Covid-19 Outbreak and New Normal Teaching in Higher Education: Empirical Resolve from Islamic Universities in Indonesia

Ani Cahyadi

UIN Antasari, Indonesia e-mail: anicahyadi@uin-antasari.ac.id

Abstract

Mid of March 2020, the coronavirus 19 pandemic outbreaks caused many offices, markets, schools, and universities closed to maintain its dead spreading. It makes all the offline activities should be changed into online interaction including at higher education. Lawrence & Tar (2018) reflected a study about factors that influence teachers' adoption and integration of ICT in teaching/learning process. This study is about the activity of new normal in conducting online education relating to the use of six strategies applied which are applied by teachers in the Islamic University of Antasari Banjarmasin Indonesia. Within the new normal period, this study reveals the six strategies on conducting online education namely; a) the strategy of contextualization, b) the strategy of proper delivery, c) the strategy of high adaptation on using technology, d) the strategy of adequate support, e) the strategy of quality participation, f) the strategy of sustainable processes.

Keywords: covid-19, new normal, online education

A. Introduction

The pandemic of covid-19 brings the died impact to the society and community in any aspect of life survival including in education sector. Since the mid of March 2020, during the pandemic outbreaks, all the tertiary education in Indonesia removed and adapted the new normal era in learning method, from face to face interaction in the classroom towards online education. Lawrence & Tar (2018) reflected a study about factors that influence teachers' adoption and integration of ICT in teaching/learning process. The government of Indonesia deliberately produced the policy toward this pandemic outbreak by asking all the educational institutions to host the education; teaching and learning at home (study at home) through maximizing the use of the online system. Hinostroza (2018) explained about new challenges for ICT in education policies in developing countries: The need to account for the widespread use of ICT for teaching and learning outside the school.

Consequently, formal institution should change their perspectives and practices and think about why, who, what, and how of education during covid-19 outbreak (Lie, 2020). all the education rulers began to start using online education through their cellphones, smartphones, notebooks to keep them stay at home and getting lessons and knowledge from the teachers. Biddix et al. (2016) explained about faculty use and perception of mobile information and communication technology (m-ICT) for teaching practices. Besides Indonesia, there are some other countries all over the world getting stuck on the hit of covid-19. About 61 countries already made the local take down to their citizen by closing the schools and universities (Unesco, 2020).

Teaching and learning process at higher education during the covid-19 pandemic spreading caused educational institution cannot undertake the face to face interaction in the classroom. It makes the universities think so hard to overcome existing learning difficulties faced by the lecturers and students. Online education is chosen to occupy the academical connection between lecturers and students. Shishkovskaya et al. (2015) argued about "Paperless" foreign languages teaching. Online teaching uses paperless contribution in distributing materials as well as the submitting assignments. Moreover, Oproiu (2015) took a study about using e-learning platform (Moodle) in university teaching process.

More research on the online teaching have been explained by these following writers; Brinkley-Etzkorn (2018): Learning to teach online; Measuring the influence of faculty development training on teaching effectiveness through a TPACK lens, Hege (2011): The online theology classroom: Strategies for engaging a community of distance learners in a hybrid model of online education, Jenkins (2014): Teaching leadership online: An exploratory study of instructional and assessment strategy use, Camus et al. (2016): Facebook as an online teaching tool: Effects on student participation, learning, and overall course performance, Cowan (2013): A Connectivism Perspective of the Transition from Face-to-Face to Online Teaching in Higher Education, and Camus et al. (2016): Perceived that Facebook as an online teaching tool: Effects on student participation, learning, and overall course performance.

The use of technology in new normal teaching make lecturers and students should realize to use the online education in harmony with the pandemic period. Asamoah & Oheneba-Sakyi (2017) mentioned about Constructivist tenets applied in ICT-mediated teaching and learning: higher education perspectives. Discussion on the internet, Communication and Technology (ICT) have also been elaborated by some writers such as; Valtonen et al. (2015) mentioned that the impact of authentic learning experiences with ICT on pre-service teachers' intentions to use ICT for teaching and learning. Wu & Liu (2015) took the acceptance of ICT-mediated teaching/learning systems for elementary school teachers: Moderating effect of cognitive styles. Kamaruddin et al. (2017) mentioned Integrating ICT in teaching and learning: A preliminary study on Malaysian private preschool. Kweka & Ndibalema (2018) delivered constraints hindering adoption of ICT in government secondary schools in Tanzania: The case of Hanang District.

