



Comparison of the impact of the learning system during the COVID-19 Pandemic in several countries and Indonesia

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Abstract

Online learning is an alternative during the COVID-19 pandemic. This study aims to empirically verify the impact of the learning system during the COVID-19 pandemic in several countries and Indonesia. The method used in writing this article is using the prism method, which is part of the literature search method from national and international article sources, which is carried out using an indexed search on Google Scholar. The articles reviewed were the latest 49 articles from 2020 to 2022, consisting of 40 national journals and 9 international journals. The results of the study are presented as follows; (1) The search results prove an increase in the number of articles published from 2020-2021; (2) The distribution of articles by type and method of data is presented using more qualitative data; (3) The results showed that the impact of the learning system during the covid-19 pandemic had a major impact on the learning system, namely the positive and negative impacts of online learning carried out by every school facing the covid-19 pandemic. Online learning itself is very influential on learning during the pandemic and is the most widely used. Digital literacy competence is highly demanded in the conditions of the COVID-19 pandemic.

Keywords: Comparison, Learning System, COVID-19 Pandemic, Online Learning

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Introduction

The Covid-19 pandemic is no longer a problem for one person or one country, but now the Covid-19 pandemic has become a big problem for the whole world, including Indonesia. Thousands of people have become victims of this virus, which has led to the enactment of Large-Scale Social Restrictions (PSBB) which are enforced in almost all regions in Indonesia. This virus infects many people, causing a high risk of death for both exposed victims and medical personnel who are at the forefront of handling cases of the COVID-19 pandemic. The rapid spread of the virus and the need for self-quarantine to find out if we are infected with the virus or not. This has prompted the government to take many policies in order to prevent and break the chain of the spread of the COVID-19 virus. Cucinotta & Vanelli, (2020) stated that the World Health Organization (WHO) on March 11, 2020 gave a statement that COVID 19 is a virus that has been declared a global pandemic that has attacked several countries in the world. As of March 21, 2020 it was recorded that the Corona virus had spread to 167 countries and more than 285,000 cases with nearly 12,000 deaths in the world (Clerkin, Fried, & Raikhelkar, 2020; Hermansyah, 2020).

The whole world is carrying out policies on a large scale starting from the health and social fields both individually, local, national and international communities and institutions, collaborating with each other in an effort to break the chain of spread of COVID-19 by means of self-isolation, contact tracing and quarantine, maintain social and physical distance, stop national and international travel, and treat patients infected with Covid-19 (World Health Organization, 2020). The Corona Virus or COVID-19 has changed the face of education throughout the world including Indonesia, the Ministry of Education and Culture's policy in the field of education is stated in the Circular Letter of the Ministry of Education and Culture No. Circular No. 15 of 2020 concerning Guidelines for Organizing Learning from Home in an Emergency Period for the Spread of COVID-19. Based on Circular Number 4 of 2020 regarding the implementation of education policies in the

emergency period of the spread of Corona virus Disease (Covid-19) issued by the Minister of Education and Culture on March 24, 2020 there is an explanation of the implementation of the learning process from home with several provisions, namely first, Learning from home through online learning is implemented to provide a meaningful learning experience for students, without being burdened with the demands of completing all curriculum achievements for grade promotion and graduation; second, learning from home can be focused on life skills education, including regarding the Covid-19 pandemic; third, Home learning activities and assignments may vary between students, according to the interests and conditions of each, including considering the gap in learning facilities at home; fourth, the evidence or product of learning activities from home is given qualitative and useful feedback from the teacher, without being required to give qualitative scores. With this policy, many schools carry out distance learning, both at the elementary and secondary school levels, as well as at the tertiary level (Bahar, 2020).

