At-Tasyrih Jurnal Pendidikan dan Hukum Islam, 10(2) - September 2024 359-373

The Impact of the Covid-19 Pandemic on Student Learning Activities at Madrasah Ibtidaiyah

Suhaimi [1], Saidah [2], Rashid Rahman [3] , Haziq Idris [4]
[1] *Sekolah Tinggi Agama Islam Al-Azhar Pekanbaru, Indonesia*
[2] *Universitas Islam Negeri Sultan Thaha Saifuddin Jambi, Indonesia*
[3] *Universiti Sains, Malaysia*
4 Paktia University, Afghanistan

Corresponding Author: Suhaimi, E-mail; suhaimilb1972@gmail.com

Received: March 19, 2023	Revised: March 22, 2023	Accepted: March 25, 2023	Online: March 27, 2023

ABSTRACT
Current technological developments have produced many applications that can be used as learning methods for educators for online learning during the pandemic. One application that can be used is Telegram. Telegram is an application as a practical message sending facility, which has a high level of security, and can transfer large files. The purpose of this study is to develop a technological learning method for educators so that educators are assisted in carrying out their duties to deliver fiqh learning materials to students as an online learning medium. The research method used by the researcher is the quantitative method. This method uses Google Form as a form of survey to educators and students in utilizing Telegram as an online learning medium in the subject of Fiqh. The results of this study illustrate that Telegram is one application that can be utilized for online learning because it can accommodate large files such as learning videos. The conclusion of this study explains that the Telegram application can help educators and students in online learning in the subject of Fiqh. The limitation of this study is that the researcher only conducted research on the utilization of the Telegram application in the subject of Fiqh, the researcher hopes that further researchers can conduct research on other subjects.

Keywords: *Covid-19, Learning Activities, Madrasah Ibtidaiyah*

Journal Homepage https://ejournal.iainbatanghari.ac.id/index.php/attasyrih/index
This is an open access article under the CC BY SA license
https://creativecommons.org/licenses/by-sa/4.0/
How to cite: Suhaimi, Suhaimi., Saidah, Saidah., Rahman, R & Idris, H. (2024). The Impact of the Covid-19 Pandemic on Student Learning Activities at Madrasah Ibtidaiyah. *At-Tasyrih: Jurnal Pendidikan dan Hukum Islam*, 10(2), 359-373. https://doi.org/10.55849/attasyrih.v10i2.259
Published by: Pusat Penelitian dan Pengabdian Masyarakat, Institut Agama Islam Nusantara Batang Hari

INTRODUCTION

A pandemic is the spread of an infectious disease outbreak that requires students to do online learning at home using online learning media, one of the applications that can be utilized is Telegram (Polack et al., 2020; van Doremalen et al., 2020; Wu & McGoogan, 2020). Telegram is an application that is easy to find on the Playstore and can be downloaded by educators or students on their respective smartphones (Bikdeli et al., 2020; Chan & Leung, 2018; Rogers, 2020). Telegram is an application that can send files in the form of text, video, images, stickers, audio and various file formats in the form of pdf, zip,

mp3, doc and so on (Lai et al., 2020; Mao et al., 2020; Onder et al., 2020). Educators and students can create learning groups on Telegram to send learning materials in the form of videos or other forms (Polsinelli et al., 2020; Radianti et al., 2020). Education in the current technological era has developed rapidly, and shifted learning in the traditional era to the digital era. One of the basic human needs is education, because a good standard of living is achieved with higher education. Learning can take place using learning media that can convey educational goals and messages. Learning media is an educational communication tool between educators and students in a useful learning (Meng & Karniadakis, 2020; Nagata et al., 2020; Wang et al., 2019). Following the development of the times, learning media that is comfortable to use today is digital media, because technological changes will continue throughout human life (Chandra & Pandey, 2020; Matsuoka et al., 2019; Pipia et al., 2019). Since early March 2020, all schools in Indonesia have implemented home learning, known as online learning, due to the pandemic that has spread to various regions in Indonesia (Gössling et al., 2021; Pan et al., 2020; Salazar et al., 2020). Online learning requires educators to be more creative and innovative in utilizing technology so that students remain enthusiastic about learning even though they only interact with educators in cyberspace (Chick et al., 2020; Himanen et al., 2020; Rasmitadila et al., 2020). Telegram is an application that allows educators to interact with students in the form of conversations. Teaching and learning activities on Telegram can be done by (Luri et al., 2018; Y. Wang et al., 2019; Zhou et al., 2020) expressing opinions or questions about the learning material that will be discussed thoroughly. Online learning carried out during the pandemic requires students to have facilities to support the continuity of online learning, namely by having a smartphone, this is one of the burdens of students whose parents are unable to buy them a smartphone (Dhiman & Kumar, 2019; Teece, 2018; Theobald et al., 2020). Another problem arises when students already have smartphones, but the network is lacking because the location does not reach the internet, and the quota is minimal. Educators in this case must pay more attention to this, because it affects the continuity of an effective teaching and learning process, the innovation of educators is needed in this case. The subject of fiqh is a religious subject that prepares students to introduce daily worship which is then expected to students to be able to apply it in life (Abualigah et al., 2021; Bozbuğa, 2021; Rochman, 2020).