Based on the research review above, as higher education in Indonesia, 223 Islamic universities have only delivered hundreds, online education hosts. Zare et al. (2016) explained Multi-criteria decision-making approach in E-learning: A systematic review and classification. It is still much lower compared to the online education conducted by public universities. Simon (2016) stated Mobile instant messaging support for teaching and learning in higher education. The pandemic outbreak asks the institutions of Islamic universities to create many kind online education programs to occupy the 2.526 students undergraduate to get keeping at home as well as having virtual teaching and getting transfer knowledge form teachers during the new normal period. Particularly, this study focuses on the solution on the online education though appearing the empirical resolution by promoting the six strategies of teaching the online education in Islamic universities in Indonesia. Therefore, the researcher proposed one research problem i.e. "How do the universities resolve the strategies of teaching online education to confront the covid-19 pandemic?"

B. Literature Review

Covid-19 outbreak brings people all over the world to change their methods from traditional to more technological way in teaching. It is obvious that in traditional teaching, as what teachers conduct everyday where they can accommodate face to face interaction directly to students. Additionally, teachers can maximize the power of body language, facial expressions, and teacher's voice in order to make students understand toward the materials explained. In the era of covid-19 outbreak nowadays, teachers seem cannot use those three elements in clear and direct way because the whole elements elements in school whould should switch to online platform. As a result, the teacehrs should slow down their explanation in order to have meaningful teaching and learning process where the students can understand and capture the points explained in the online lesson (Bao, 2020).

Indonesian scholars and educators have been used to apply and implement elearning through internet access and system. In Indonesia, it has begun in the midnineteenth about the late 70s and early 80s (Sulistyo, 2007). We have been emerging technology in the education society from 2010 to 2015 as the developing country and was

ranked 9th highest growth rate of technology users. Indonesian students love and profound technology, including the usage of social media. According to the research of the Cambridge Assesment International Education (2018) shows that mostly Indonesian scholars have been literate ICT to support their readiness in facing the online education (Widyanti, 2020; Suwarsono, 2016; Hasanah et al., 2014).

Review on the use of e-learning have been explored by these following authors like; Horspool & Lange (2012) said applying the scholarship of teaching and learning: student perceptions, behaviours and success online and face-to-face. Lameras et al. (2012) explained Blended university teaching using virtual learning environments: conceptions and approaches. Donlan (2014) mentioned Exploring the views of students on the use of Facebook in university teaching and learning. Alwehaibi (2015) elaborated the impact of using Youtube in EFL classroom on enhancing EFL students' content learning. De Freitas et al. (2015) stated about will MOOCs transform learning and teaching in higher education? Engagement and course retention in online learning provision.

Analyzing subjects towards online learning have been declared by Young (2006) stated that student views of effective online teaching in higher education. Hege (2011) elaborated the online theology classroom: strategies for engaging a community of distance learners in a hybrid model of online education. Cowan (2013) argued a connectivism Perspective of the Transition from Face-to-Face to Online Teaching in Higher Education. Hung & Jeng (2013) explored factors influencing future educational technologists' intentions to participate in online teaching. González-Sanmamed et al. (2014) took a study on the level of proficiency and professional development needs in peripheral online teaching roles.

