

E-Learning Process in Elementry School: Bibliometrics Approach

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Abstract

In the transition to entirely online learning for Covid-19, the learning management system (LMS) plays a critical role in higher educational institutions around the world. The Nvivo plus 12 system and the Vosviewer program were utilized in the qualitative research. The goal of this research paper is to look into the e-learning process among students who are familiar with the internet. The development of an online education model (Zoom, WA, LMS), platform, and comprehensive online e-Learning would have a big impact. Full e-learning is a term used to describe fully online learning that occurs between traditional campus education and online learning (e-learning) that occurs outside of the campus facing covid-19. The use of a virtual learning management system (LMS) allowed for the promotion of online learning (e-learning). The new research on virtual Learning management systems has the potential to transform essential components of classrooms by utilizing forms that can have a substantial impact on teaching and learning. According to the findings, technology affects librarians' perspectives of their jobs, students' needs, and faculties that might help them develop. In order to produce a selection and motivate pupils to think about it, full e-learning must collaborate with them. Despite the fact that comprehensive e-learning is becoming a viable strategy for various institutions in the country, some universities, particularly in developing countries, are opposing the transition.

Keywords E-Learning; Students; Technology; Developing; Learning Management System

Introduction

Develop and test a comprehensive model for managing the e-learning process, as well as the relationship between the model's systematic application, the outcomes of specific e-learning components, and the e-learning subject. Institutions that engage in e-learning can use the concept and its practical implications as a process model for adopting e-learning-related activities (Granic & Ukui, 2007). E-learning is an important part of the e-Learning system's conception and design (Granic, ukui, et al., 2009), because it gives powerful principles for creating learning scenarios that will improve

students' learning experiences (Granic, Mifsud, et al., 2009). Then, among the most modern technology-based remote learning and mobile learning delivery platforms are mobile phone SMS systems, which provide access to learning resources without being limited by place or time (Katz & Yablon, 2011). Sophisticated technology improvements in pedagogical delivery have resulted in motivated, flexible, user-friendly, regulated, and adaptive learning via mobile phone delivery systems (Katz, 2015).

The 2019 coronavirus infection pandemic (COVID-19) is wreaking havoc on many

aspects of society, including personal health (Holmes et al., 2020); (Brooks et al., 2020). (Verma et al., 2020). C. Wang et al., 2020; Ser (Conti et al., 2020). According to the World Health Organization, Coronavirus (COVID-19) is an infectious disease caused by a newly discovered coronavirus (WHO, 2020). According to the WHO, people infected with the COVID-19 virus get mild to severe respiratory illnesses that resolve without the need for treatment. On the other hand, older people and people with underlying health problems including diabetes, cardiovascular disease, chronic lung disease, and cancer are more likely to develop serious illnesses and die. Despite widespread public education about how to prevent and stop the spread of the disease, it has spread to 210 countries and territories throughout the world, with a total of 2,013,918 confirmed cases of COVID-19 originating in Wuhan, China, and a death toll of 127,587 people (Nguyen & Dong, 2018, p. E Aboagye). Human-to-human transmission demanded social separation and avoidance of busy settings. As a result, most governments have shut down schools and other institutions where big crowds are unavoidable until further notice. Authorities have offered emergency remote teaching to ensure that students are not left idle during the pandemic due to the unexpected closure of educational establishments. As a result, traditional methods (traditional face-to-face schooling) have been temporarily replaced by online ones (e-learning). When comparing developed and developing countries, it was discovered that developing countries face challenges such as poor internet connectivity, a lack of knowledge about how to use ICT, and a lack of content production (Muehlschlegel et al., 2021); (Y. Wang et al., 2021; Cao et al., 2020; Szczeniak et al., 2020).

Students and teachers' perceptions on the effectiveness of foreign language teaching in terms of students' academic needs (Krkgöz, 2009). The clear conceptual approach is based on a discourse community (DC) perspective,

which considers writing to be a socio-cultural practice and reading to be a work-related activity (Krkgöz, 2005). As a result, the primary sources of motivation that influence students' evaluation choices and views of the challenges they may face when studying via E-learning must be identified. Students favored a combination of integrative and instrumental incentives when it came to motivational tendencies. They had a generally positive opinion of themselves (Ferris & Tagg, 1996). According to a recent study (Başbek et al., 2014), the following information on lecturers' perspectives toward their teaching of learning might be revealed: Lecturers in partial EMI programs may consider they are less capable of carrying out their teaching duties or that some areas of instruction are more difficult.