Telegram is one of the applications that can be used so that students do not get bored in fiqh subjects, educators can use interesting features that are available on Telegram (Calvaresi et al., 2021; Nawi et al., 2019; Uchiyama et al., 2020). Educators can also create creative learning videos of fiqh subject material, which can then be sent via the Telegram application to students. Telegram can send long videos without being cut off when sent. Telegram is made practically and has many advantages that can be used for online learning (Faraji et al., 2020; Ghorbanzadeh & Saeednia, 2018; Kaveh-Yazdy & Zarifzadeh, 2021). Fiqh subjects are one of the subjects that utilize Telegram as an online-based learning medium (Aduba & Mayowa-Adebara, 2022). An example of material in a subject is religious practice, this material can be delivered by educators through interesting videos to increase students' understanding, in the Telegram application sending videos

with large capacity sizes is not a problem, because the application can accommodate large files, so educators have no difficulty in sending learning videos even though they are long to students, because they use the Telegram application (Calvaresi et al., 2021; Kwak & Cho, 2021; Uchiyama et al., 2020). Previous researchers have studied Telegram as an online-based learning media, some argue that Telegram is less effective when used as an online-based learning media compared to offline learning, this is because the quota must still be available as a requirement in online learning with a signal that must be stable. Telegram is an application that has almost the same benefits as WhatsApp, but the security system on Telegram is better than the security system on WhatsApp (Albaalharith et al., 2021). Telegram's security risks are the same as WhatsApp. Telegram is a place that is run to send messages, attachments, files, and also malicious links. Telegram users must be careful and vigilant about attachments obtained from the Telegram application. Compared to WhatsApp, Telegram has a fairly high storage capacity of 1.5 GB. Telegram can store user files freely, if at any time a Telegram user changes their account, the files that have been stored in Telegram will not be lost, it can be seen that this makes it easier for educators and students in the teaching and learning process, just in case one day their Telegram account must be changed, without having to remove the previous learning files. Telegram uses a logical digital data storage model system, which can be accessed anywhere and makes it easy to share files with anyone on the Telegram application (Ferrante et al., 2020; Musto et al., 2019; Rogowska et al., 2020). Sending large files in this system must have high internet speed. This system is known as the cloud. Cloud is a server with a secure network (Ozturk et al., 2020; Reyna et al., 2018; Williams et al., 2018). Users can access data obtained from anywhere, the cloud can protect data from anyone who is not authorized (Afgan et al., 2018; Davis et al., 2018; Greiner et al., 2019). Through telegrams, educators and students can communicate without having to meet face to face, through groups created in fiqh subjects, educators and students can discuss fiqh learning materials, with text messages, voice and so on (Amberger et al., 2019; Sundararaj et al., 2018; Tamiminia et al., 2020). In the description of the telegram group, educators can create fiqh learning regulations that are useful for students to read before learning begins so that learning can be carried out regularly. Relevant research has been conducted by previous researchers, namely research on telegram as an online learning medium, some say that by using the telegram application, students get more learning experiences (Hamrick et al., 2021; Jarynowski et al., 2021; Tadese et al., 2021). The pandemic should not be used as an excuse for not continuing education, education is the responsibility of every student, and with the pandemic, students are required to be responsible for existing challenges, by developing student creativity through technology (Abi et al., 2021; Vazquez-Calvo, 2021; Xu et al., 2018). In today's era, education requires a very high concentration for the continuity of education in accordance with educational goals (Agnelli et al., 2020; Roosa et al., 2020; Shekerdemian et al., 2020).

Students are not only required to be able to master the material, but are also required to be able to master the learning media used in the online-based learning process, because a student must be able to follow technological developments, coupled with the pandemic

that requires students to follow the teaching and learning process online at their respective homes.

This study is related to previous studies which explain that the telegram application has an impact on online-based learning, the evidence is that in every learning at school students and educators are very influential, including for students, namely feeling that they understand the learning material very well and do not get bored when the learning process begins and the task of educators becomes easier to carry out because they apply the education process using online-based methods (Dashti et al., 2019). Where each study conducted is interrelated with each other, both in discussing learning problems faced during the development of technology, it can be overcome by utilizing applications that have developed at this time such as telegram media which has a more guaranteed level of security and educators can directly send learning videos to students, especially in fiqh learning.