Moreover, it is important to highlight new normal approach so that decision makers and teachers are able to analyse opportunities and challenges that teachers and students might face in teaching and learning process on post covid-19 period. Therefore, curriculum design of new normal is highly urgent to guide teachers in solving problems as well as gaining solutions in teaching by considering goals, contents, approaches, and evaluations items (Cahapay, 2020). Furthermore, covid-19 in new normal setting is not only influencing the teaching content and curriculum, habitual actions on post covid-19 outbreak brings human to new activities which should be applied wherever they are, i.e. wearing face mask, washing hands, keeping physical distancing, applying online teaching and learning platform, as well as keeping body health by consuming more Vitamin C and healthy food (Tria, 2020). Additionally, in the era of new normal, teacherr should also consider not only to suggest students to have healthy body, but also tend to keep away students from psychological effect of the online learning such as stress and being afraid of academical lost. Hence, having sufficient teaching and learning plans and teachers' professional development are suggested to be improved to adjust this pandemic condition (Hasan & Bao, 2020).

C. Research Methodology

This was a descriptive qualitative research design. The writers got the students of Islamic universities in Indonesia as the random sample of research. Exploring the observation as the instrument in collecting the data through attaining the students' social media. There were some steps in analyzing the data, (Miles & Huberman, 2014) namely; data reduction, data display, data conclusion. First, the writers were doing reduction on the all data got form the students' responses in social media they commented about the online education held in higher education. Second, data display was accomplished through tabulating data, classifying data, categorizing data and analyzing data. Lastly, third, the writers conclude the findings and discussing the result of analysis regarding with the answers of research problems.

D. Research Findings and Discussion

The institution should work hard to provide anything in conducting online education such as; the internet connection, online materials, the audio and video application, and the hardware facility. Moreover, teachers need to break the challenge right now to prepare themselves in holding the online teaching under the sufficient teaching experience and lack of high technology. Surprisingly, during this covid-19 outbreak, it potentially causes the unprepared and unqualified students in the future since there is no readiness in implementing online education bringing technology on the program of study at home (Hariyadi & Martiarini, 2019). Another research pointed out that the online application for whole academic period will make the students less active and creative because they spend too much time at home without any teachers' guidance (Murdaningsih, 2019).

On the other hand, based on the data got from the students; responses through the social media they have, the problems of attending the online classroom is not always about the technical disorder like the insufficient of internet infrastructure and online hardware, but also about the non-technical disorder such as the appropriate materials and students' learning attitudes (Brinkley-Etzkorn, 2018). Those disorder have frequently disordered in the students' and teachers' settings regarding the unreadiness of hosting it.

Based on that, then the result of research focus on the strategies which are helping teachers and students in conducting the online classroom effectively and maintain the students' learning attitude. We have already held the observation; this study describes the online teaching strategies to provide students with the materials and learning kits effectively.

First, create an alternative teaching plan; This online teaching will be dependent on the internet online system which needs a huge and visibility computer hardware and software, we need to serve the platform that we are going to use which is tangible and easy to operate for students. Mohamad et al. (2015) mentioned that making easiness for students is one of the factors affecting lecturer's motivation to students in using online teaching tools. The internet connection and access are the majority consideration that should be overcome. The institution needs to provide the well-maintained internet terminal at the campus which supports the process of platform online teaching while being

used. They also need to gather those students who cannot have access to the online teaching platform by providing them with sufficient internet quota.

Second, we need to pay attention to our audio voice; When we hold conventional classroom teaching, we can have students' body language, facial expressions, and speak loudly to ensure that our voice is well listened to by students. Since the online classroom, there are some limited things to have like; teachers' and students' attitudes on-screen, readiness, and existence during the online interaction, and the acceptance of the full materials. Besides, we also find some weaknesses of online teaching like; teachers' voices, students' voices, and very short time allotments. To handle these problems teachers should organize their voice, their presentation slides, and cooccurrence time in a teaching session.

Third, the small class is beautiful; Having an online classroom is not easy for students of Islamic universities. They are not persistently encouraging in attending and joining the virtual classroom. Some of them feel lazy to follow since they don't have any enough internet quota access and some other reasons. Teachers should manage the lessons into several parts of the session such as; teaching content materials, dividing classrooms into small groups, separated materials into small topic areas discussion, and using an effective and simple teaching technique. Kizilcec et al. (2017) viewed about self-regulated learning strategies predict learner behavior and goal attainment in small class open online courses. Whereas, teachers should as consider as the firmed curriculum of structure in which has several topic discussions that should be consumed by students in a semester within each meeting class is about 30 minutes.

