

Online Learning Content Creation for Junior High School Teachers during the Covid-19 Pandemic

Brahmantya Aji Pramudita, Bandiyah Sri Aprillia, Porman Pangaribuan, Mohamad Ramdhani, Kharisma Bani Adam

School of Electrical Engineering, Telkom University, Bandung, West Java, Indonesia
Email: brahmantyaajip@telkomuniversity.ac.id, bandiyah@telkomuniversity.ac.id

Article Info

Submitted: 15 May 2021
Revised: 20 Augus 2021
Accepted: 8 October 2021
Published: 5 January 2022

Keywords: Online learning, content creation, COVID-19

Abstract

The community service program from Telkom University aims to improve the ability and insight of learning technology using Camtasia Studio at SMPN 1 Baleendah. The method used in community service is a form of training or workshops where the participants, in this case are teachers, are given training for a maximum of 3 hours, instructors in this case are from Telkom University. The stages carried out in this training are broadly as follows: The stages of making or recording material content, the editing or editing stages of material content and the stages of uploading learning material content. Participation by partners is in the form of providing space, infrastructure such as laptops or computers (computer laboratory recommendations), internet networks, and teachers' resources to be given Camtasia Studio training. Based on the results of the initial survey it was found that 15% had experience in making interactive videos by using programs other than Camtasia studio, and as many as 85% of the teachers are inexperienced in making interactive videos because they only use learning media based on whatsapps, zoom and google classroom. After the training, there was an increase in the skill level of making interactive videos for all participants. As many as 75% of the teachers strongly agree regarding the suitability of the programs held with the aim of carrying out activities. Lecturers and students are stated to be more friendly, faster and responsive in helping during the practical activities of creating interactive video content using Camtasia studio.

Abstrak

Program pengabdian masyarakat dari Telkom University ini bertujuan untuk meningkatkan kemampuan dan wawasan teknologi pembelajaran menggunakan Camtasia Studio di SMPN 1 Baleendah. Metode yang digunakan dalam pengabdian kepada masyarakat merupakan bentuk pelatihan atau workshop yang pesertanya dalam hal ini adalah guru, diberikan pelatihan maksimal 3 jam, instruktur dalam hal ini adalah dari Universitas Telkom. Tahapan yang dilakukan dalam

pelatihan ini secara garis besar sebagai berikut : Tahapan pembuatan atau pencatatan isi materi, tahap pengeditan atau pengeditan konten materi dan tahap pengunggahan konten materi pembelajaran. Partisipasi mitra berupa menyediakan ruang, infrastruktur seperti laptop atau komputer (*computer* rekomendasi laboratorium), jaringan internet, dan sumber daya yang akan diberikan pelatihan Camtasia Studio. Berdasarkan hasil dari survei awal ditemukan bahwa 15% memiliki pengalaman dalam membuat video interaktif dengan menggunakan program selain Camtasia studio, dan sebanyak 85% guru belum berpengalaman dalam membuat interaktif video karena hanya menggunakan media pembelajaran berbasis Whatsapp, Zoom dan Google kelas. Setelah pelatihan, ada peningkatan keterampilan tingkat pembuatan video interaktif untuk semua peserta. Sebanyak 75% dari para guru sangat setuju mengenai kesesuaian program diselenggarakan dengan tujuan untuk melaksanakan kegiatan. Dosen dan mahasiswa adalah dinyatakan lebih ramah, cepat dan tanggap dalam membantu selama kegiatan praktis membuat konten video interaktif menggunakan Camtasia studio.

1. INTRODUCTION

Coronavirus Disease-2019 or what is known as COVID-19 has spread rapidly since the end of 2019 causing many changes to human activities and habits (Lestiyawati & Widyanoro, 2020). The virus known to have appeared for the first time in the city of Wuhan spread outside of Wuhan city very quickly, causing many people to contract the virus and causing the virus to spread throughout the world (Bhaumik et al., 2020; Churiyah et al., 2020; Giatman et al., 2020; Mishra et al., 2020; Setiawan & Iasha, 2020). The World Health Organization (WHO) announced the incident as a world pandemic situation (Adnan, 2020; Churiyah et al., 2020; Mahmood, 2020). This has resulted in many countries around the world trying to prevent the spread of the virus as quickly as possible by imposing special rules, such as implementing social distancing, not allowing public events that invite crowds, prohibiting long-distance travel both domestic and abroad, and the closing of cities and/or countries (Ali, 2020; Hamid et al., 2020; König et al., 2020; Qazi et al., 2020).