The implementation of distance learning due to the Covid-19 pandemic is the implementation of the education policy of the Minister of Education and Culture (Mendikbud). The aim is to ensure the fulfillment of the rights of students to obtain educational services during the Covid-19 pandemic emergency, prevent the spread and transmission of Covid-19 in education units and ensure the fulfillment of psychosocial support for educators and students. Distance learning or what we often call online learning is a learning system that is carried out through live but virtual. That is, at the same time a teacher teaches in front of a computer in one place, while students follow the learning from another computer in a different place (Elyas, 2018). All events almost all over the earth are booming with the Covid-19 virus, especially in the State of Indonesia which is currently being attacked by the Covid-19 virus. The covid-19 virus or corona virus is a disease that originated in China and experts state that there are strong indications that the cause of SARS, this virus causes respiratory infections that spread through respiratory secretions, then the nose on the walls of the upper respiratory tract, some facts say this corona virus causes many deaths, this virus is thought to have mutated so that it becomes more virulent (Treatise et al., 2020). Until everyone stops their activities and carries out all activities in the house. And of course this can indirectly interfere with learning at school. The implementation of Work from Home (WFH) in various schools is motivated by the widespread spread of the corona virus in a number of regions, this can also be related to the rights of educators and also students for teaching and learning safety (Herliandry et al., 2020).

In an effort to prevent and protect teachers and students, several authorities have set a temporary WFH policy (Pahan & Fitriani, 2020). In this case, educators and students are required to study online and practice social distancing during this corona outbreak in order to break the virus network. However, the impact of the WFH is very much felt because our habits in socializing and greeting each other between teachers and students must be limited which has its own positive and negative impact for a teacher and student, especially in this process. Students are required to always be able to understand the lessons given by the teacher with existing limitations, because the online learning system that requires a signal as a medium for channeling learning that is not fully accessible in all existing areas can also disrupt the process of teaching and learning activities (Amalina, 2021; Ahmad Jaelani, Hamdan Fauzi, Hety Aisah, 2020; Wiryanto, 2020). This includes students being closed, this is an effort from the government to prevent the development of the Covid-19 virus, which spreads very quickly. Related to this incident, students are not only given a day off but are still studying at home. Students can do online learning by using the internet at their respective homes, so that in this Covid-19 pandemic condition it does not decide their enthusiasm for learning, because education for them is still a top priority. Therefore, one of them is not to stop in the learning process in the midst of this outbreak, namely students doing online learning, but what is the impact of the learning system during the COVID-19 pandemic in several countries and Indonesia.

Method

The method used in writing this article is a systematic literature review, which is a literature search from international article sources and national articles conducted using an indexed search on Google Scholar. This literature review was conducted using the PRISMA method. The PRISMA method is a method used to carry out literature review and meta-analysis activities to make it easier to review the structure of the roadmap of research objectives (Moher et al., 2015). Meta-analysis in the literature review is used as a source of empirical evidence, through which authors can summarize and analyze articles (Amelia et al., 2019). Furthermore, meta-analysis can also define articles according to their qualifications (Husin et al., 2021), which will play an important role in solving problems by explaining, synthesizing, and assessing quantitative or qualitative evidence for reporting.

The systematic literature review process was carried out in 3 stages, consisting of searching and retrieving articles, filtering and sorting, and analyzing. In the early stages of searching for journal articles related to the comparison of the impact of the learning system during the Covid-19 pandemic in several countries, 9 journal articles were obtained from 2020 to 2022 and a comparison of the impact of the learning system during the COVID-19 pandemic in Indonesia obtained 40 journal articles from 2020 to 2022. The results identified using the keyword "Impact of the COVID-19 pandemic on the education system in several countries and Indonesia"

which resulted in a Google Scholar search: 9 international journals and 43 national journals. In the end, 49 articles were thoroughly analyzed, synthesized to extract and summarize the basic findings needed to answer the research objectives. Give an idea about the comparison of the education system in several countries and Indonesia during the covid-19 pandemic.

Results and Discussion

The results of the meta-analysis of the various comparisons of the impact of the learning system during the Covid-19 pandemic in several countries and Indonesia which have been studied in depth are presented as follows. Figure 2 shows that there is an increase in articles from 2020 to 2022. In 2020 the number of articles published was 22 articles with a percentage of 43%, in 2021 the number of articles published increased by 26 articles with a percentage of 55%, while in in 2022 the number of articles published greatly decreased by 1 article with a percentage of 2%. This is because in 2020 the online learning transition has only started due to the pandemic period, so the impact of the learning system during the COVID-19 pandemic is very visible. It is different in 2022, the article on the impact of the learning system during the COVID-19 pandemic has greatly decreased due to the transition of online learning which has been getting better from 2020 to 2021 so that learning carried out in educational institutions has started to improve and in 2022 learning has begun to be carried out as normal face-to-face learning at school. Therefore, there are many articles that discuss the various impacts of learning during the COVID-19 pandemic in 2020 and 2021.