Research Method

This research takes a qualitative approach. As a data-gathering tool, semi-structured interviews are performed. The participants are gathered in a WhatsApp group by the researcher, who provides them certain guidelines in instructions. The research analysis is bibliometrics review through publication document and the subject of the Muhammadiyah University of Enrekang, all departments were obligated to use WA, Zoom, LMS, and Facebook education and science student communities (publish or perish). After eight weeks of online instruction, students' perceptions were anonymously collected using WA, Zoom, LMS, and Facebook education and science student communities. This research uses a bibliographic study design as well as systematic and explicit mapping approaches. A qualitative case study was done to approach the research to understand better how e-learning impacts covid-19. Vosviewer and Nvivo plus 12 were utilised in this study. From March 20 through April 25, 2021, the questionnaire was available online via a learning management

system and other technologies. Exclusion criteria were not available. The questionnaire could only be completed once by each student. All participants were informed about the study's objectives and consented to participate voluntarily.

Result and Discussion

The research outcomes remain presented by writing the processed data of the trend of publication in 2000-2021 is 'e-learning proses' trend by using the PoP application as follow.

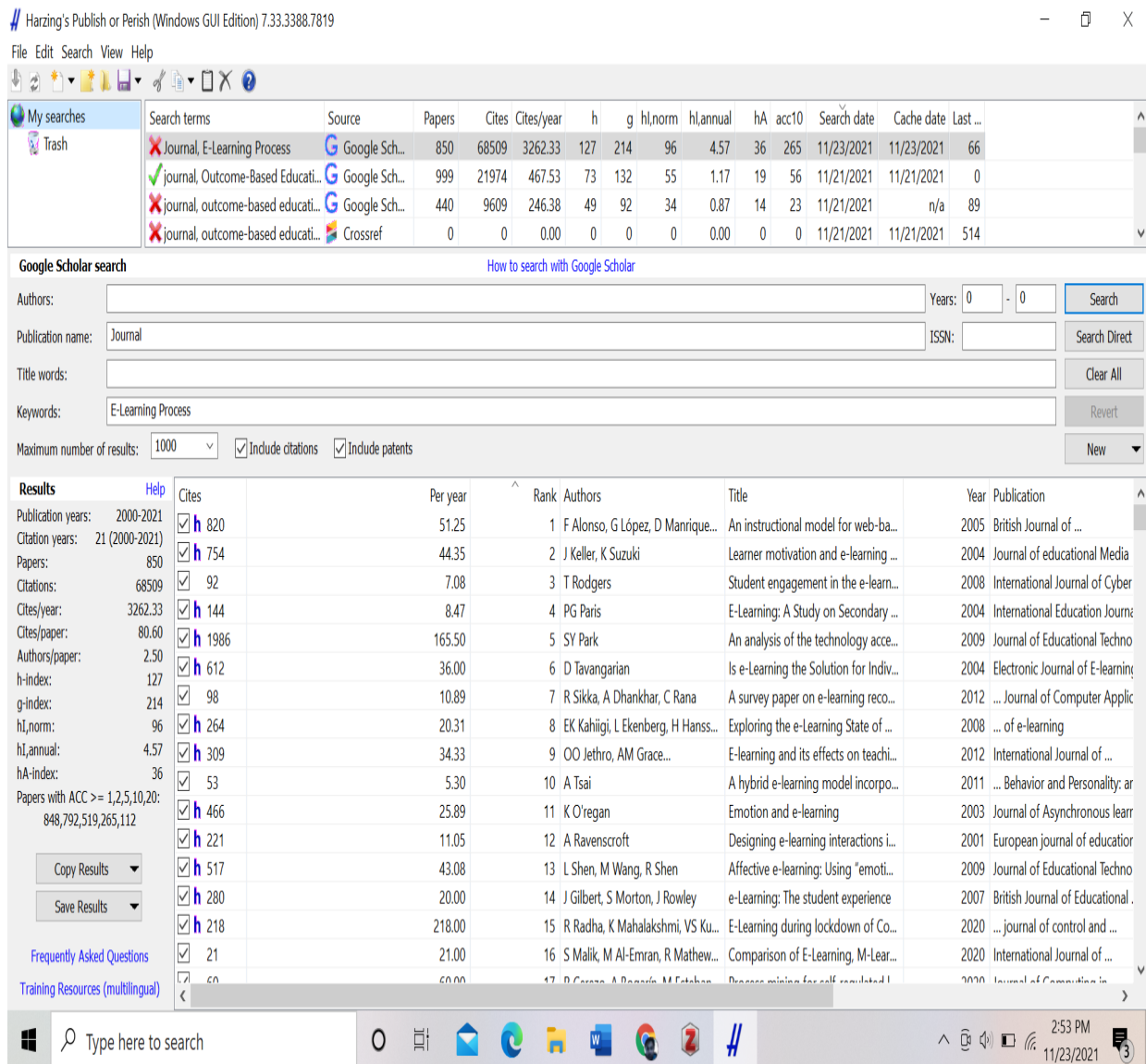


Figure 1. Publish or Perish about the E-learning process

The initial exploration results of the 2000 to 2021, this research aims to provide a PoP application resulted in 850 papers. From comprehensive analysis of the "E-learning

process" trend. The information was obtained from the Science Citation Index database of Google Scholar. A qualitative methodology was used in the investigation using Harzing's Publish or Perish (Windows GUI Edition) 7.33.3388.7819. All the files were evaluated, and data such as titles, author affiliations, and publication dates were recovered and exported to Excel. There were 850 articles published in

total, h-index 214, with 68509 citations. Between 2000 until 2021, the majority of the outcomes (n = 850) were published. Bibliometrics analysis can be used by scientists and financial institutions interested in Publish or Perish about E-learning process.