Fourth, increasing students' competency through classroom outside activity; while conducting an online classroom, the teacher can not monitor and control the students; doing at home even though they are joining our class meeting. They are freely hiding the visual monitor on their face to have personal private and teachers can not see him/her face with any gestures binging out. By this phenomenon, the teacher can only interact with the audiovisual and slides of materials during the online teaching and virtual classroom. Therefore, the result of designing an online classroom can proceed effectively if students have a high technology adaption that they got from the outside and field experience while they have trial and error using any online learning platform. Jenkins (2014) mentioned teaching leadership online: An exploratory study of instructional and assessment strategy use. They also welcome for the materials and assignment which is easily understood and easily submit through the common online teaching media they acknowledged.

Fifth, using a teaching assistant; Teachers at universities are parted to be junior and senior teachers. They have different empirical teaching using technology since it depends on the expertise of their subject. Some teachers like using ICT (internet, communication, and technology) some others do not accustom to use it. based on the data of the institution mentioned that 70 percent of teachers are senior teachers aged 50 years old over. This condition makes them face difficulties in emerging online teaching using any

platform application. Consequently, they need to have any pieces of training to equip them mastering that online teaching platform comprehensively.

The solution is that senior teachers need to have a teaching assistant before teaching their students with their expertise. This can be shaped by including junior teachers in a teaching team with them. In the teaching team, the junior teacher will help the senior teacher in operating the online teaching using the internet and adapted technology as well the junior teacher can learn from the senior about the profound materials, references, and teaching assessment. Additionally, here the teaching assistant can help the senior teacher in maintaining during the online teaching using the platform whether assisting to open the online classroom, proceeding the online classroom, designing content discussion online classroom, and organizing the students' online tasks and assignments.

Sixth, combining online classroom and independent classroom; The teaching problem usually appears while there is no very active participation from the students in having a discussion and academic dialogue between teacher-student and student-student. This commonsense occurs in offline teaching or face to face classrooms, even much worst in online classrooms then. To cope with that problem, the teacher should rely on the two-classroom domain, namely; online classroom and independent classroom. In online classroom teachers should be active in releasing the lesson plans and transferring materials and knowledge, as well as students, are asked to attend and join all the teaching and learning processes including being active in questioning and answering about the materials. Additionally, Young (2006) declared that student views of effective online teaching in higher education. On the other hand, In the independent classroom, the teacher independently digging up more materials from any sources which are fun and interesting, students are asked to explore more knowledge from other sources they might have.

To support online education, teachers should arrange an academic assessment regarding cognitive and content assessments. According to González-Sanmamed et al. (2014) discussed about the level of proficiency and professional development needs in peripheral online teaching roles. The institution should have a rubric to measure the students' skills and knowledge as the instruments in assessing the teaching process. The circumstances of teaching and learning process using online classroom, teachers encourage students to be more active and creative in absorbing and accepting the knowledge and materials delivered by teachers, including having a virtual small group discussion, virtual group conference, and virtual presentation to strengthen the mastery of subjects.

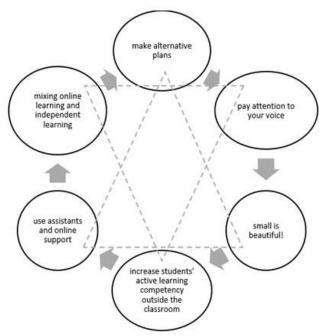


Figure: 1 Six empirical resolutions on online education

This study delivers the implication on the teaching pedagogy especially in facing the online education to maintain the health protocol on the covid-19 pandemic period. According to Hung & Jeng (2013), there are some factors influencing future educational technologists' intentions to participate in online teaching both for lecturers and students. These are the implications that might be inputted for lecturers in conducting materials during teaching form home as well as the learning from home instead, such as; lecturers should be creative and innovative in designing the daring/online lesson plan including daring materials and daring assessments. Next, lecturers need to have an assistant to operate and manage during online teaching. Lecturers require students to be active and independent in compiling their knowledge through many resources whether from the internet or the natural settings. Lastly, lecturers should be completing with the hard and soft devices to succeeded the online education during the covid-19 pandemic.