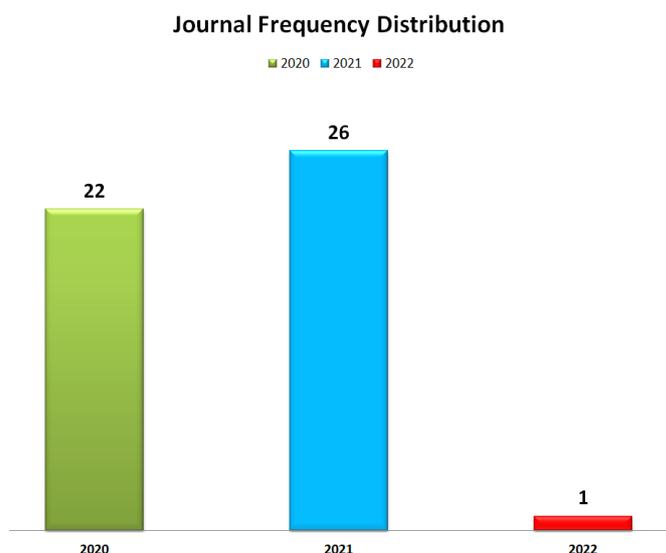


Figure 1. Frequency distribution of journals for the year 2020-2022

The articles in this literature review were taken from 49 national and international scientific journals from 2020 to 2022. The distribution of articles by type of publication is presented in Figure 2.

The frequency of articles published on the Google Scholar index

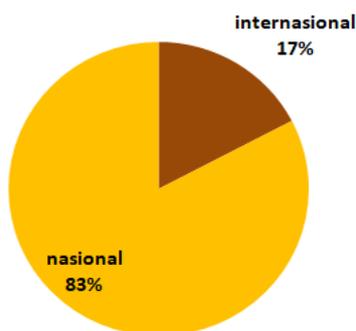


Figure. 2 Distribution of the frequency of articles published in the Google Scholar index

As shown in Figure 2, in the Google Scholar index of international journals, the number of articles on the comparison of the impact of the learning system during the COVID-19 pandemic in several countries was

published in 9 with a percentage of 17%. Meanwhile, in the Google Scholar index of national journals, a comparison of the impact of the learning system during the COVID-19 pandemic in Indonesia, the number of articles published was 40 with a percentage of 83%. Furthermore, the distribution of articles based on topics, found several articles related to the comparison of the impact of the learning system during the COVID-19 pandemic in several countries and Indonesia as follows:

1. The impact of the learning system during the COVID-19 pandemic in several countries, found as many as 9 posts, with percentages as big as 17%, namely: (Linda la Velle, Stephen Newman, Catherine Montgomery & David Hyatt, 2020), (Viv Ellis, Sarah Steadman & Qiming Mao, 2020), (Suzuki, Nagai, Akonoghre, Desborough, 2020), (Hebecci, Bertiz, Alan, 2020), (Ka Ho Mok, Weiyan Xiong, Guoguo Ke, Joyce Oi Wun Cheung, 2021), (Stephanie Scott, Victoria J. McGowan and Shelina Visram, 2021), (Daniel A. Ogundijo, Ayten A. Tas, and Bukola A. Onarinde, 2021), (Matt J. Keeling, Michael J. Tildesley, Benjamin D. Atkins, Bridget Penman, Emma Southall, Glen Guyver-Fletcher, Alex Holmes, Hector McKimm, Erin E. Gorsich, Edward M. Hill and Louise Dyson, 2021), (Nina Regenold and Cecilia Vindrola-Padros, 2021).
2. The impact of the learning system during the COVID-19 pandemic in Indonesia, found as many as 40 writings, with percentages as big as 83%, namely: (A Minutes, W Ibad, L Maghfiroh, MI Azza, SA Cahyani, ZA Ulfayati, 2020), (Syairul Bahar, 2020), (Puji Asmaul Chusna, Ana Dwi Muji Utami, 2020), (W. Samudera, 2020), (Nurul Hidayah, 2020), (Mastura, Rustan Santaria, 2020), (Nur'ain Pakaya, Faudzan Azhar Kida, Wirahayu Atas, 2020), (M Sya'rani Machrizzandi, 2020), (Suspahariati, Ririn Susilawati, 2020), (Yogik Delta Hermawan, 2020), (Bambang Wisnu Widagdo, Murni Handayani, and Agus Suharto, 2020), (Yulita Pujilestari, 2020), (Rodame Monitorir Napitupulu, 2020), (Niken Bayu Argaheni, 2020), (Willy Setiawan; Dede Yusuf, 2020), (Nourma Ulva, Kumala Devi, 2020), (Cecilia Engko, Paul Usmany, 2020), (Nurkholis, 2020), (Andi Yurni Ulfa and Haerul Mutiah, 2021), (Adittyanto, Fikri Ardian Putra, Firdaus Nur Alim, Muchamad Tegar Suseno, Sawung Seta Pungkas Yudha, Ilma Aulia Thohir, 2021), (Angeline Rivanna, Putri Soegiono, Astrid Kusumowidagdo, 2021), (Mungky Hendriyani, Ni Made Artini, Tatyana, 2021), (Oktaria Vita Loka, 2021), (Ashabul Kahfi, 2021), (Roswita Hafni, 2021), (Arifah Prima Satrianingrum, Iis Prasetyo, 2021), (Nuraini, Dadan Suryana, 2021), (Salma Rahma Chrisya Adriani, Sinung Khoirot, Sawitri, and Nurjanah, 2021), (Alpi Subahan, Dini Xena Dista, Ramdhan Witarsa, 2021), (Made Adi Nugraha Tristaningrat, 2021), (Roliana Manurung, Arief Sadjarto, Destri Sambara Sitorus, 2021), (Rifa Fauziyyah, Rinka Citra Awinda, Besral, 2021), (Muttaqin Choiri, Mutiara Cahyani Fajrin, Tanti Alfrida Novianti, Eva Nur Kholidah Putri Ms, 2021), (Washilatun Novia and Wasehudin, 2021), (Carissa V. Tirajoh, Herdy Munayang, Bernabas HR Kairupan, 2021), (Siti Nita Sari, Haryono, 2021), (Zulfa Fahmy, Asep Purwo Yudi Utomo, Yusro Edy Nugroho, Annisa Tetty Maharani, Nailul Akhla Alfatimi, Novi Izmi Liyana, Rossi Galih Kesuma, and Titi Wuryani, 2021), (Sri Herwanto Dwi Hatmo, 2021), (Jauharotur Rihlah, Destita Shari, Ayu Rizki Anggraeni, 2021), (Mhd irgi Maulana, Nasution Leni Hermita Hasibuan Annisa Hananiyah, Sania Nurhasanah, Inom Nasution, 2022).

Based on these findings, it can be seen the impact of the learning system during the COVID-19 pandemic in several countries and Indonesia. Figure 3 presents the distribution of articles by topic.

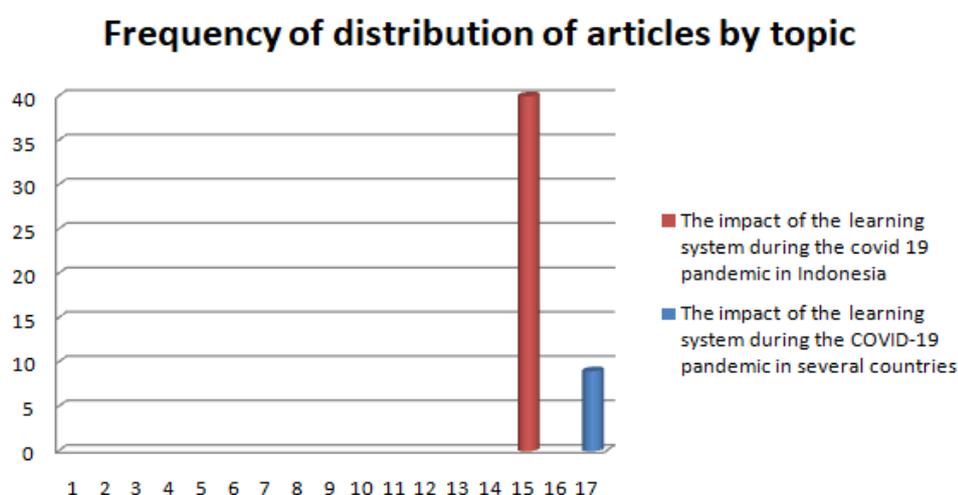


Figure 3. Frequency of article distribution by topic

Furthermore, based on the type of data and methods used in each article analyzed, several methods were found that are often used in this research, such as:

1. Qualitative descriptive : (Linda la Velle, Stephen Newman, Catherine Montgomery & David Hyatt, 2020), (Viv Ellis, Sarah Steadman & Qiming Mao, 2020), (Suzuki, Nagai, Akonoghre, Desborough, 2020), (Nina Regenold and Cecilia Vindrola-Padros, 2021), (A Minutes, W Ibad, L Maghfiroh, MI Azza, SA Cahyani, ZA Ulfayati, 2020), (Puji Asmaul Chusna, Ana Dwi Muji Utami, 2020), (W. Samudera, 2020), (Nurul Hidayah, 2020), (Nur'ain Pakaya, Faudzan Azhar Kida, Wirahayu Atas, 2020), (Suspahariati, Ririn Susilawati, 2020), (Yogik Delta Hermawan, 2020), (Yulita Pujilestari, 2020), (Rodame Monitorir Napitupulu, 2020), (Niken Bayu Argaheni, 2020), (Willy Setiawan; Dede Yusuf, 2020), (Nurkholis, 2020),(Adittyanto, Fikri Ardian Putra, Firdaus Nur Alim, Muchamad Tegar Suseno, Sawung Seta Pungkas Yudha, Ilma Aulia Thohir, 2021),(Mungky Hendriyani, Ni Made Artini, Tatyana, 2021), (Nuraini, Dadan Suryana, 2021),(Salma Rahma Chrisya Adriani, Sinung Khoirot, Sawitri, and Nurjanah, 2021),(Roliana Manurung, Arief Sadjarto, Destri Sambara Sitorus, 2021),(Siti Nita Sari, Haryono, 2021), (Zulfa Fahmy,Asep Purwo Yudi Utomo, Yusro Edy Nugroho, Annisa Tetty Maharani, Nailul Akhla Alfatimi, Novi Izmi Liyana, Rossi Galih Kesuma, and Titi Wuryani, 2021), (Mhd irgi maulana, nasution Leni hermita hasibuan Annisa hananiyah, Sania nurhasanah, Inom Nasution , 2022).
2. Quantitative descriptive : (Hebeeci, Bertiz, Alan, 2020), (Ka Ho Mok, Weiyan Xiong, Guoguo Ke, Joyce Oi Wun Cheung, 2021), (Stephanie Scott, Victoria J.McGowan and Shelina Visram, 2021), (DanielA. Ogundijo , Ayten A.Tas, and Bukola A.Onarinde, 2021), (Mattj. Keeling, Michaelj. Tildesley, Benjamin D.Atkins, Bridget Penman, Emma Southall, Glen Guyver-Fletcher, AlexHolmes, Hector McKimm, Erin E.Gorsich , Edward M. Hill and Louise Dyson, 2021), (Sri Herwanto Dwi Hatmo, 2021), (Jauharotur Rihlah, Destita Shari, Ayu Rizki Anggraeni, 2021).
3. Qualitative and quantitative : (Bambang Wisnu Widagdo, Murni Handayani, and Agus Suharto, 2020), (Angeline Rivanna, Putri Soegiono, Astrid Kusumowidagdo, 2021), (Roswita Hafni, 2021),
4. Literature review : (Oktaria Vita Loka, 2021), (Ashabul Kahfi, 2021),), (Alpi Subahan, Dini Xena Dista, Ramdhan Witarasa, 2021), (Rifa Fauziyyah, Rinka Citra Awinda, Besral, 2021), (Muttaqin Choiri , Mutiara Cahyani Fajrin, Tanti Alfrida Novianti, Eva Nur Kholidah Putri Ms, 2021),),(Washilatun Novia and Wasehudin, 2021), (Carissa V. Tirajoh, Herdy Munayang, Bernabas HR Kairupan, 2021)
5. Case Study : (Syairul Bahar, 2020),(Mastura, Rustan Santaria, 2020),(M Sya'rani Machrizzandi, 2020),(Nourma Ulva, Kumala Devi, 2020), (Cecilia Engko, Paul Usmany, 2020), (Andi Yurni Ulfa and Haerul Mutiah, 2021), (Arifah Prima Satrianingrum, Iis Prasetyo, 2021)
6. Meta-analysis : (Made Adi Nugraha Tristaningrat, 2021)