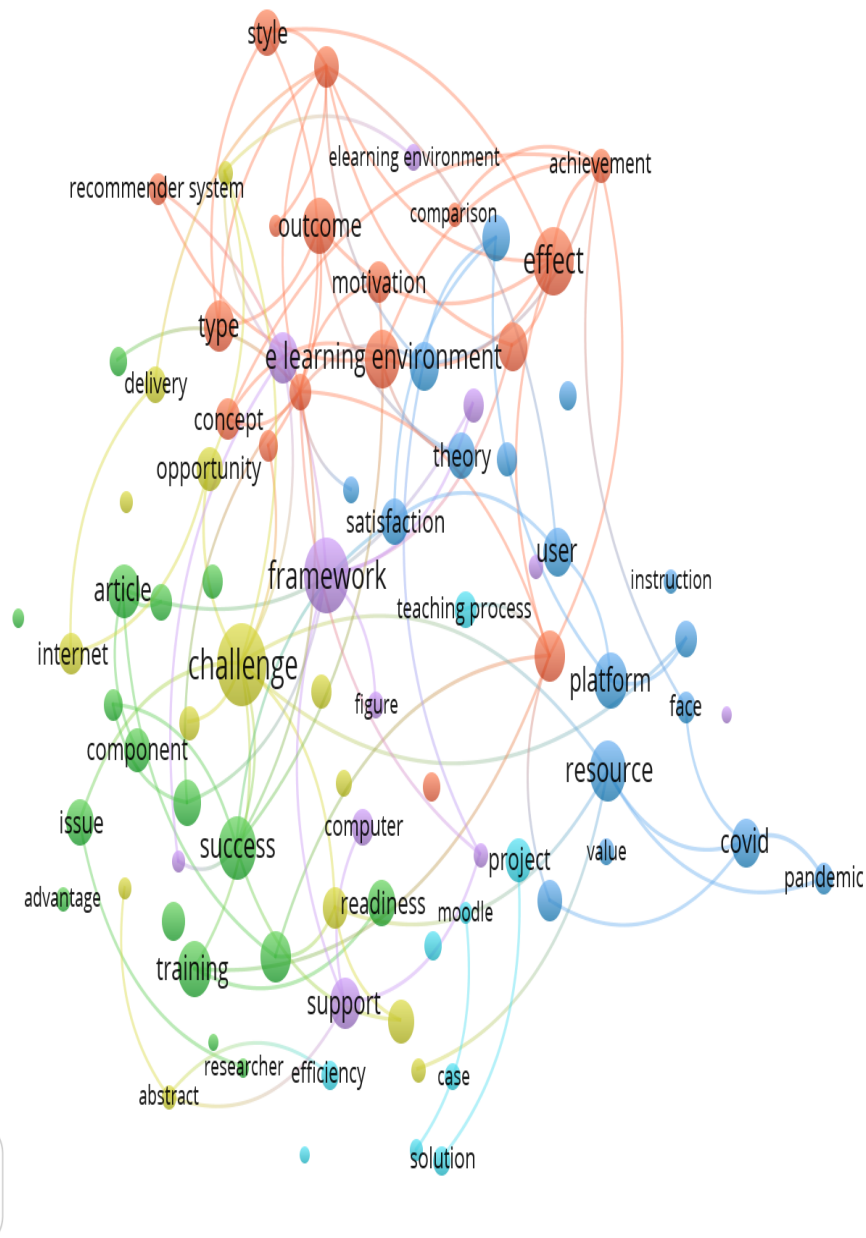


Figure 2. Network Visualization Visualisation about E-learning process

Learning in Communities of Inquiry: A Review of the Literature

PoP app
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Content analysis schemes to analyze transcripts of online asynchronous discussion groups: A review

E-Learning in the 21st Century: A Framework for Research and Practice

Prior works

Derivative works



Q Search...						
Download Collapse						
Title	Authors	Year	Citations	References	Similarity to origin	
A Constructivist Approach to Online Learning: The Community of Inquiry Framework	Karen Swan, D. Garrison, Jennifer C. Richardson	2009	309	49	10.1	
AN EMPIRICAL VERIFICATION OF THE COMMUNITY OF INQUIRY FRAMEWORK	B. Arbaugh	2019	72	80	9.9	
The Development of a Community of Inquiry over Time in an Online Course: Understanding the Progression and Integration of Social...	Zehra Akyol, D. Garrison	2008	458	34	9.8	
Creating cognitive presence in a blended faculty development community	N. Vaughan, D. Garrison	2005	252	17	9.7	
The first decade of the community of inquiry framework: A retrospective	D. Garrison, T. Anderson, W. Archer	2010	637	40	9.7	
Understanding cognitive presence in an online and blended community of inquiry: Assessing outcomes and processes for deep approaches to...	Zehra Akyol, D. Garrison	2011	377	57	9.5	
The Relationship of Social Presence and Interaction in Online Classes	C. Tu, M. Mcisaac	2002	983	42	9.4	
Validating a Measurement Tool of Presence in Online Communities of Inquiry	Karen Swan, Jennifer C. Richardson, P. Ice, D. Garrison, M. Cleveland-Innes, J. Arbaugh	2008	308	65	9.4	
Learning in Communities of Inquiry: A Review of the Literature	L. Rourke, H. Kanuka	2009	273	60	9.3	
Content analysis schemes to analyze transcripts of online asynchronous discussion groups: A review	B. Wever, T. Schellens, M. Valcke, H. V. Keer	2006	928	95	9.2	

Figure 3. Connected papers about the E-learning process

These are the papers most frequently cited by the graph's papers, as shown in Figure 3. It indicates that they are seminal works in this field and that familiarising yourself with them

is a good idea. Selecting a previous work will display all graph papers that reference it, and selecting a graph paper will display all previous work cited. Word Frequency Query

for the E-learning process. The exponential, unprecedented, and disruptive nature of the E-learning process has been described. E-Learning in the Twenty-First Century provides a framework for understanding how and why e-learning is used in higher education (Garrison et al., 2003). The obstacles of implementing e-learning have been researched in the literature (Akyol & Garrison, 2008). There is evidence that electronic learning projects have failed due to a lack of preparation on the part of institutions and their constituents (Akyol et al., 2009).

Individuals are also adhering to outdated pedagogies and practices, making it more difficult for them to adapt to new ones and update old ones. Because of previous experiences, students' impressions of online learning were negative, resulting in high dropout rates and low learner motivation (Arbaugh, 2019; Alavi & Taghizadeh, 2013; Garrison et al., 2003; Rourke & Kanuka, 2009). One of the other explanations was revealed to be low student satisfaction with online learning. Despite this, research shows that both students and instructors are satisfied with online and traditional learning methods.