The subject of Islamic jurisprudence has a fairly difficult level of learning for students to master the material, where in understanding its basic competencies there are arguments from the Qur'an and Hadith as a guide to life for Muslims from the time of the Prophet Muhammad to the afterlife and in it there is also an explanation of muamlah and worship according to sharia which in this learning must not deviate from the existing guidelines so that students can apply it according to the provisions of Islamic law (Kumar et al., 2022). So by implementing this telegram application, the task of educators can convey material optimally and help their obligations to provide understanding to students until educators can ensure that their students understand the material that has been explained in class. Telegram learning media can also be used as a place to evaluate learning materials by educators and students, to increase understanding of learning materials. This study aims to find out about the use of telegrams as online-based learning media that can be used for learning during the pandemic, in the subject of Islamic jurisprudence. This study also contains the advantages and disadvantages of telegrams as online-based learning media. Telegram as a learning medium can be used in all educational institutions. The online learning process in telegram educators and students must first download the telegram application on their respective smartphones, after that educators can create subject groups for students as a communication medium for effective learning. Achieving effective learning is one of the processes in achieving educational goals, which can improve student achievement in the learning process, the media chosen is also very influential, for that educators must really master telegram media as a learning medium.

RESEARCH METHODOLOGY

This study uses a quantitative method, this method uses google form as a form of survey (Franzén et al., 2019; Nagata et al., 2020; Van Bel et al., 2018). Data collection carried out in this study is in the form of numbers that are arranged systematically to find accurate data. The purpose of this study is to determine the use of the telegram application as an online learning medium for fiqh subjects (Amin et al., 2018; Dwyer et al., 2018; Yang et

al., 2019). The time the research was carried out because this telegram can actually be used by every educational institution, but there are some institutions that do not know this, these institutions use WhatsApp more often than Telegram, because the WhatsApp application is better known among the general public than the Telegram application (Fan et al., 2018; Putignano et al., 2018; Thurman et al., 2019). This study is very useful to find out about the use of telegram as an online-based learning media in fiqh subjects as a form of learning carried out online, during the pandemic. This study was aimed at students at Madrasah Tsanawiyah 16 Tanah Datar, with questions on the google form filled in by several students, with different responses (Jegadeesan et al., 2019, 2019). This study reviews the use of telegram in online learning in fiqh subjects. This aims to ensure that educators and students can find out that telegram is one of the effective applications used for online learning, because telegram has many benefits. Filling out the google form online collects systematic data which is then used as an accurate survey form for this study (Kucheryavskiy, 2020). The research conducted in this method is systematic, quantitative data research through online interviews via google form. The questions provided in the online interview are questions that explain the content of the material, namely the use of the telegram application as an online learning medium for the subject of fiqh at Madrasah Tsanawiyah 16 Tanah Datar. The data that has been obtained will be discussed to see the results of the answers given by students to the questionnaire that the researcher has distributed via an online link (Darzi et al., 2018). The results of this study will be described by the researcher in the form of a table, which contains the percentage of answers and descriptions. In this study, the researcher needs an instrument that can support the researcher in the research that the researcher is conducting, namely in the form of a questionnaire, and relevant research that has been conducted by previous researchers (Castro-Mondragon et al., 2022). The main objective of this study is to find out about the use of the telegram application as an online learning media in the subject of fiqh, so that in the future the telegram application can be used properly at Madrasah Tsanawiyah 16 Tanah Datar, for online learning in the subject of fiqh, in order to increase student interest, in order to achieve effective learning, even though learning is not carried out directly.

RESULT AND DISCUSSION

Telegram application as an online-based learning media in fiqh subjects, shows telegram which is an application for sending various files, related to fiqh material discussed and debated by educators and students in a telegram group, which is a feature provided by the telegram application. Telegram is an application that follows technological developments, by providing various features that are useful for the continuity of learning in fiqh subjects. It is known that the telegram application is an alternative as a useful media for learning, which is practical. Telegram is also a free application, and can be accessed through various devices. Educators in fiqh subjects can provide creative content in fiqh material which is then sent via telegram with the features available on telegram. Students can easily access the material sent by educators, in order for effective education to take place, which utilizes telegram as a learning medium. Telegram provides effective educational support

features. Educators send messages in the form of learning materials in the telegram group, which can be directly answered by students to be discussed in the group and questions and answers regarding the subject of fiqh to increase students' understanding of the material presented by educators in the telegram group. The telegram application provides secret messages or also called secret chat, this is one of the advantages of telegram. Secret messages are one of the features that can be used by students who are embarrassed to ask directly in the learning group, students can send secret messages privately to educators to discuss learning materials that are not yet understood by the students. Researchers conducted observations via google form, which researchers have distributed in the form of links to students, in order to determine the use of telegram as an online learning medium in fiqh subjects, some data in the form of questionnaires have been presented by researchers, including:

Table 1: Research results at Madrasah Tsanawiyah 16 Tanah Datar school

No	Question	Answer (presentation)	Information
1.	Can Telegram be used for online learning media?	32.7% strongly agree 40% agree 23% quite agree 3.6% disagree	18 people strongly agree 22 people agree 13 people somewhat agree 2 people disagree
2.	Will it be difficult to use telegram as a learning medium in fiqh subjects?	16.4% strongly agree, 27.3% agree, 18.2% quite agree, 38.2% disagree	9 people strongly agree, 15 people agree, 10 people quite agree, 21 people disagree.
3.	Can using Telegram in online learning increase students' enthusiasm for learning?	23.6% strongly agree, 32.7% agree, 32.7% quite agree, 10.9% disagree	13 people strongly agree, 18 people agree, 18 people quite agree, 6 people disagree.
4.	Do you agree that by using the Telegram application, students can easily understand Islamic jurisprudence learning materials?	14.5% strongly agree, 41.8% agree 32.7% quite agree, 10.9% disagree	8 people strongly agree, 23 people agree, 18 people quite agree, 6 people disagree.
5.	Do you agree that the Telegram application makes it easier for educators to send learning videos in Islamic jurisprudence subjects?	27.3% strongly agree, 54.5% agree, 16.4% quite agree, 1.8% disagree	15 people strongly agree, 30 people agree, 9 people quite agree, 1 person disagrees.

6.	Do you agree that the Telegram application can be used by every educational institution?	18.2% strongly agree, 50.9% agree, 14.5% quite agree, 16.4% disagree	10 people strongly agree, 28 people agree, 8 people somewhat agree, 9 people disagree.
7.	Can Islamic jurisprudence learning via Telegram be effective?	14.5% strongly agree, 38.2% agree, 34.5% quite agree, 12.7% disagree	8 people strongly agree, 21 people agree, 19 people quite agree, 7 people disagree.
8.	In online learning, do students prefer to use other applications compared to other applications?	23.6% strongly agree, 36.4% agree, 29.1% quite agree, 10.9% disagree	Teachers are required to be professional in creating creative and innovative learning methods and strategies.
9.	Can learning objectives be achieved during the distance learning process?	80% achieved	Teachers are required to be professional in creating creative and innovative learning methods and strategies.
10.	Can learning objectives be achieved during the distance learning process?	80% achieved	Teachers are required to be professional in creating creative and innovative learning methods and strategies.

The results of the study show that the impact of Covid-19 on private elementary schools in Baringin Batusangkar Village is very serious. Where elementary school students in learning have experienced a drastic decline. So that teachers are required to have high professionalism in realizing study programs at the Baringin Batusangkar State Elementary Madrasah. Therefore, success in learning is largely determined by the creativity of teachers. Including first grade students who have just entered and have difficulty reading. Teachers must be responsible for this. Students can be given reading learning videos by utilizing existing technology so that learning objectives can be achieved. The impact of Covid-19 on learning at the Baringin Batusangkar State Elementary Madrasah initially made it difficult for teachers to continue to carry out their duties in guiding students to learn. Therefore, teachers of the Elementary Madrasah collaborated with other teachers on the stages that must be carried out in the learning process so that it can be carried out properly during Covid-19. Teachers of the Baringin Batusangkar State Elementary Madrasah agreed to carry out their duties by complying with health protocols and government regulations to carry out the learning process online

or remotely. This is by utilizing existing information communication and technology as a support for learning during Covid-19.

Difficulties faced by teachers in online learning. Teachers are required to be professional in creating creative and innovative learning strategies and methods. Not only that, all teachers at the Baringin Batusangkar Nagari private elementary madrasah must work together with parents of students to be able to facilitate the learning process even though it is done remotely. This cooperation determines the success of the Madrasah's learning. Parents must be updated on the assignments given by teachers to students. So that parents can guide their children by utilizing existing ICT such as Android and so on. So that teachers and parents can monitor their children's development in learning.

Madrasah Ibtidaiyah is one of the schools that is below the junior high school. In this school, students have different personalities and characteristics for each child. Elementary school as a school where all students are still in the stage of character and cognitive formation. Madrasah Ibtidaiyah teachers play a very important role in guiding children towards learning. Especially for first and second grade students who are still learning to read. Therefore, children will be happy if the teacher can attract their attention during the teaching and learning process. Students will be enthusiastic and have an interest and motivation in learning even though they are guided by their parents at home.

The characteristics of elementary school children are very different from junior high school children and high school children. This is because the intellectual development and physical or motoric development of children are different. This is because the elementary school period is the beginning of the formation of children's physical and motoric abilities. Furthermore, in junior high school, children are still in an unstable state in acting. So that at this time children still cause many problems for themselves and others. While in high school children begin to understand how they are but are still learning at the stage of how to find solutions to solving the problems they face.