E. Conclusion

The writers can conclude that there is an empirical resolution on overcoming the online education while conducting withing the covid-19 pandemic outbreaks through the six strategies. Firstly, having the daring lesson plan. This is quite different from the regular lesson plan that is usually designed before the covid-19 pandemic scattering. Secondly, providing the best audio tools in our teaching devices. The audio devices are the important part of holding the online teaching. Thirdly, organizing the small classroom by dividing the class shifts by 10-15 students in a teaching schedule session. Fourthly, ordering students to get digging up any sources of learning from the outsides of classroom, like internet, environment, news, and natural sources. Fifthly, many senior lecturers get a trouble in Dinamika Ilmu, Volume 20(2), 2020

hosting the online education. It seems that they need to have a teaching assistant from the junior who master the ICT matters. This is supported by Qaddumi et al. (2020) who revealed that evaluating the impact of ICT on teaching and learning need to have in daring/online system. Sixthly, intermixing between the online teaching and independent learning by instructing students to attend the distance classroom as well as demanding students accomplishing the tasks and assignments given. In line with (Nikolić et al., 2019) argued that lecturers are required to use appraisal and review of e-learning and ICT systems in teaching process.

BIBLIOGRAPHY

- Alwehaibi, H. O. (2015). The Impact Of Using YouTube In EFL Classroom On Enhancing EFL Students' Content Learning. *Journal of College Teaching & Learning (TLC)*, 12(2), 121–126. https://doi.org/10.19030/tlc.v12i2.9182
- Asamoah, M. K., & Oheneba-Sakyi, Y. (2017). Constructivist tenets applied in ICT-mediated teaching and learning: Higher education perspectives. *Africa Education Review*, 14(3–4), 196–211. https://doi.org/10.1080/18146627.2017.1279956
- Bao, Wei. (2020). COVID-19 and Online Teaching in Higher Education: A Case Study of Peking University. *Hum Behav & Emerg Tech*, 2.
- Biddix, J. P., Chung, C. J., & Park, H. W. (2016). Faculty use and perception of mobile information and communication technology (m-ICT) for teaching practices. *Innovations in Education and Teaching International*, 53(4), 375–387. https://doi.org/10.1080/14703297.2014.997778
- Brinkley-Etzkorn, K. E. (2018). Learning to teach online: Measuring the influence of faculty development training on teaching effectiveness through a TPACK lens. *The Internet and Higher Education*, 38, 28–35. https://doi.org/10.1016/j.iheduc.2018.04.004
- Cahapay, Michael B. (2020). Rethinking Education in the New Normal Post-COVID-19 Era: A Curriculum Studies Perspective. *AQUADEMIA*, 4(2).
- Cambridge Assesment International Education. (2018). Cambridge International Global Education Census. Retrieved from https://www.cambridgeinternational.org/about-us/edcensus/.
- Camus, M., Hurt, N. E., Larson, L. R., & Prevost, L. (2016). Facebook as an Online Teaching Tool: Effects on Student Participation, Learning, and Overall Course Performance. *College Teaching*, 64(2), 84–94. https://doi.org/10.1080/87567555.2015.1099093
- Cowan, P. (2013). A Connectivist Perspective of the Transition from Face-to-Face to Online Teaching in Higher Education. *International Journal of Emerging Technologies in Learning (IJET)*, 8(1), 10–19. https://doi.org/10.3991/ijet.v8i1.2346
- de Freitas, S. I., Morgan, J., & Gibson, D. (2015). Will MOOCs transform learning and teaching in higher education? Engagement and course retention in online learning provision: Engagement and course retention in online learning provision. *British Journal of Educational Technology*, 46(3), 455–471. https://doi.org/10.1111/bjet.12268