The School Literacy Movement is a social movement with the collaborative support of various elements. The effort taken to make it happen is in the form of habituation of reading for students. This habituation is carried out with 15 minutes of reading activities. When the habit of reading is formed, it will then be directed to the development and learning stage (accompanied by bills based on the 2013 Curriculum) (Syaparuddin, dkk., 2019). The variety of activities can be in the form of a combination of developing receptive and productive skills. In its implementation, at certain scheduled periods, an assessment is carried out so that the impact of the existence of the School Literacy Movement can be known and continuously developed. The School Literacy Movement is expected to be able to mobilize school residents, stakeholders,

and the community to jointly own, implement, and make this movement an important part of life (Hasnidar, dkk., 2019).

Literacy is more than just reading and writing, but includes thinking skills using sources of knowledge in print, visual, digital, and audio forms. The following are the stages of the School Literacy Movement. 1. Stage 1: Getting used to reading fun activities in the school ecosystem. This habituation aims to foster interest in reading and in reading activities within the school community. The growth of interest in reading is fundamental to the development of students' literacy skills. 2. Stage 2: Development of reading interest to improve literacy skills. Literacy activities at this stage aim to develop the ability to understand reading and relate it to personal experience, think critically, and cultivate creative communication skills through activities responding to enrichment readings. 3. Stage 3: Implementation of literacy-based learning. Literacy activities at the learning stage aim to develop the ability to understand texts and relate them to personal experience, think critically, and cultivate creative communication skills through activities responding to texts of enrichment reading books and textbooks. In this stage there are bills that are academic in nature (related to subjects) (Saharuddin, dkk., 2019). Reading activities at this stage are to support the implementation of the 2013 Curriculum which requires students to read non-textual books which can be in the form of books about knowledge (Syamsinar, dkk., 2019). The development of literacy goes according to predictable stages of development. The developmental stages of children in learning to read and write intersect between stages of development. Understanding the stages of literacy development of students can help schools to choose appropriate literacy habits and learning strategies according to their developmental needs. 2. A good literacy program is balanced Schools that implement a

balanced literacy program realize that each student has different needs. Therefore, reading strategies and text types.

Conclusion

To summarize, while involving students during this pandemic period can be good in terms of keeping them active and engaged on their studies, some issues should have been addressed earlier to the outbreak. The E-learning process, for example, should have introduced students to online learning before the shift to 100% online learning. Many of the students are unfamiliar with online learning, and many would want the semester to be postponed until further notice once they are in the midst of the pandemic. Before implementing e-learning, an organization's business environment, technology, content, training technique, culture, human resources, and financial issues should all be examined. Prior to the use of e-learning, all of these issues were disregarded. So, will e-learning be useful in this epidemic era? Following the COVID-19, more research into student satisfaction with traditional online learning should be conducted.

References

- Akyol, Z., Arbaugh, J., Cleveland-Innes, M., Garrison, D., Ice, P., Richardson, J. C., & Swan, K. (2009). A Response to the Review of the Community of Inquiry Framework. *International Journal of E-Learning and Distance Education*, 23, 123–136. <https://www.semanticscholar.org/paper/78de9dc28d9c9d858927b4ac298aba2b4a656ed>
- Akyol, Z., & Garrison, D. (2008). The Development of a Community of Inquiry over Time in an Online Course: Understanding the Progression and Integration of Social, Cognitive and Teaching Presence. *Journal of Asynchronous Learning Networks*, 12, 3–22. <https://doi.org/10.24059/OLJ.V12I3.66>
- Alavi, S. M., & Taghizadeh, M. (2013). Cognitive Presence in A Virtual Learning Community: An EFL Case. *International Journal of E-Learning and Distance Education*, 27, 1. <https://www.semanticscholar.org/paper/926fae860e2ff10d525cc244fa7738f045959b6bArbaugh>,
- B. (2019). AN EMPIRICAL VERIFICATION OF THE COMMUNITY OF INQUIRY FRAMEWORK. *Online Learning*. <https://doi.org/10.24059/OLJ.V11I1.1738>
- Başıbek, N., Dolmacı, M., Cengiz, B. C., Bur, B., Dilek, Y., & Kara, B. (2014). Lecturers' Perceptions of English Medium Instruction at Engineering Departments of Higher Education: A Study on Partial English Medium Instruction at Some State Universities in Turkey. *Procedia - Social and Behavioral Sciences*, 116, 1819–1825. <https://doi.org/10.1016/J.SBSPRO.2014.01.477>
- Brooks, S., Webster, R., Smith, L. E., Woodland, L., Wessely, S., Greenberg, N., & Rubin, G. J. (2020). *The psychological impact of quarantine and how to reduce it: Rapid review of the evidence*. [https://doi.org/10.1016/S0140-6736\(20\)30460-8](https://doi.org/10.1016/S0140-6736(20)30460-8)
- Cao, W., Fang, Z., Hou, G., Han, M., Xu, X., Dong, J., & Zheng, J. (2020). *The psychological impact of the COVID-19 epidemic on college students in China*. <https://doi.org/10.1016/j.psychres.2020.112934>
- Conti, E., Sgandurra, G., Nicola, G. D., Biagioni, T., Boldrini, S., Bonaventura, E., Buchignani, B., Vecchia, S. D., Falcone, F., Fedi, C., Gazzillo, M., Marinella, G., Mazzullo, C., Micomonaco, J., Pantalone, G., Salvati, A., Sesso, G., Simonelli, V., Tolomei, G., ... Battini, R. (2020). *Behavioural and Emotional Changes during COVID-19 Lockdown in an Italian Paediatric Population with Neurologic and Psychiatric Disorders*. <https://doi.org/10.3390/brainsci101209>