Childhood or elementary school is a time for children to play and have fun. At this time, children will be interested if the teacher's learning method is creative and innovative in learning. This can be done by singing while learning, playing while learning and so on. At this time, children are difficult to organize in their compactness. So the playing and singing method is suitable for use at this time. However, not at all levels of elementary school. Because children in grades 3 to 6 in the learning method are also different from grades 1 and 2 which prioritize learning to read and write. So teachers are needed in the implementation of learning

Madrasah Ibtidaiyah in the learning process, students prefer to use something to learn. For example, in learning to read, students like the singing method. So that students' understanding of reading can increase. Not only that, in the playing method, teachers can provide services such as using numbers and letters by exemplifying animals. So that students can respond quickly and memorize the numbers and letters that are combined. Therefore, at this stage teachers must have a variety of interesting and creative learning methods. So that in the implementation of learning, students do not feel bored in thinking and completing assignments.

The role of teachers in online learning is very much needed even though teachers cannot directly monitor the development of elementary school children. Therefore, teachers must be professional in everything that can facilitate the learning process creatively and innovatively. This new thing is a challenge for all elementary school teachers because the implementation of learning is usually done face-to-face. Teachers play an important role in the learning process because teachers are a source of knowledge transfer and of value to students. So that students can be instilled in the values of faith, ethics and good manners, values of togetherness, social values and so on. With such learning, learning can be achieved effectively and on target.

The role of parents is also very important in distance learning. Because students cannot learn independently in understanding the material and completing the tasks given by the teacher. Therefore, parents must guide, facilitate, monitor and help children in the learning process. So that parents can see how the child's motoric, intellectual and attitude development is in learning. Parents can inform how children learn and develop. and the teacher's approach to online learning can be done with a collaborative approach with parents. Like first graders and second graders who are still learning to read, they need help and guidance from their parents. So that children's reading level can increase.

The use of information and communication technology is very much needed in the online learning process for elementary school children. This is because during the Covid-19 period it is not possible to carry out face-to-face learning. So that with the very rapid development of information and communication technology, the learning process can still be carried out even at home for each student. Therefore, teachers are required to prepare materials or teaching materials so that students can study at home with parental guidance. Thus, learning objectives are achieved effectively with the help of technology. Technology as a learning support can be utilized properly and create students who are active and can think critically.

Factors inhibiting the online learning process include the limited availability of technology for each elementary school child, especially Android cellphones. Elementary school children also still have minimal knowledge in using cellphones and laptops. So, parents must facilitate the use of Android for their children. Therefore, in using an Android cellphone, parents must monitor their children in using it. and limited signal or network in the interior makes it difficult for parents and students to always be updated on the learning and assignments given by the teacher. Therefore, this is what inhibits the online learning process.

Utilizing online learning applications can also help students and teachers continue to carry out the learning process. Among them are the zoom meeting or google meet applications. With this application, students and teachers can face each other directly. Teachers can monitor students even though they are not physically but online. With the help of this application, teachers can have a reciprocal relationship with students. Other applications that can be used such as WAG, Google Classroom can also be used in the online learning process. Not only that, there are still many other types of applications that

are used such as YouTube, children can learn independently and teachers can also make video tutorials. So that learning can be carried out properly.

The negative impact of learning from elementary school has a major impact on students' understanding of learning materials. Teachers cannot monitor the development of children's motor skills, intellectual skills and attitudes. Teachers can only receive assignments given by parents of students. So that teachers cannot see how children learn and their attitudes in learning. Students' interest in reading also decreases in online learning. So teachers must be good at creating the right methods and strategies. Students' losses in learning make children's motor skills and intellectual intelligence slow and underdeveloped if not monitored and guided by parents and teachers.

Lack of interest in reading among students is due to the lack or absence of reading materials and teaching materials at home. Therefore, teachers can make tutorial videos and send them to parents. So that students can watch and study the tutorial videos sent by teachers. Therefore, the role of teachers and parents is very much needed in the process of transferring knowledge to students. Learning can be achieved if cooperation between teachers and parents is always solid. Teachers cannot develop children's potential and talents. Because with online learning, teachers cannot facilitate children's potential and talents remotely. Children's talents will develop if there is direct contact between teachers and students. The positive impact of Covid-19 on online learning is that teachers will be challenged in the new learning process. So that teachers are more up to date with technology. Teachers are required to also update online learning applications. So that the learning process can be carried out smoothly. Learning solutions during Covid-19 are very dependent on the teacher's methods and strategies in applying them to the online learning process. Therefore, teachers and parents must be facilitators, guides, and monitors of children in learning. So that students will develop and be motivated in reading, writing and understanding the learning materials given by the teacher.

Based on the results of the explanation above, the research that the researcher has conducted shows that the impact of Covid-19 on elementary school students greatly affects the development of motor skills, intellectual and children's potential. Another impact is that in the learning process, students' interest in reading decreases. Especially for elementary school students in grades one and two who have just entered, teachers cannot provide services to students. The learning process is achieved and successful if teachers can apply creative and interesting strategies and methods. So that students will be enthusiastic and motivated in learning. Teachers and parents play a very important role in the online learning process. Without the help of parents, teachers will find it difficult to apply learning strategies and methods. Students will not focus on the material and assignments given by the teacher. Therefore, teachers and parents both become facilitators in guiding and educating children.