- Donlan, L. (2014). Exploring the views of students on the use of Facebook in university teaching and learning. *Journal of Further and Higher Education*, 38(4), 572–588. https://doi.org/10.1080/0309877X.2012.726973
- Enrique Hinostroza, J. (2018). New Challenges for ICT in Education Policies in Developing Countries: The Need to Account for the Widespread Use of ICT for Teaching and Learning Outside the School. In I. A. Lubin (Ed.), ICT-Supported Innovations in Small Countries and Developing Regions (pp. 99–119). Springer International Publishing. https://doi.org/10.1007/978-3-319-67657-9_5
- González-Sanmamed, M., Muñoz-Carril, P.-C., & Sangra, A. (2014). Level of proficiency and professional development needs in peripheral online teaching roles. *The International Review of Research in Open and Distributed Learning*, 15(6). https://doi.org/10.19173/irrodl.v15i6.1771
- Hariyadi, S., & Martiarini, N. (2019). Career Decision Self Efficacy and Psychological Distress in Non-Formal Education Students. *The International Journal of Indian Psychology*, 7(1), 270.
- Hasan, Najmul & Bao, Yukun. (2020). Impact of "e-Learning crack-up" Perception on Psychological Distress among College Students during COVID-19 Pandemic: A Mediating Role of "Fear of Academic Year Loss". *Children and Youth Services Review*, 118.
- Hasanah, S., Nurdin, E., A., & Herbet. (2014). E-learning Implementation Based on E-learning Readiness (Kajian Implementasi E-learning Berdasarkan Tingkat Kesiapan Peserta E-learning, in Indonesian). In Prosiding Seminar Ilmiah Nasional Komputer dan Sistem Intelijen (pp. 335–342). Depok: Universitas Gunadarma.
- Hege, B. A. R. (2011). The Online Theology Classroom: Strategies for Engaging a Community of Distance Learners in a Hybrid Model of Online Education: Online Theology Classroom. *Teaching Theology & Religion*, 14(1), 13–20. https://doi.org/10.1111/j.1467-9647.2010.00668.x
- Horspool, A., & Lange, C. (2012). Applying the scholarship of teaching and learning: Student perceptions, behaviours and success online and face-to-face. *Assessment & Evaluation in Higher Education*, 37(1), 73–88. https://doi.org/10.1080/02602938.2010.496532
- Hung, W.-C., & Jeng, I. (2013). Factors influencing future educational technologists' intentions to participate in online teaching: Intentions to participate in online teaching. *British Journal of Educational Technology*, 44(2), 255–272. https://doi.org/10.1111/j.1467-8535.2012.01294.x
- Jenkins, D. (2014). Teaching Leadership Online: An Exploratory Study of Instructional and Assessment Strategy Use. *Journal of Leadership Education*, 15(2), 129–149. https://doi.org/10.12806/V15/I2/R3
- Kamaruddin, K., Abdullah, C. A. C., & Idris, M. N. (2017). Integrating ICT in Teaching and Learning: A Preliminary Study on Malaysian Private Preschool. *International Journal*