- Ferris, D., & Tagg, T. (1996). Academic Listening/Speaking Tasks for ESL Students: Problems, Suggestions, and Implications*. *TESOL Quarterly*, 30, 297–320.
<https://doi.org/10.2307/3588145>
- Garrison, D., Anderson, T., & Garrison, R. (2003). *E-Learning in the 21st Century: A Framework for Research and Practice*.
<https://doi.org/10.4324/9780203166093>
- Granic, A., & Ćukušić, M. (2007). An Approach to the Design of Pedagogical Framework for e-Learning. *EUROCON 2007 - The International Conference on "Computer as a Tool,"* 2415–2422.
<https://doi.org/10.1109/EURCON.2007.4400675>
- Granic, A., Ćukušić, M., & Walker, R. (2009). MLearning in a Europe-wide network of schools. *Educational Media International*, 46, 167–184.
<https://doi.org/10.1080/09523980903135301>
- Granic, A., Mifsud, C., & Ćukušić, M. (2009). Design, implementation and validation of a Europe-wide pedagogical framework for e-learning. *Comput. Educ.*, 53, 1052–1081.
<https://doi.org/10.1016/j.compedu.2009.05.018>
- Hasnidar, H., & Elihami, E. (2020). Pengaruh Pembelajaran Contextual Teaching Learning Terhadap Hasil Belajar PKn Murid Sekolah Dasar. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, 1(1), 42-47.
- Hajrah, H., & Elihami, E. (2020). Measuring the Preventive of Drug Dangers in Elementary Schools. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, 1(2), 21-27.
- Holmes, E., O'Connor, R., Perry, V., Tracey, I., Wessely, S., Arseneault, L., Ballard, C., Christensen, H., Silver, R. C., Everall, I., Ford, T., John, A., Kabir, T., King, K., Madan, I., Michie, S., Przybylski, A. K., Shafran, R., Sweeney, A., ... Bullmore, E. (2020). *Multidisciplinary research priorities for the COVID-19 pandemic: A call for action for mental health science*.
[https://doi.org/10.1016/S2215-0366\(20\)30168-1](https://doi.org/10.1016/S2215-0366(20)30168-1)
- Katz, Y. (2015). Concept Learning via SMS Delivery at the University Level. *The European Journal of Open, Distance and E-Learning*, 18.
<https://www.semanticscholar.org/paper/289daf5a16f9f32c1147f6c908cfc4ea0f71ce62>
- Katz, Y., & Yablon, Y. B. (2011). Affect and digital learning at the university level. *Campus-Wide Information Systems*, 28, 114–123.
<https://doi.org/10.1108/10650741111117815>
- Kırkgöz, Y. (2005). Motivation and Student Perception of Studying in an English-medium University. *Journal of Language and Linguistic Studies*, 1, 101–123.
<https://doi.org/10.17263/JLLS.37410>
- Kırkgöz, Y. (2009). *Students' and lecturers' perceptions of the effectiveness of foreign language instruction in an English-medium university in Turkey*.
<https://doi.org/10.1080/13562510802602640>
- Muehlschlegel, P. A., Parkinson, E. A., Chan, R. Y., Arden, M., & Armitage, C. (2021). *Learning from previous lockdown measures and minimising harmful biopsychosocial consequences as they end: A systematic review*.
<https://doi.org/10.7189/jogh.11.05008>
- Nguyen, D. C., & Dong, V. (2018). 2,5-Dimethylfuran for Internal Combustion Engines: Potential and Development. *European Journal of Engineering Research and Science*, 3, 106–111.
<https://doi.org/10.24018/EJERS.2018.3.12.1049>
- Rourke, L., & Kanuka, H. (2009). *Learning in Communities of Inquiry: A Review of the Literature*.
<https://www.semanticscholar.org/paper/19e0f60d94fe6ef182903514d01fc8f257e5bf7b>
- Saharuddin, A., Wijaya, T., Elihami, E., & Ibrahim, I. (2019). Literation of Education and Innovation Business Engineering Technology. *Jurnal Edukasi Nonformal*, 1(1), 48-55.

- Serafini, G., Parmigiani, B., Amerio, A., Aguglia, A., Sher, L., & Amore, M. (2020). *The psychological impact of COVID-19 on the mental health in the general population*. <https://doi.org/10.1093/qjmed/hcaa201>
- Szczęśniak, D., Gładka, A., Misiak, B., Cyran, A., & Rymaszewska, J. (2020). *The SARS-CoV-2 and mental health: From biological mechanisms to social consequences*. <https://doi.org/10.1016/j.pnpbp.2020.110046>
- Syarif, I., Elihami, E., & Buhari, G. (2021). Mengembangkan Rasa Percaya Diri Melalui Strategi Peer Tutoring Di Sekolah Dasar. *EduPsyCouns: Journal of Education, Psychology and Counseling*, 3(1), 69-77.
- Syaparuddin, S., & Elihami, E. (2020). Peningkatan Kecerdasan Emosional (EQ) Dan Kecerdasan Spiritual (SQ) Siswa Sekolah Dasar SD Negeri 4 Bilokka Sebagai Upaya Meningkatkan Kualitas Diri Dalam Proses Pembelajaran PKn. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, 1(1), 11-29.
- Syamsinar, S., Firawati, F., Hafid, R., Elihami, E., & Asikin, A. (2020). Pelatihan Model Pembelajaran Kooperatif E-Learning pada Peserta didik di Sekolah Dasar. *MASPUL JOURNAL OF COMMUNITY EMPOWERMENT*, 2(2), 81-90.
- Syaparuddin, S., Meldianus, M., & Elihami, E. (2020). Strategi pembelajaran aktif dalam meningkatkan motivasi belajar pkn peserta didik. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, 1(1), 30-41.
- Syaparuddin, S., & Elihami, E. (2020). Improving student learning motivation through the utilization of video media in education students. *Jurnal Edukasi Nonformal*, 1(1), 228-235.
- Tasrim, T., & Elihami, E. (2020). Motivasi Kerja Pendidik dalam Meningkatkan Manajemen Lembaga Pendidikan Dasar. *Mahaguru: Jurnal Pendidikan Guru Sekolah Dasar*, 1(1), 48-53.
- Verma, T. L., Nema, D., Pandagre, R., & Verma, S. (2020). *IMPACT OF DEMONETIZATION DEMONETISATION, GOODS AND SERVICE TAX & COVID-19 ON INDIAN ECONOMY*. <https://doi.org/10.21474/IJAR01/11649>
- Wang, C., Pan, R., Wan, X., Tan, Y., Xu, L., Ho, C., & Ho, R. (2020). *Immediate Psychological Responses and Associated Factors during the Initial Stage of the 2019 Coronavirus Disease (COVID-19) Epidemic among the General Population in China*. <https://doi.org/10.3390/ijerph17051729>
- Wang, Y., Shi, L., Que, J., Lu, Q., Liu, L., Lu, Z.-A., Xu, Y., Liu, J., Sun, Y., Meng, S., Yuan, K., Ran, M., Lu, L., Bao, Y., & Shi, J. (2021). *The impact of quarantine on mental health status among general population in China during the COVID-19 pandemic*. <https://doi.org/10.1038/s41380-021-01019>