In Indonesia, positive cases of COVID-19 were officially detected for the first time on March 2, 2020. Up until November 30, 2020, more positive cases were recorded and are still increasing today (The Jakarta Post, 2020). As a result, many local governments have

implemented Large-Scale Social Restrictions (PSBB) policies to reduce positive cases of COVID-19 (Hamid et al., 2020). The impact caused by this PSBB policy is very large, especially in the world of education (Setiawan & Iasha, 2020). According to the United Nation Educational, Scientific, Culture Organization (UNESCO) millions of students from various parts of the world are affected by the spread of Covid-19 (Mahmood, 2020; Mishra et al., 2020). In addition, the Indonesian government through the Ministry of Education and Culture takes steps to prevent the spread of Covid-19 in school environments by providing policies to carry out online education or long distance learning (Clark et al., 2020; Lestiyawati & Widyanoro, 2020; Olszewska, 2020; Yulia, 2020).

The implementation of long distance learning policies resulted in many teachers adapting. Teachers must adjust in creating material according to the conditions of long distance learning process so that students still get competencies comparable to face-to-face learning (Kamal et al., 2020). Educational media is also a solution that can be used to solve long distance learning problems (Febrianto et al., 2020). Essentially, educational media is media that is used to provide space for student and teacher communication to produce special learning so that they can improve their skills.

At this time, technology has developed rapidly and can be used as learning media. E-learning is an example of educational media that uses technology to create a forum between teachers and students to learn (Dhawan, 2020; Febrianto et al., 2020). The e-learning system makes it easy for students to study anywhere and anytime. In addition, e-learning can change traditional forms of learning such as face-to-face online meetings (Yulia, 2020). This is done so the learning materials provided by teachers to students will be more efficient. E-learning has the advantage of managing learning materials and learning schedules well. So, students who use the media can access the material provided in accordance with the competencies designed by the teacher and easily access the previous material. However, e-learning has a drawback, which is a potential waste of time. The learning materials provided in e-learning can be in the form of videos, presentation slides, audio, linking to external links, etc. to support the learning plan. In addition, e-learning can be filled with evaluation materials such as quizzes, assignments and other exams. So, teachers can find out the level of students who can follow the material that has been given and students can measure their abilities after following the learning plan (Febrianto et al., 2020).

Changes in learning patterns are occurring very fast as a result of the Covid-19 pandemic and have many implications on the world of education in Indonesia. Many education providers are unable to cope quickly with this pandemic to provide learning services to their students. The main obstacle is the infrastructure to provide long distance learning. Therefore, many education providers, especially for elementary to high school, experience difficulties in adaptation. Examples of infrastructure embraced by education providers are school computer technology and digital instruments for teaching. School computer technology is grouped into two, namely software and hardware. Software is used for the creation of digital learning media and communication media for video conferencing. Meanwhile, hardware consists of camera and audio devices compatible for video conferencing through internet infrastructure (Lestiyawati & Widyanoro, 2020). In addition, the teacher's readiness to provide material to students

was not ready, which caused other problems. In pandemic conditions, teachers must see this condition as an opportunity to improve the digital competence of teachers because education is given online (König et al., 2020). The competency in question is the competence to design and the quality of learning that will be provided to students. Teachers must adapt to the existing curriculum. Then, the teacher applies and adapts the curriculum to long distance learning. Thus, the quality and learning outcomes given to students will be achieved or fulfilled (Kaiser & König, 2019).

Creating media for long distance lectures can be done by the use of digital media such as PowerPoint, Google Slides, Camtasia, and Keynote. Various education providers make use of these digital media to provide learning materials to students. Lectures are published in digital media for students to follow. Thus, students take part in learning according to the learning plan prepared by the teacher (Baker et al., 2018). Digital media has an impact on students to improve understanding of the material by processing the information provided by the teacher through the instructions that have been given. However, student activeness is required to follow the learning process using digital media. Students must have their own initiative to enrich information through outside sources to provide a deeper understanding of the lectures that has been given, because the learning process carried out by students needs to involve a complex thinking process to get the desired understanding (Giatman et al., 2020). However, digital media for teachers can help in evaluating students because the level of individual student activity affects the level of understanding and student success in learning.