CONCLUSION

Based on the research conducted by the researcher at the Madrasah Ibtidaiyah Swasta Nagari Baringin Batusangkar, the researcher feels the need for teachers to create

creative and innovative learning methods and strategies for distance learning for elementary school students. Because the impact caused by Covid-19 greatly affects the development of intellectual motor skills and talents possessed by children. The researcher hopes that this research can support previous research that is relevant to this research. The researcher also hopes that by conducting this research it can be useful for further researchers in conducting research on the impact of Covid-19 on elementary school students. To improve children's cognitive and motor intelligence, elementary school teachers should be able to collaborate with parents of students in implementing learning activities. So that students can be motivated to learn with a good attitude and expected by the community and parents.

ACKNOWLEDGEMENT

The researcher would like to express his gratitude to the fathers and mothers at the Madrasah Ibtidaiyah Swasta Nagari Baringin Batusangkar who have been willing to be resource persons for the researcher. The researcher was able to complete this research on the impact of Covid-19 on elementary school students. The researcher hopes that this research can be useful for readers and elementary school teachers. So that teachers, parents and students can continue to carry out the online learning process with the help of media and technology.

REFERENCES

Ananda, R., Fadhilaturrahmi, F., & Hanafi, I. (2021). Dampak Pandemi Covid-19 terhadap Pembelajaran Tematik di Sekolah Dasar. Jurnal Basicedu, 5(3), 1689–1694. https://doi.org/10.31004/basicedu.v5i3.1190

Andrew, M., Taylorson, J., J Langille, D., Grange, A., & Williams, N. (2018). Student Attitudes towards Technology and Their Preferences for Learning Tools/Devices at Two Universities in the UAE. Journal of Information Technology Education: Research, 17, 309–344. https://doi.org/10.28945/4111

Aristovnik, A., Keržič, D., Ravšelj, D., Tomaževič, N., & Umek, L. (2020). Impacts of the COVID-19 Pandemic on Life of Higher Education Students: A Global Perspective. Sustainability, 12(20), 8438. https://doi.org/10.3390/su12208438

Aubriet, V., Courouble, K., Gros-Jean, M., & Borowik, Ł. (2021). Correlative analysis of embedded silicon interface passivation by Kelvin probe force microscopy and corona oxide characterization of semiconductor. Review of Scientific Instruments, 92(8), 083905. https://doi.org/10.1063/5.0052885

Baek, M., DiMaio, F., Anishchenko, I., Dauparas, J., Ovchinnikov, S., Lee, G. R., Wang, J., Cong, Q., Kinch, L. N., Schaeffer, R. D., Millán, C., Park, H., Adams, C., Glassman, C. R., DeGiovanni, A., Pereira, J. H., Rodrigues, A. V., van Dijk, A. A., Ebrecht, A. C., … Baker, D. (2021). Accurate prediction of protein structures and interactions using a three-track neural network. Science, 373(6557), 871–876. https://doi.org/10.1126/science.abj8754

Belete, T. M. (2020). A review on Promising vaccine development progress for COVID-19 disease. Vacunas, 21(2), 121–128. https://doi.org/10.1016/j.vacun.2020.05.002

Botchkarev, A. (2019). A New Typology Design of Performance Metrics to Measure Errors in Machine Learning Regression Algorithms. Interdisciplinary Journal of Information, Knowledge, and Management, 14, 045–076. https://doi.org/10.28945/4184

Braun, V., & Clarke, V. (2021). To saturate or not to saturate? Questioning data saturation as a useful concept for thematic analysis and sample-size rationales. Qualitative Research in Sport, Exercise and Health, 13(2), 201–216. https://doi.org/10.1080/2159676X.2019.1704846

Burkart, S., Parker, H., Weaver, R. G., Beets, M. W., Jones, A., Adams, E. L., Chaput, J., & Armstrong, B. (2022). Impact of the COVID -19 pandemic on elementary schoolers' physical activity, sleep, screen time and diet: A quasi-experimental interrupted time series study. Pediatric Obesity, 17(1). https://doi.org/10.1111/ijpo.12846

Challenges Faced by Working Population During Lockdown in Response to Corona Virus Outbreak. (2020). Indian Journal of Forensic Medicine & Toxicology. https://doi.org/10.37506/ijfmt.v14i4.12214

