Anak Usia 5-6 Tahun. Jurnal Golden Age, 2(02), 75. https://doi.org/10.29408/goldenage.v2i02.1033.
- Cavanagh, T., Chen, B., Lahcen, R. A. M., & Paradiso, J. (2020). Constructing a Design Framework and Pedagogical Approach for Adaptive Learning in Higher Education: A Practitioner's Perspective. *The International Review of Research in Open and Distributed Learning*, 21(1), 172–196. https://doi.org/10.19173/IRRODL.V2111.4557.
- Churiyah, M., & Sakdiyyah, D. A. (2020). International Journal of Multicultural and Multireligious Understanding Indonesia Education Readiness Conducting Distance Learning in Covid-19 Pandemic Situation. International Journal of Multicultural and Multireligious Understanding (IJMMU), 7(6), 491–507. https://ijmmu.com/index.php/ijmmu/article/download/1833/1413.
- Ding, Y., & Zhang, P. (2018). Practice and effectiveness of web-based problem-based learning approach in a large class-size system: A comparative study. *Nurse Education in Practice*, 31, 161–164. https://doi.org/10.1016/j.nepr.2018.06.009.
- Dwijayani, N. M. (2019). Development of circle learning media to improve student learning outcomes. *Journal of Physics: Conference Series*, 1321(2), 171–187. https://doi.org/10.1088/1742-6596/1321/2/022099.
- Erni, S., Vebrianto, R., Miski, C. R., MZ, Z. A., Martius, & Thahir, M. (2020). Refleksi Proses Pembelajaran Guru MTs dimasa Pendemi Covid 19 di Pekanbaru : Dampak dan Solusi. *Journal of Education and Learning*, 1(1), 1–10 https://ejournal.anotero.org/index.php/bedelau/article/view/1.

- Fitriyani, Y., Fauzi, I., & Sari, M. Z. (2020). Motivasi Belajar Mahasiswa Pada Pembelajaran Daring Selama Pandemik Covid-19. *Profesi Pendidikan Dasar*, 7(1), 121–132. https://doi.org/10.23917/ppd.v7i1.10973.
- Garad, A., Al-Ansi, A. M., & Qamari, I. N. (2021). The Role Of E-Learning Infrastructure And Cognitive Competence In Distance Learning Effectiveness During The Covid-19 Pandemic. *Cakrawala Pendidikan*, 40(1), 81–91. https://doi.org/10.21831/cp.v40i1.33474.
- Handayani, D., Elvinawati, Isnaeni, & Alperi, M. (2021). Development Of Guided Discovery Based Electronic Module For Chemical Lessons In Redox Reaction Materials. *International Journal of Interactive Mobile Technologies (IJIM)*, 15(07), 94–106. https://doi.org/10.3991/IJIM.V15I07.21559.
- Khamparia, A., & Pandey, B. (2017). Impact of interactive multimedia in E-learning technologies: Role of multimedia in E-learning. *Enhancing Academic Research With Knowledge Management Principles*, 199–227. https://doi.org/10.4018/978-1-5225-2489-2.CH007.
- Koh, T. S., Lee, S. C., Foo, S. F., Plomp, T., Anderson, R. E., Law, N., & Quale, A. (2009). Cross-national Information and Communication Technology: Vol. null (null (ed.)) https://www.infoagepub.com/products/Cross-National-Information-and-Communication-Technology-Policies.
- Kristanto, A. (2021). Integration of a Constructivism Approach in E-learning Photography Subjects: Feasibility and Effectiveness in Learning. *Journal of Education Technology*, 5(2), 167–174. https://ejournal.undiksha.ac.id/index.php/JET/article/view/33380.
- Kristanto, A., Sulistiowati, ., & Pradana, H. D. (2021). Brain-Based Online Learning Design in The Disruptive Era for Students in University. *Journal of Educational and Social Research*, 11(6), 277. https://doi.org/10.36941/jesr-2021-0147.
- Lase, M. B., Siantajani, Y., & Harefa, D. (2020). *Pembelajaran Problem Solving Dalam Mengembangkan Psikomotorik Anak Usia Dini di Era Revolusi 4*. 0. 5(1), 98–105. https://osf.io/preprints/cs5hn/.
- Magnus, D. D. M., Carbonera, L. F. B., Pfitscher, L. L., Farret, F. A., Bernardon, D. P., & Tavares, A. A. (2020). An Educational Laboratory Approach for Hybrid Project-Based Learning of Synchronous Machine Stability and Control: A Case Study. *IEEE Transactions on Education*, 63(1), 48–55. https://doi.org/10.1109/TE.2019.2956909.
- Majid, M. S. Z. B. A., Ali, M. M. B. A., Rahim, A. A. B. A., & Khamis, N. Y. B. (2012). The Development of Technical English Multimedia Interactive Module to Enhance Student Centered Learning (SCL). *Procedia* - Social and Behavioral Sciences, 67, 345–348. https://doi.org/10.1016/J.SBSPRO.2012.11.337.
- Mariono, A., Bachri, B. S., Kristanto, A., Dewi, U., Sumarno, A., Kholidya, C. F., & Pradana, H. D. (2021). Online Learning in Digital Innovations. *Journal of Education Technology*, 5(4), 547–555. https://doi.org/10.23887/JET.V5I4.40115.
- McGarr, O., & Ó Gallchóir, C. (2020). Examining supervising field instructors' reporting and assessment of technology use by pre-service teachers on school placement. *Computers & Education*, 146, 103753. https://doi.org/10.1016/J.COMPEDU.2019.103753.
- McGrew, S. (2020). Learning to evaluate: An intervention in civic online reasoning. *Computers & Education*, 145, 103711. https://doi.org/10.1016/J.COMPEDU.2019.103711.
- Mpungose, C. B. (2021). Lecturers' reflections on use of Zoom video conferencing technology for e-learning at a South African university in the context of coronavirus. *African Identities*, 1-17. https://doi.org/10.1080/14725843.2021.1902268.
- Polizzi, G. (2020). Digital literacy and the national curriculum for England: Learning from how the experts engage with and evaluate online content. *Computers & Education*, *152*, 103859. https://doi.org/10.1016/J.COMPEDU.2020.103859.
- Pradana, H. D., & Kuswandi, D. (2017). Model Learning Cycle Dalam Pengembangan. *Prosiding TEP &PDs*, 292–297. http://pasca.um.ac.id/conferences/index.php/sntepnpdas/article/view/878.
- Priatmoko, S., Sugiri, W. A., Bashori, & Islamy, M. I. (2021). Distance Learning for New Students in the Era of Pandemic Coronavirus Disease (Covid-19): Implementation and Barriers. *Proceedings of the International Conference on Engineering, Technology and Social Science (ICONETOS 2020)*, 529(Iconetos 2020), 607–613. https://doi.org/10.2991/assehr.k.210421.088.
- Pujilestari, Y. (2020). Dampak Positif Pembelajaran Online Dalam Sistem Pendidikan Indonesia Pasca Pandemi Covid-19. *Adalah*, 4(1), 49–56. http://journal.uinjkt.ac.id/index.php/adalah/article/view/15394/7199.
- Sadikin, A., & Hamidah, A. (2020). Pembelajaran Daring di Tengah Wabah Covid-19. *Biodik*, 6(2), 109–119. https://doi.org/10.22437/bio.v6i2.9759.
- Sert, N., & BoynueÄŸri, E. (2017). Digital technology use by the students and english teachers and self-directed language learning. World Journal on Educational Technology: Current Issues, 9(1), 24–34. https://doi.org/10.18844/WJET.V9I1.993.

- Solehana, L., Solehana, L., Asrori, A., & Usman, A. (2019). The Development of E-Learning Teaching Material Based on Edmodo on Basic Competencies of National Integration at Class X of Senior High School. *JETL* (*Journal of Education, Teaching and Learning*), 4(2), 382–388. https://doi.org/10.26737/jetl.v4i2.1914.
- Stockdale, J., Hughes, C., Stronge, S., & Birch, M. (2019). Motivating midwifery students to digitalise their enquiry-based learning experiences: An evaluative case study. *Studies in Educational Evaluation*, 60, 59–65. https://doi.org/10.1016/J.STUEDUC.2018.11.006.
- Wahyuni, E. N., Aziz, R., Wargadinata, W., & Efiyanti, A. Y. (2021). Investigation of Primary School Teacher Readiness in Online Learning during the Covid-19 Pandemic. *Madrasah: Jurnal Pendidikan Dan Pembelajaran Dasar*, 13(2), 97–113. https://doi.org/10.18860/mad.v13i2.11343.
- Wulandari, H., & Purwanta, E. (2021). Pencapaian Perkembangan Anak Usia Dini di Taman Kanak-kanak selama Pembelajaran Daring di Masa Pandemi Covid-19. Jurnal Obsesi : Jurnal Pendidikan Anak Usia Dini, 5(1), 452–462. https://doi.org/10.31004/obsesi.v5i1.626.