Although the development of education has not been able to optimally keep up with the speed due to the industrial revolution, one of the efforts that need to be made to face the challenges of the 4.0 industrial revolution is through improving the quality of teachers to be able to teach material with an approach to the application of the use of Information Technology (IT) in the teaching and learning process if not, it will be further outdated and this has an effect on the quality of graduates (Chauhan, 2017). Facing the great challenges of this 4.0 industrial

revolution era, education is also required to change because we are only left with two choices, namely change or die. Including education at the primary and secondary education levels. The education era influenced by the industrial revolution 4.0 is called Education 4.0 which is characterized by the use of digital technology in the learning process known as the cyber system and is able to make the learning process take place continuously without space boundaries and without time limits (Wargadinata et al., 2020). During this Covid-19 pandemic, the industrial revolution 4.0 forced in quotes must be ready. This readiness must be proven in an effort to learn long distance or online, where students are required to study at home (SFH = School from Home) and teachers work at home (WFH = Work from Home) (Hamid et al., 2020). The most difficult thing of SFH WFH is the readiness of learning materials that can be delivered to students properly. Camtasia is a software for screen capturing, e-learning authors, content creators, video editing and sharing of videos created through one application. This monitor screen recorder does not record like the camera we usually use, this software must be installed on your computer so that it can be used to record digital video with fairly good audio quality (depending on the microphone you use). Camtasia can be adjusted when to start recording your monitor screen,

and if you want to record the entire monitor screen or only certain areas.

In this study, Camtasia software was introduced to teachers to create learning materials as a basis for distance learning and provide the ability to master learning technology. So that, teacher competence can increase, teacher readiness to face changes in educational development, and provide teaching solutions during the Covid-19 pandemic.

2. METHODS

The method used in assisting the creation of learning material content using Camtasia studio is training otherwise known as the workshop method. The forms of activities carried out in the training program are as follows:

1. Initial survey in regards to the knowledge of educational media.
2. Training of educational content creation.
3. Practice of educational content creation using Camtasia studio corresponding to the field that is specialized by the instructors of SMPN 1 Baleendah.
4. Final survey through google form to evaluate the community service program.

The following is an image of technology knowledge that was being transferred to the instructors of SMPN 1 Baleendah.



Figure 1 View of Camtasia Studio Menu

Area number one accesses the three important features of the Editor: Record the Screen, Import Media, and Produce and Share the created video. The Options menu is shown in number 2, functions to access program settings and options, import and export features and several other features. The Editing Dimensions menu is shown in number 3, in this section to adjust the dimensions / resolution of the video created. Click to open the Editing Dimension options in the dialog box that will appear. Magnification View Options shown in number 4, this menu serves to select the zoom level of the video on the screen. This is done for more detail in editing. If you select Shrink to Fit, the video will follow the size of the preview area. In number 5 indicates Features for accessing help using Camtasia Studio. Number 6 shows the Preview Window menu, there are several options, namely: Toggle Pan View, which can be activated by pressing and holding Spacebar. It is used to scroll the screen without moving the objects in it. Switch to Full Screen Mode, to see the results of work in full screen size. Detach or Attach the Preview Window, this button is to display or release part of the preview window. Toggle Crop Mode On / Off, to activate it by pressing Alt. To remove the part of the video that you want to delete. In number 7 shows the Canvas menu, this section is where to see the video being edited. Objects in it can be resized and positioned. Playback Controls shown in number 8, these buttons are used to play the video. Number 9 shows Task Tabs, for options for adding callouts, transitions, zoom and pan animations, etc. The Library menu at number 10

contains a collection of videos and audios that have been prepared by Camtasia Studio so that they can be used directly. Clip Bin at number 11, is a collection of files used in the timeline. Number 12 shows the Timeline menu, which is the main work area used to organize the video being edited. Whereas numbers 13, 14 and 15 show the Timeline Toolbar, Timeline Tracks, and Stitched Media menus respectively.