The method that is often used in research is descriptive qualitative and descriptive quantitative. This method is possible to describe the impact of the learning system during the COVID-19 pandemic in several countries and Indonesia. With this descriptive method, researchers can create an overview of learning conditions and the impact of the learning system during the COVID-19 pandemic in several countries and Indonesia. While other methods used literature review, meta-analysis and case studies. The distribution of articles by data type or method is presented in Figure 4.

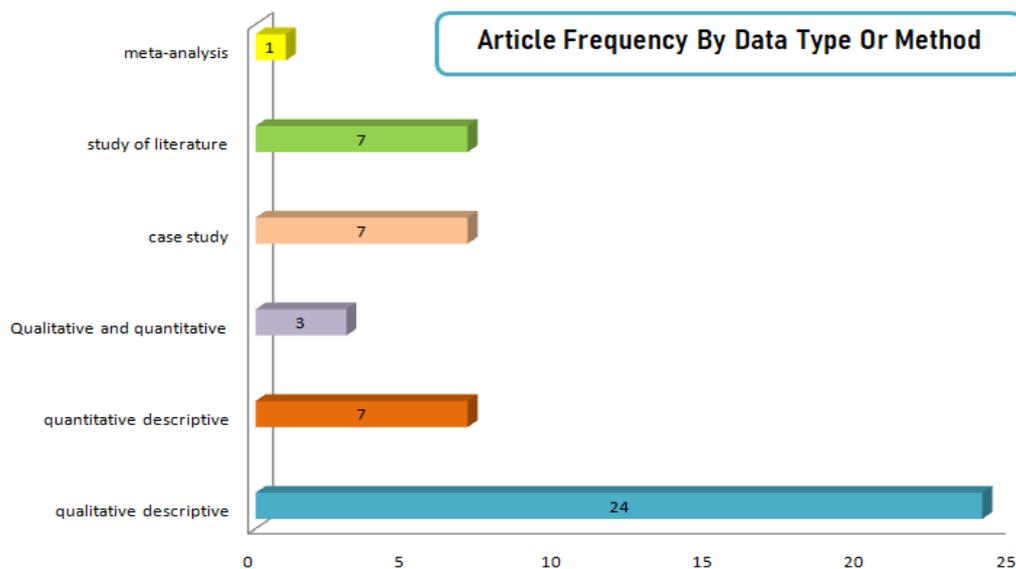


Figure 4. Article frequency by data type or method

The development of innovative learning models is very much needed (Hidayat et al., 2018; Hidayat et al., 2019a, 2019b; Hidayat et al., 2020; Ganefri et al., 2021), the importance of learning needs analysis (Ganefri et

al., 2017; Hidayat et al., 2019c; Ganefri et al., 2020), learning media and technology (Anwar et al., 2021; Ardi et al., 2021; Hidayat et al., 2021; Hidayat, & Muji, 2021; Tasrif et al., al., 2021), is no exception to learning during the covid-19 pandemic. This analysis examines the various impacts of learning during the COVID-19 pandemic in several countries, the problems of learning during the pandemic and the impacts of learning during the pandemic are very diverse and varied. Research on the impact of learning analyzed examines the impact of learning during the pandemic and the development of distance learning through technology in carrying out the learning process during the COVID-19 pandemic. In this analysis identified 49 articles from 2020 to 2022.

The result is the impact of the learning system during the COVID-19 pandemic in several countries and Indonesia. The impact of learning caused by the Covid-19 pandemic, schools and universities from the perspective of four universities in the UK is that schools are closed to all and the normal placement of students in education cannot be continued. Learning is carried out with 'virtual-ITE programs both in schools and universities. (Ellis, Viv et al., 2020; Vellea, Linda la, 2020). The UK experience of COVID-19 is based on the results of a six-week study of 31 young people aged 13–17 years (1) impact on mental health and emotional well-being; (2) disruption and change to education and school life; and (3) frustration, burden and responsibility (Scott, Stephanie etc al, 2021). In the United States A unique approach is taken to address learning difficulties and classroom experiences, as well as student assessment, with distance learning or online formats. (Suzuki, Kawaguchi M, etc al, 2020). The impact of learning during the COVID-19 pandemic shows the fact that education can be carried out in a planned and scheduled manner even under extraordinary conditions, which is often expressed in positive opinions. Problems such as limited interaction, infrastructure problems and lack of equipment are among the overwhelming negative opinions regarding distance education activities. (Hebebcı, etc al, 2020). In Mainland China and Hong Kong studying plans to fight the COVID-19 crisis Among 2739 respondents, 84% showed no interest in studying abroad after the pandemic. For respondents who will continue to pursue further degrees abroad, Asian regions and countries, in particular Hong Kong, Japan and Taiwan, are listed in the top five, in addition to the US and UK. The pandemic has not only significantly decreased the mobility of international students but has also shifted the flow of international student mobility. (Ka Ho Mok etc al, 2021).

The positive and negative impacts of online learning applied by every school facing the covid-19 pandemic, in online teaching and learning activities themselves have a good effect on learning, especially elementary school children's learning, because children can get to know and learn online and can take advantage of technology those who exist wisely and know better how to use gadgets or electronic media that can help in other online learning. But in addition to this good impact, it has a greater negative impact because teaching and learning activities themselves are better done directly face to face with teachers or educators because online learning cannot instill education that has a social character and online education can also lead to an anti-social spirit because it makes children children become comfortable with their own world and indifferent to their surroundings, therefore the role of parents is very important in this case, parents must be able to supervise children properly in the online learning process because elementary children themselves are still unstable and still very weak. requires guidance in carrying out online-based learning so that something unwanted happens. (Minutes. A et al, 2020; Samudera, 2020; Muji, AP, Jamaris, J., Solfema, S., & Hidayat, H., 2022).

The problems in distance learning experienced by teachers are the wasteful use of quota or credit, the existence of signal or internet network disturbances, the material presented has not been able to build interaction with students so that the expected results are not optimal, and it is difficult to grow student motivation so that there is a lack of awareness of students in completing assignments. In addition, the problems in distance learning experienced by students are first, the tasks given by teachers are very large with relatively short assignments so that students have an impact on lack of sleep and experience stress, second, connection or internet network is also often problematic for them, and lastly, teachers sometimes explain the material too quickly and result in many students having difficulty capturing the subject matter (Bahar Syairul, 2020; Hidayah, 2020; Mastura et al., 2020; Pakaya, 2020). The impact of information technology is very large on the economic conditions of students and even parents of students. (Machrizandi, 2020).

The rapid development of information technology, especially the internet, opens up opportunities for the development of better information services in educational institutions. After the outbreak of the COVID-19 pandemic in Indonesia in mid-March 2020, the regional government issued a policy in the world of education, namely temporarily eliminating face-to-face learning and replacing it with online learning, both at the elementary and middle school levels, as well as at the university level. This is realized in a system called an electronic university (e-University). (Pujilestari, Yulita, 2020). The role of parents in optimizing children's learning achievement includes as educators, teachers, motivators, supporters, facilitators and models (examples). Meanwhile, teachers continue to act as planners, implementers and managers (organizers) and evaluators (Chusna, Utami, 2020).

Conclusion

This systematic literature review with the prism method helps teachers, lecturers and education stakeholders to assess the impact of learning during the COVID-19 period and online learning methods. The search results prove an increase in the number of articles published from 2020-2021, with 49 articles from the Google Scholar index, 40 national and 9 international articles. The results showed that the topic of the impact of learning during the covid-19 pandemic was most common in the learning system and the method most widely used in research articles about the impact of learning during the covid-19 pandemic was the qualitative descriptive method. Furthermore, the most widely used learning model in learning is distance learning or online. Most countries provide policies to stop formal face-to-face learning activities, including in Indonesia. All educational institutions have officially stopped face-to-face learning activities and enforce a learning system from home or commonly known as online learning. The implementation of virtual learning activities is not only must be followed by students but also for all staff, both lecturers and employees as an effort to break the chain of the spread of the Covid-19 virus. Utilization of learning using technology requires educators to improve their competencies. educators must follow technological developments, provide learning that is relevant to students, build a solid foundation of character education, actively observe the development of popular culture, and actively research.

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