- of Academic Research in Business and Social Sciences, 7(11), Pages 1236-1248. https://doi.org/10.6007/IJARBSS/v7-i11/3561
- Kizilcec, R. F., Pérez-Sanagustín, M., & Maldonado, J. J. (2017). Self-regulated learning strategies predict learner behavior and goal attainment in Massive Open Online Courses. *Computers* & *Education*, 104, 18–33. https://doi.org/10.1016/j.compedu.2016.10.001
- Kweka, K. H., & Ndibalema, P. (2018). Constraints Hindering Adoption of ICT in Government Secondary Schools in Tanzania: The Case of Hanang District. *International Journal of Educational Technology and Learning*, 4(2), 46–57. https://doi.org/10.20448/2003.42.46.57
- Lameras, P., Levy, P., Paraskakis, I., & Webber, S. (2012). Blended university teaching using virtual learning environments: Conceptions and approaches. *Instructional Science*, 40(1), 141–157. https://doi.org/10.1007/s11251-011-9170-9
- Lawrence, J. E., & Tar, U. A. (2018). Factors that influence teachers' adoption and integration of ICT in teaching/learning process. *Educational Media International*, 55(1), 79–105. https://doi.org/10.1080/09523987.2018.1439712
- Lie, Anita. (2020). The New Normal in Education. The Jakarta Post. 20th of June, 2020 Edition. https://www.thejakartapost.com/academia/2020/06/20/the-new-normal-ineducation.html
- Miles, M., B., & Huberman, A., M. (2014). *Qualitative data analysis: A methods sourcebook.* 3rd. SAGE Publications
- Mohamad, S. N. M., Salleh, M. A. M., & Salam, S. (2015). Factors Affecting Lecturers Motivation in Using Online Teaching Tools. *Procedia Social and Behavioral Sciences*, 195, 1778–1784. https://doi.org/10.1016/j.sbspro.2015.06.378
- Murdaningsih, D. (2019). Rendahnya Kompetensi Guru Jadi Masalah Pendidikan Indonesia. Diakses dari https://m. Republika. Co. Id.
- Nikolić, V., Petković, D., Denić, N., Milovančević, M., & Gavrilović, S. (2019). Appraisal and review of e-learning and ICT systems in teaching process. *Physica A: Statistical Mechanics and Its Applications*, 513, 456–464. https://doi.org/10.1016/j.physa.2018.09.003
- Oproiu, G. C. (2015). A Study about Using E-learning Platform (Moodle) in University Teaching Process. *Procedia Social and Behavioral Sciences*, 180, 426–432. https://doi.org/10.1016/j.sbspro.2015.02.140
- Qaddumi, H., Bartram, B., & Qashmar, A. L. (2020). Evaluating the impact of ICT on teaching and learning: A study of Palestinian students' and teachers' perceptions. *Education and Information Technologies*. https://doi.org/10.1007/s10639-020-10339-5
- Shishkovskaya, J., Sokolova, E., & Chernaya, A. (2015). "Paperless" Foreign Languages Teaching. *Procedia Social and Behavioral Sciences*, 206, 232–235. https://doi.org/10.1016/j.sbspro.2015.10.014
- So, S. (2016). Mobile instant messaging support for teaching and learning in higher education. *The Internet and Higher Education*, 31, 32–42. https://doi.org/10.1016/j.iheduc.2016.06.001

- Sulistyo, B., L. (2007). IT and education, the case study of e-learning in Indonesia.
- Suwarsono, L. W. (2016). Pengukuran E-LEarning Readiness pada Mahasiswa Teknik Universitas Telkom. *Psympathic : Jurnal Ilmiah Psikologi*, 2(2), 141–152. https://doi.org/10.15575/psy.v2i2.455
- Tria, Jose Z. (2020). The COVID-19 Pandemic through the Lens of Education in the Philippines: The New Normal. *International Journal of Pedagogical Development and Lifelong Learning*, 1(1).
- Valtonen, T., Kukkonen, J., Kontkanen, S., Sormunen, K., Dillon, P., & Sointu, E. (2015). The impact of authentic learning experiences with ICT on pre-service teachers' intentions to use ICT for teaching and learning. *Computers & Education*, 81, 49–58. https://doi.org/10.1016/j.compedu.2014.09.008
- Widyanti, A. (2020). E-Learning readiness and perceived learning workload among students in an Indonesian university. *Knowledge Management & E-Learning: An International Journal*, 18–29. https://doi.org/10.34105/j.kmel.2020.12.002
- Wu, C., & Liu, C.-F. (2015). Acceptance of ICT-mediated teaching/learning systems for elementary school teachers: Moderating effect of cognitive styles. *Education and Information Technologies*, 20(2), 381–401. https://doi.org/10.1007/s10639-013-9290-8
- Young, S. (2006). Student Views of Effective Online Teaching in Higher Education. *American Journal of Distance Education*, 20(2), 65–77. https://doi.org/10.1207/s15389286ajde2002_2
- Zare, M., Pahl, C., Rahnama, H., Nilashi, M., Mardani, A., Ibrahim, O., & Ahmadi, H. (2016). Multi-criteria decision making approach in E-learning: A systematic review and classification. *Applied Soft Computing*, 45, 108–128. https://doi.org/10.1016/j.asoc.2016.04.020