3. RESULTS AND DISCUSSIONS

This community service program is carried out at SMP Negeri 1 Baleendah, which is one of the State Junior High Schools in Bandung Regency, West Java, Indonesia, having its address at Jl. Adipati Agung No.29 Baleendah, Kec. Baleendah Bandung West Java 40375. The target of the activity is the educators or teachers at SMP Negeri 1 Baleendah, totaling 20 people. Participation by partners is in the form of providing space, infrastructure such as laptops or computers (computer laboratory recommendations), internet networks, and teachers' resources to be given Camtasia Studio training.

The initial activity of implementing community service programs begins with conducting an initial survey regarding the level of knowledge and skills of teachers related to interactive learning media. The number of questions to determine the level of knowledge in this initial survey amounted to 6 questions. The initial survey was given using the survey media provided by Google, namely the google form.

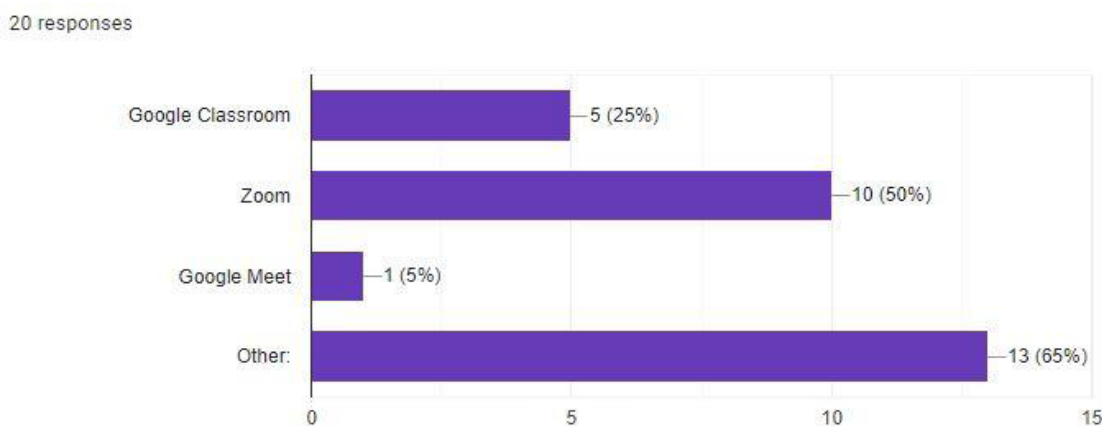


Figure 2 Result of Survey to Determine Types of Online Learning Media Used

Figure 2 is the result of the responses from the teachers regarding the types of online learning media that have been used. Based on the survey results, 65% of the teachers at SMP N 1 Baleendah use learning media other than Google Classroom, zoom, and Google Meet.

To find out the experiences of the teachers at SMPN 1 Baleendah, the survey data is presented in Figure 3. Based on the survey results in Figure 3, all the teachers have never created educational media content using Camtasia studio

In Figure 4, the survey results are presented regarding the experience of making interactive videos as an educational media. Based on the survey results in Figure 4, 85% have never made interactive videos. Meanwhile, 15% of the teachers use the Webex and Corel video studio applications for making interactive videos as learning media.

Furthermore, in the second stage, training was carried out related to the creation of learning content. The material is delivered by the lecture method through the help of powerpoint slides. To increase the teachers' knowledge, a video of the stages of making an interactive video was played using the Camtasia studio.

In the third stage, namely the practice of creating learning content using Camtasia studio according to the field being taught by educators at Baleendah 1 Middle School. The stages carried out in this training are broadly as follows: The stages of making or recording material content, the editing or editing stages of material content and the stages of uploading learning material content.