Cuschieri, S., & Grech, V. (2022). A comparative assessment of attitudes and hesitancy for influenza vis-à-vis COVID-19 vaccination among healthcare students and professionals in Malta. Journal of Public Health, 30(10), 2441–2448. https://doi.org/10.1007/s10389-021-01585-z

de Jong, T., Gillet, D., Rodríguez-Triana, M. J., Hovardas, T., Dikke, D., Doran, R., Dziabenko, O., Koslowsky, J., Korventausta, M., Law, E., Pedaste, M., Tasiopoulou, E., Vidal, G., & Zacharia, Z. C. (2021). Understanding teacher design practices for digital inquiry–based science learning: The case of Go-Lab. Educational Technology Research and Development, 69(2), 417–444. https://doi.org/10.1007/s11423-020-09904-z

DeJonckheere, M., & Vaughn, L. M. (2019). Semistructured interviewing in primary care research: A balance of relationship and rigour. Family Medicine and Community Health, 7(2), e000057. https://doi.org/10.1136/fmch-2018-000057

Dewi, W. A. F. (2020). Dampak COVID-19 terhadap Implementasi Pembelajaran Daring di Sekolah Dasar. EDUKATIF : JURNAL ILMU PENDIDIKAN, 2(1), 55–61. https://doi.org/10.31004/edukatif.v2i1.89

Eirín-Nemiña, R. (2018). Las comunidades de aprendizaje como estrategia de desarrollo profesional de docentes de Educación física. Estudios Pedagógicos (Valdivia), 44(1), 259–278. https://doi.org/10.4067/S0718-07052018000100259

Gralewski, J., & Karwowski, M. (2018). Are Teachers' Implicit Theories of Creativity Related to the Recognition of Their Students' Creativity? The Journal of Creative Behavior, 52(2), 156–167. https://doi.org/10.1002/jocb.140

Gupta, S., & Deep, K. (2019). A hybrid self-adaptive sine cosine algorithm with opposition based learning. Expert Systems with Applications, 119, 210–230. https://doi.org/10.1016/j.eswa.2018.10.050

Handsman, E. (2021). From Virtue to Grit: Changes in Character Education Narratives in the U.S. from 1985 to 2016. Qualitative Sociology, 44(2), 271–291. https://doi.org/10.1007/s11133-021-09475-2

Hutzler, Y., Meier, S., Reuker, S., & Zitomer, M. (2019). Attitudes and self-efficacy of physical education teachers toward inclusion of children with disabilities: A narrative review of international literature. Physical Education and Sport Pedagogy, 24(3), 249–266. https://doi.org/10.1080/17408989.2019.1571183

Jain, M., Singh, V., & Rani, A. (2019). A novel nature-inspired algorithm for optimization: Squirrel search algorithm. Swarm and Evolutionary Computation, 44, 148–175. https://doi.org/10.1016/j.swevo.2018.02.013

Khosravi, K., Pham, B. T., Chapi, K., Shirzadi, A., Shahabi, H., Revhaug, I., Prakash, I., & Tien Bui, D. (2018). A comparative assessment of decision trees algorithms for flash flood susceptibility modeling at Haraz watershed, northern Iran. Science of The Total Environment, 627, 744–755. https://doi.org/10.1016/j.scitotenv.2018.01.266

Kim, S., & Kim, H. Y. (2018). A Computational Thinking Curriculum and Teacher Professional Development in South Korea. Dalam M. S. Khine (Ed.), Computational Thinking in the STEM Disciplines (hlm. 165–178). Springer International Publishing. https://doi.org/10.1007/978-3-319-93566-9_9

Li, S., Zhao, X., & Zhou, G. (2019). Automatic pixel-level multiple damage detection of concrete structure using fully convolutional network. Computer-Aided Civil and Infrastructure Engineering, 34(7), 616–634. https://doi.org/10.1111/mice.12433

Li, X., Zhang, W., & Ding, Q. (2018). A robust intelligent fault diagnosis method for rolling element bearings based on deep distance metric learning. Neurocomputing, 310, 77–95. https://doi.org/10.1016/j.neucom.2018.05.021

Lin, Q., Zhao, S., Gao, D., Lou, Y., Yang, S., Musa, S. S., Wang, M. H., Cai, Y., Wang, W., Yang, L., & He, D. (2020). A conceptual model for the coronavirus disease 2019 (COVID-19) outbreak in Wuhan, China with individual reaction and governmental action. International Journal of Infectious Diseases, 93, 211–216. https://doi.org/10.1016/j.ijid.2020.02.058

Liu, Z., Magal, P., Seydi, O., & Webb, G. (2020). A COVID-19 epidemic model with latency period. Infectious Disease Modelling, 5, 323–337. https://doi.org/10.1016/j.idm.2020.03.003

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, 1, 100012. https://doi.org/10.1016/j.ijedro.2020.100012

Moutaouakil, A., Jabrane, Y., Reha, A., & Koumina, A. (2021). The Spread of the Corona Virus Disease (Covid-19) and the Launch of 5G Technology in China: What

Relationship. Dalam S. Motahhir & B. Bossoufi (Ed.), Digital Technologies and Applications (Vol. 211, hlm. 919–924). Springer International Publishing. https://doi.org/10.1007/978-3-030-73882-2_83