Figure 3 Experiences Using Camtasia Studio Survey Result

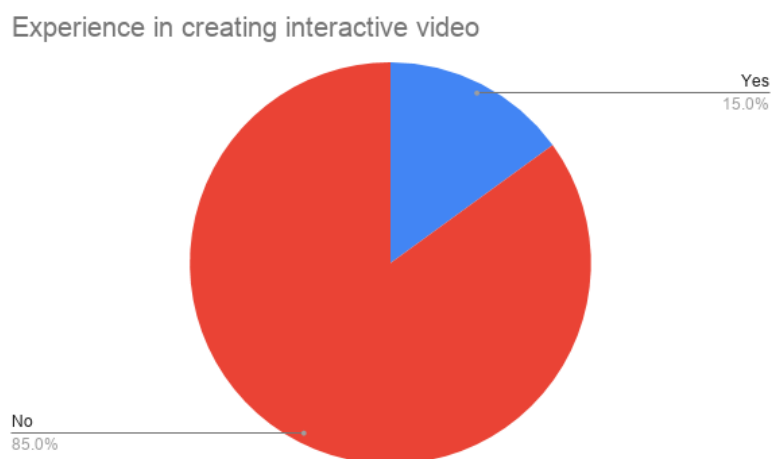


Figure 4 Experience in Creating Interactive Video Survey Results.



Figure 5 Interactive Video Creation Training using Camtasia Studio



Figure 6 Interactive Video Creation Practice using Camtasia studio.

The fourth stage, a final survey is conducted to evaluate the community service programs that have been held. Figure 7 presents the survey results related to the purpose of carrying out the activity. Figure 8 presents the survey results in relation to the friendly, fast and responsive attitude of program organizers during community service activities.

Based on the survey results in Figure 7, as many as 75% of the teachers strongly agree regarding the suitability of the program held

for the purpose of carrying out activities. The lecturers and students were stated to be friendly, fast and responsive in helping during the practical activities of creating interactive video content using Camtasia studio.

The skill level of the teachers prior to the training was 15% experienced in making interactive videos using programs other than Camtasia studio and as many as 85% of the teachers were not experienced in making interactive videos because learning media

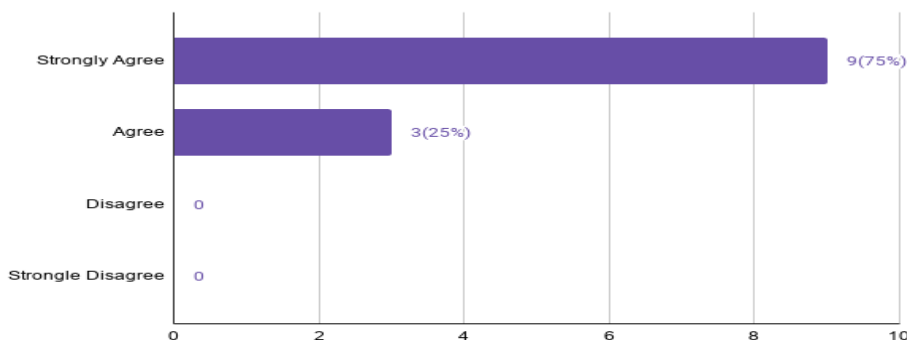


Figure 7 Evaluation Whether the Community Service Program's Purpose Had Been Achieved

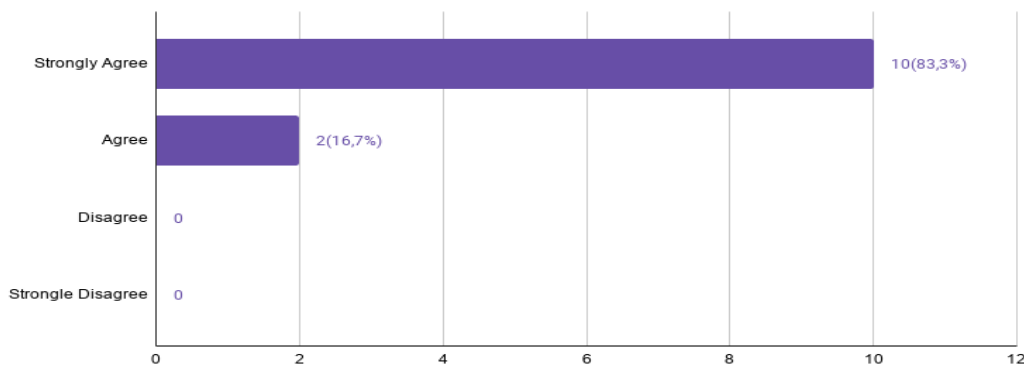


Figure 8 Evaluation of the Program Organizers' Attitude

were based on WhatsApp, zoom and google classroom. After the training, there was an increase in the skill level of making interactive videos for all participants. Figure 9 shows some of the interactive video works that the teachers had made during the training.



Figure 9 Product of Interactive Videos from the Teachers of SMPN 1 Baleendah

The Covid-19 pandemic is a multidimensional problem facing the world, it also has an impact in the education sector which causes a decrease in the quality of learning in students (Sahu, 2020), this pandemic emergency period requires the learning system to be replaced with online learning so that the learning process continues (Sahu, 2020). Sintema, 2020), this clearly changes the learning pattern which requires teachers and education developers to provide learning materials and teaching students directly through remote digital tools (United Nations, 2020).

Online learning allows students to have the flexibility to study time so that they can study anytime and anywhere. In addition, students can interact with lecturers using several applications such as e-classroom, video conferencing, telephone or live chat, zoom or via WhatsApp group (Dhull & Sakshi, 2017). This learning activity is an educational innovation to answer the challenges of the availability of various learning resources. The success of a model or learning media depends on the characteristics of the students. This was revealed by Nakayama et al (2014) that all literature indicates that not all students will be successful in online learning, this is due to differences in learning environmental factors and student characteristics. One of the successes in learning is related to the motivation of students (Schunk et al., 2014). According to Brophy (2010) that motivation is a theoretical construction to explain initiation, direction, intensity, persistence, and quality of behavior, especially goal-directed behavior. Motivation provides the impetus for action that aims in the desired direction both physically and mentally, so that activity becomes a very important part of motivation (Lee & Martin, 2017). Motivation can influence what we learn, how we learn, and when we choose to learn (Schunk & Usher, 2012). This is also shown from research which explains that motivated students are more likely to do challenging activities, be actively involved, enjoy the process of learning activities and show increased learning outcomes, persistence and creativity (Samir Abou El-Seoud et al., 2014). In addition, designing a learning environment that motivates students will attract the attention of students (Keller, 2010).

There are several alternative learning media that can be used by educators in delivering material, one of which is by using instructional videos. The use of video in the distance learning process is the right step, because the ability of video can visualize material very effectively and of course this is very helpful for educators in delivering dynamic material.

This is in line with Edi's opinion (in Imamah, 2012) that learning using interactive multimedia can improve aspects of understanding the concept of subject matter and can increase student motivation in the learning process, because students are more likely to concentrate and pay more attention in following lessons because of the use of interesting and various media.

In addition, the packaging of educational videos can be made as attractive as possible, in order to foster students' enthusiasm for learning in the midst of the Covid 19 pandemic, one of which is by combining them using animation. According to Agustien (2018) animation is an activity of animating, moving still objects, where stationary objects can be given a boost of strength, enthusiasm and emotions in order to have the impression of life. So, in making instructional videos, animation can be used to support the appearance in conveying the content of the material, so that this can increase the enthusiasm for student learning.

This means that among the various learning media, video technology is believed to be very

useful and suitable for problem-based learning because it can convey settings, characters, and actions in an interesting way and can describe complex and problem-related matters. Therefore, here the researchers conducted training related to making interactive videos using Camtasia studio.

4. CONCLUSION

Based on the results of the initial survey it was found that 15% had experience in making interactive videos using programs other than Camtasia studio and as many as 85% of the teachers were not experienced in making interactive videos because they only use learning media based on WhatsApp, zoom and google classroom. After the training, there was an increase in the skill level of making interactive videos for all participants. As many as 75% of the teachers strongly agree regarding the suitability of the programs held with the aim of carrying out activities. The lecturers and students were stated to be friendly, fast and responsive in helping during the practical activities of creating interactive video content using Camtasia studio.

5. ACKNOWLEDGEMENT

The author's team would like to thank the principal and teachers of SMP Negeri 1 Baleendah, who have worked together during the process of this community service.

REFERENCES

- Adnan, M. (2020). Online learning amid the Covid-19 pandemic: Students perspectives. *Journal of Pedagogical Research*, 1(2), 45–51. <https://doi.org/10.33902/jpsp.2020261309>
- Ali, W. (2020). Online and Remote Learning in Higher Education Institutes: A Necessity in light of Covid-19 Pandemic. *Higher Education Studies*, 10(3), 16. <https://doi.org/10.5539/hes.v10n3p16>
- Baker, J. P., Goodboy, A. K., Bowman, N. D., & Wright, A. A. (2018). Does Teaching with PowerPoint Increase Students' Learning? A Meta-Analysis. *Computers and Education*, 126, 376–387. <https://doi.org/10.1016/j.compedu.2018.08.003>
- Bhaumik, M., Hassan, A., & Haq, S. (2020). Covid-19 Pandemic, Outbreak Educational Sector and Students Online Learning in Saudi Arabia. *Journal of Entrepreneurship Education*, 23(3), 23.
- Brophy, J. (2010). *Motivating Students to Learn* (3th Ed). Routledge, Abingdon-on-Thames.
- Chauhan, S. (2017). A Meta-Analysis of the Impact of Technology on Learning Effectiveness of

- Elementary Students. *Computers and Education*, 10(5), 14–30. <https://doi.org/10.1016/j.compedu.2016.11.005>
- Churiyah, M., Sholikhah, S., Filianti, F., & Sakdiyyah, D. A. (2020). Indonesia Education Readiness Conducting Distance Learning in Covid-19 Pandemic Situation. *International Journal of Multicultural and Multireligious Understanding*, 7(6), 491. <https://doi.org/10.18415/ijmmu.v7i6.1833>
- Clark, A. E., Nong, H., Zhu, H., & Zhu, R. (2020). Compensating for Academic Loss: Online Learning and Student Performance During the Covid-19 Pandemic. *Journal of Education*, 1(2), 1–18. <https://halshs.archives-ouvertes.fr/halshs-02901505>
- Dhawan, S. (2020). Online Learning: A Panacea in the Time of Covid-19 Crisis. *Journal of Educational Technology Systems*, 49(1), 5–22. <https://doi.org/10.1177/0047239520934018>
- Dhull, I., & Sakshi. (2017). Online Learning. *International Education & Research Journal (IERJ)*, 3(8), 32–34.
- Febrianto, P. T., Mas'udah, S., & Megasari, L. A. (2020). Implementation of Online Learning During the Covid-19 Pandemic on Madura Island, Indonesia. *International Journal of Learning, Teaching and Educational Research*, 19(8), 233–254. <https://doi.org/10.26803/ijlter.19.8.13>
- Giatman, M., Siswati, S., & Basri, I. Y. (2020). Online Learning Quality Control in the Pandemic Covid-19 Era in Indonesia. *Journal of Nonformal Education*, 6(2), 168–175. <https://journal.unnes.ac.id/nju/index.php/jne>
- Hamid, R., SENTRYO, I., & Hasan, S. (2020). Online Learning and Its Problems in the Covid-19 Emergency Period. *Jurnal Prima Edukasia*, 8(1), 86–95. <http://journal.uny.ac.id/index.php/jpe>
- Kaiser, G., & König, J. (2019). Competence Measurement in (Mathematics) Teacher Education and Beyond: Implications for Policy. *Higher Education Policy*, 32(4), 597–615. <https://doi.org/10.1057/s41307-019-00139-z>
- Kamal, A. A., Shaipullah, N. M., Truna, L., Sabri, M., & Junaini, S. N. (2020). Transitioning to Online Learning During Covid-19 Pandemic: Case Study of A Pre-University Centre in Malaysia. *International Journal of Advanced Computer Science and Applications*, 11(6), 217–223. <https://doi.org/10.14569/IJACSA.2020.0110628>
- Keller, J. M. (2010). *Motivational Design for Learning and Performance: The ARCS Model Approach*. Springer.
- König, J., Jäger-Biela, D. J., & Glutsch, N. (2020). Adapting to Online Teaching During Covid-19 School Closure: Teacher Education and Teacher Competence Effects Among Early Career Teachers in Germany. *European Journal of Teacher Education*, 43(4), 608–622. <https://doi.org/10.1080/02619768.2020.1809650>
- Lee, J., & Martin, L. (2017). Investigating Students' Perceptions of Motivating Factors of Online Class Discussions. *International Review of Research in Open and Distance Learning*, 18(5), 148–172. <https://doi.org/10.19173/irrodl.v18i5.2883>
- Lestyanawati, R., & Widyanoro, A. (2020). Strategies and Problems Faced by Indonesian Teachers in Conducting E- Learning System During Covid-19 Outbreak. *Journal of Culture, Literature, Linguistic and English Teaching*, 2(1), 71–82.
- Mahmood, S. (2020). Instructional Strategies for Online Teaching in Covid-19 Pandemic. *Human Behavior and Emerging Technologies*, July, 1–5. <https://doi.org/10.1002/hbe2.218>
- Mishra, L., Gupta, T., & Shree, A. (2020). Online Teaching-Learning in Higher Education During Lockdown Period of Covid-19 Pandemic. *International Journal of Educational Research Open*, 100012. <https://doi.org/10.1016/j.ijedro.2020.100012>

- Nakayama, M., Mutsuura, K., & Yamamoto, H. (2014). Impact of Learner's Characteristics and Learning Behaviour on Learning Performance during a Fully Online Course. *Electronic Journal of E-Learning*, 12(4), 394–408. www.ejel.org.
- Olszewska, K. (2020). The Effectiveness of Online Learning in the Era of the SARS-CoV-2 Pandemic on the Example of Students of Polish universities. *World Scientific News*, 148(August), 108–121.
- Post, T. J. (2020). *Covid-19 Figures Keep Getting Worse, Says President National The Jakarta Post*. the Jakarta Post. <https://www.thejakartapost.com/news/2020/11/30/covid-19-figures-keep-getting-worse-says-president.html>
- Qazi, A., Naseer, K., Qazi, J., AlSalman, H., Naseem, U., Yang, S., Hardaker, G., & Gumaei, A. (2020). Conventional to Online Education During Covid-19 Pandemic: Do Develop and Underdeveloped Nations Cope Alike. *Children and Youth Services Review*, 119, 105582. <https://doi.org/10.1016/j.chilyouth.2020.105582>
- Sahu, P. (2020). Closure of Universities Due to Coronavirus Disease 2019 (Covid-19): Impact on Education and Mental Health of Students and Academic Staff. *Cureus*, 2019(April). <https://doi.org/10.7759/cureus.7541>
- Samir Abou El-Seoud, M., Taj-Eddin, I. A. T. F., Seddiek, N., El-Khouly, M. M., & Nosseir, A. (2014). E-learning and Students' Motivation: A Research Study on the Effect of Elearning on Higher Education. *International Journal of Emerging Technologies in Learning*, 9(4), 20–26. <https://doi.org/10.3991/ijet.v9i4.3465>
- Schunk, D. H., Meece, J. R., & Pintrich, P. R. (2014). *Motivation in Education: Theory, Research, and Applications (4th Ed)*. Pearson.
- Schunk, D. H., & Usher, E. L. (2012). Social Cognitive Theory and Motivation The Oxford handbook of Human Motivation (In RM Ryan). Oxford University Press.
- Setiawan, B., & Iasha, V. (2020). Covid-19 Pandemic: the Influence of Full-Online Learning for Elementary School in Rural Areas. *Jpsd*, 6(2), 114–123.
- Sintema, E. J. (2020). Effect of Covid-19 on the Performance of Grade 12 Students: Implications for STEM Education. *Eurasia Journal of Mathematics, Science and Technology Education*, 16(7), 1–6. <https://doi.org/10.29333/ejmste/7893>
- Wargadinata, W., Maimunah, I., Dewi, E., & Rofiq, Z. (2020). Student's Responses on Learning in the Early COVID-19 Pandemic. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*, 5(1), 141–153. <https://doi.org/10.24042/tadris.v5i1.6153>
- Yulia, H. (2020). Online Learning to Prevent the Spread of Pandemic Corona Virus in Indonesia. *ETERNAL (English Teaching Journal)*, 11(1), 48–56. <https://doi.org/10.26877/eternal.v11i1.6068>