Muthmainnah, A., Rahma, D., Robi'ah, F., & Prihantini, P. (2021). Dampak Pandemi Covid-19 terhadap Kegiatan Ektrskurikuler di Sekolah Dasar. Jurnal Basicedu, 6(1), 394–406. https://doi.org/10.31004/basicedu.v6i1.1964

Ng, E., & Tan, B. (2018). Achieving state-of-the-art ICT connectivity in developing countries: The Azerbaijan model of Technology Leapfrogging. The Electronic Journal of Information Systems in Developing Countries, 84(3), e12027. https://doi.org/10.1002/isd2.12027

Okazaki, S., Muraoka, Y., & Osu, R. (2019). Teacher-learner interaction quantifies scaffolding behaviour in imitation learning. Scientific Reports, 9(1), 7543. https://doi.org/10.1038/s41598-019-44049-x

Rampioni, M., Moșoi, A. A., Rossi, L., Moraru, S.-A., Rosenberg, D., & Stara, V. (2021). A Qualitative Study toward Technologies for Active and Healthy Aging: A Thematic Analysis of Perspectives among Primary, Secondary, and Tertiary End Users. International Journal of Environmental Research and Public Health, 18(14), 7489. https://doi.org/10.3390/ijerph18147489

Regmi, K., & Jones, L. (2020). A systematic review of the factors – enablers and barriers – affecting e-learning in health sciences education. BMC Medical Education, 20(1), 91. 1115-Article Text-14339-1-9-20240829.docx

Samanta, S., Banerjee, J., Rahaman, S. N., Ali, K. M., Ahmed, R., Giri, B., Pal, A., & Dash, S. K. (2022). Alteration of dietary habits and lifestyle pattern during COVID-19 pandemic associated lockdown: An online survey study. Clinical Nutrition ESPEN, 48, 234–246. https://doi.org/10.1016/j.clnesp.2022.02.007

Sari, R. P., Tusyantari, N. B., & Suswandari, M. (2021). DAMPAK PEMBELAJARAN DARING BAGI SISWA SEKOLAH DASAR SELAMA COVID-19. Prima Magistra: Jurnal Ilmiah Kependidikan, 2(1), 9–15. https://doi.org/10.37478/jpm.v2i1.732

Siregar, R. Y., Gunawan, A. H., & Saputro, A. N. (2021). Impact of the Covid-19 Shock on Banking and Corporate Sector Vulnerabilities in Indonesia. Bulletin of Indonesian Economic Studies, 57(2), 147–173. https://doi.org/10.1080/00074918.2021.1956397

Srivastava, S., Kumar, A., Bauddh, K., Gautam, A. S., & Kumar, S. (2020). 21-Day Lockdown in India Dramatically Reduced Air Pollution Indices in Lucknow and New Delhi, India. Bulletin of Environmental Contamination and Toxicology, 105(1), 9–17. https://doi.org/10.1007/s00128-020-02895-w

Susanto, E., & Deapalupi, A. P. (2020). Analisis Dampak Covid-19 terhadap Implementasi Study From Home (SFH) di Tingkat Sekolah Dasar. Jurnal Pendidikan : Riset dan Konseptual, 4(4), 536. https://doi.org/10.28926/riset_konseptual.v4i4.274

Tchamyou, V. S., Asongu, S. A., & Odhiambo, N. M. (2019). The Role of ICT in Modulating the Effect of Education and Lifelong Learning on Income Inequality and Economic Growth in Africa. African Development Review, 31(3), 261–274. https://doi.org/10.1111/1467-8268.12388

Wu, S.-Y. (2021). How Teachers Conduct Online Teaching During the COVID-19 Pandemic: A Case Study of Taiwan. Frontiers in Education, 6, 675434. https://doi.org/10.3389/feduc.2021.675434

Yan, R., Zhang, Y., Li, Y., Xia, L., Guo, Y., & Zhou, Q. (2020). Structural basis for the recognition of SARS-CoV-2 by full-length human ACE2. Science, 367(6485), 1444–1448. https://doi.org/10.1126/science.abb2762

Yang, B., Lei, Y., Jia, F., & Xing, S. (2019). An intelligent fault diagnosis approach based on transfer learning from laboratory bearings to locomotive bearings. Mechanical Systems and Signal Processing, 122, 692–706. https://doi.org/10.1016/j.ymssp.2018.12.051

Zhang, S., Yao, L., Sun, A., & Tay, Y. (2020). Deep Learning Based Recommender System: A Survey and New Perspectives. ACM Computing Surveys, 52(1), 1–38. https://doi.org/10.1145/3285029

Copyright Holder :
© Suhaimi. (2024).

First Publication Right :
© At-Tasyrih: Jurnal Pendidikan dan Hukum Islam

This article is under: