International Journal of Mechanical Engineering

Understanding Learning Loss After 2 Years of Distance Learning Responding to School Closure Policy during Covid-19

Ade Iskandar

STIA YPPT Tasikmalaya, Indonesia

Nofirman

Universitas Prof. Dr. Hazairin, SH Bengkulu, Indonesia

Endang Fatmawati

Universitas Diponegoro, Semarang, Indonesia

B.M.A.S. Anaconda Bangkara

President University, Cikarang Bekasi, Indonesia

Antono Damayanto

Universitas Jenderal Achmad Yani, Cimahi

Abstract - It is undeniable that there has been a learning loss after two years of students going through a pandemic period where school closures and learning moved from home. This study aims to understand how learning occurs after the government adopted a policy of responding by closing schools and continuing online learning. We have reviewed a series of studies on the results of scientific publications, and we examine them through the data coding system, analyze the data, draw conclusions after in-depth interpretation under a phenomenological approach. The literature sources we visited were many well-known publications that actively publish about learning and cations that the pandemic has disrupted. In the study results, in this case, we can conclude that there has been a decrease in learning achievement during school closures in response to the pandemic response in Indonesia and other countries. Hopefully, the results of this study will be helpful in the development of future studies.

Keywords - Education is disrupted, School closures during the pandemic, The theme of distance learning.

INTRODUCTION

Learning loss is the deficiency of students' information and capacities, either explicitly or primarily, which is impacted by different elements (Engzell et al., 2021). This term is regularly deciphered as an academic difficulty connected with a drawn-out hole or an instructive cycle that is not working out in a good way. Learning misfortune is alluded to as a diminishing learning accomplishment in the Guidelines for the Implementation of Learning in the COVID-19 Pandemic Period. During the pandemic, schooling is directed web-based where there are holes in access and the nature of learning (Skar et al., 2022; Sudarmo et al., 2021; Manullang et al., 2021). This causes the development of learning misfortune and diminished understudy learning accomplishment. An investigation discovered that eye-to-eye learning could bring preferable scholarly accomplishment, while distance learning or understudies learn at home over a broadcast communications organization.

As recently referenced, many changes happened during the pandemic in Indonesian schooling and even worldwide (Putra et al., 2020). The method involved with changing gaining from up close and personal to internet learning raise different difficulties for understudies, guardians, and educators. All instruction components are expected to adjust to new circumstances, beginning from the learning strategies the innovation utilized to learning plans adjusted to pandemic circumstances. Tragically, not every person can adjust to changes in instruction during the pandemic. With the destitution rate expanding, numerous understudies from oppressed families and live in remote and far-off regions are compelled to exit school because of colossal monetary tensions. A few of them need to help the family economy amidst the COVID-19 emergency. They decide to exit school since they feel troubled when they need to review the web, where many requirements should be finished, such as cell phones and web portion (Churiyah et al., 2020).

Notwithstanding monetary elements, many guardians do not see the job of schools while the instructing and learning process is not done straightforwardly. While learning at home, educators cannot completely go with understudies (Sabates et al., 2021). Materials, tasks, and tests are given online to ensure that instructors cannot straightforwardly see the course of understudy learning improvement. Long-distance directed during the pandemic likewise can make savagery youngsters. Without school, numerous kids are caught in savagery executed at home. Since the school tutoring process does not run straightforwardly, brutality against kids cannot be identified. Likewise, there are additionally outside takes a chance with that to make kids not have the option to

Copyrights @Kalahari Journals

come to studies, like early marriage or youngster abuse (Unger and Meiran, 2020). Different issues and changes cause interruption of understudy training and finish in the rise of learning misfortune. Understudies experience decreased capacity during the time spent learning and getting data. This is the real worry of the government during picking up during the pandemic (Hasan and Bao, 2020).

Lately, Indonesia has kept on endeavoring to develop understudy learning results further. Nonetheless, during the pandemic, different changes in training have brought about a decrease in understudy learning results (Ngwacho, 2020). In these troublesome times, the principal objective of instruction is not just educational plan consummation but also to keep up with the wellbeing and security of all schooling components. The COVID-19 pandemic has different adverse consequences that lead to learning misfortune (Conto et al., 2021). Understudies lose the chance to learn as they ought to, and in this situation, their entitlement to learning cannot be satisfied ideally. As indicated by information from the Indonesian Survey Institute toward the beginning of September 2021, most understudies are considered to have begun to become weary of going through long-distance learning, seen from their energy in partaking in learning. 23.8% of instructors evaluated that understudies did not inspire to learn. This information is proof of the decrease in training, where understudies care very little about getting the hang of, incorporating taking an interest in learning, and getting the material (Hilmy and Niam, 2020).

METHOD AND MATERIAL

To answer and discuss the problems of this study, which aims to understand the impact of government policies in responding and, in other words fighting the virus but still carrying out virtual learning (Cairney, 2019). A series of electronic data searches in many journals and other scientific works that discuss learning while a pandemic hits the world of education with all the impacts and challenges that have been and are being faced throughout the world, especially in Indonesia. We focus on searching for secondary data between 2010 and 2022, where the priority is on papers written after the pandemic and continuing education (Baldwin et al., 2022). Existing information and data certainly require an in-depth study to understand how this happened and how the solution is to anticipate so that learning that has occurred during the pandemic can be slowed down so that students and the world of education are not so depressed. The first step is coding the data, interpreting the data, and communicating it by looking at the high level of validity and reliability, which will later become part of the results or findings of this study (Lewis, 2015).

While the format for writing the report, we decided on the design of the qualitative data research report by following various scientific articles that have discussed the same issue with an emphasis on collecting as much data as possible and only to get an understanding that is easy to understand and has a high novelty value. Our data search mechanism system is carried out electronically by relying on keywords that are relevant to the questions and problems of the hypotheses of this study (O'Sullivan et al., 2016), which we install on the Google Scholar search engine such as the application communication and research publication database and many domestic or national publications that both discuss issues related to learning lost due to the pandemic. These are the steps and approaches we took in formulating the problem of getting data to analyze up to the final report (Crowe et al., 2011).

RESULT AND DISCUSSION

Understanding Learning Loss during Pandemic Respond

On March 2, 2020, interestingly, Covid-19 was declared to have placed Indonesia with the revelation of the initial two cases. Up to this point, Covid-19 has constrained changes in different parts of life, one of which is training (Wang et al., 2020). One of the progressions is in the gaining framework with the issuance of handouts from the public authority, and The round changed eye to eye learning at school to separate learning utilizing the web. Many effects are felt because of distance learning, which is learning loss. Learning misfortune is any loss of information or abilities, both explicitly and for the most part, in the scholastic interaction. Learning misfortune is usually brought about by a hole or intermittence in an understudy's schooling. As for schooling spectators, alluding to the thought of learning loss abroad, gaining loss can happen in youngsters from the center to bring down financial class who cannot get to devices or the web to review (Allo, 2020).

In the interim, learning loss is perhaps the most significant effect of the Covid-19 pandemic in Indonesia. The presence of the Covid-19 pandemic, which is exacerbated by the trouble of getting network access in a few regions, has made the level of learning misfortune in Indonesia higher (Dawadi et al., 2020). As indicated by the Ministry of Education and Culture, in 2020, it was recorded that 31.8 percent of understudies did not approach sufficient schooling. Learning misfortune is a danger to instruction and government assistance in a few nations. As per the World Bank, the presence of Covid-19 can expand the danger to schooling, particularly for ladies. This is because of the remarkable propensity of ladies to exit school, experience savagery in different structures, and face early marriage in youth. Likewise, kids with handicaps, ethnic minorities, and uprooted individuals will need admittance to informational materials, which causes post-school emergencies (Hermanto et al., 2021).

For Indonesia, the effect of learning misfortune most felt is the decrease in understudies' capacities in perusing and scholastics. In a report made by the World Bank, with the Program for International Student Assessment score marker in the initial four months of school terminations in Indonesia because of the Covid-19 pandemic, school understudies encountered a decay of 11 places in perusing capacity, which was enormous (Azhari and Fajri, 2021). Subsequently, the appropriation of understudies who did not meet the base perusing capability level expanded from 70% to 75 percent. In any case, on the off chance that it is accepted that understudies with low learning capacities will be abandoned. In contrast, understudies with great learning capacities

Copyrights @Kalahari Journals

will propel, the appropriation of understudies who do not meet perusing abilities will diminish from 70% to 66%. This rate outlines the hole between understudies in Indonesia. Students with sufficient offices and foundation can learn well despite the danger of learning misfortune, while understudies who experience issues getting to offices and frameworks may encounter learning loss (Al-Samarrai et al., 2020).

In the meantime, in Indonesia, learning loss is maybe the best impact of the Covid-19 pandemic. The Covid-19 pandemic, compounded by the difficulty of getting network access in a couple of locales, has increased the degree of learning hardship in Indonesia. As shown by the Ministry of Education and Culture, in 2020, it was recorded that 31.8 percent of students did not move toward adequate tutoring (Purwanto et al., 2020). Learning hardship is a threat to guidance and government help in many countries. According to the World Bank, the presence of Covid-19 can extend the risk to tutoring, especially for women. Declaring from the article, this is a direct result of the incredible affinity of women to leave school, experience viciousness in various designs, and face early marriage in youth. Moreover, kids with handicaps, ethnic minorities, and evacuated people will require induction to enlightening materials, which causes post-school crises (Indrawati et al., 2020).

How to Recover Back Learning Loss

Late evidence suggests that the excessively long acquiring mishaps from COVID-19 school terminations could be enormous, surprising the fleeting learning disasters experienced during the school terminations themselves (Nugroho et al., 2021). An examination of the impact of the 2005 quake in Indonesia saw that while kids missed three months of school, four years after the shudder, they may be contrasted with 1.5 years behind where they would have been with no tremor. The likeliest explanation is that considering how the students were behind the instructive arrangement when they returned to school, they continued to fall further behind even after returning (Dorn et al., 2020).

How much learning gain might be lost from school closures due to COVID-19 over an extended period of up to almost two years by relying solely on online learning, especially if accidents converge as suggested by the government (Kuhfeld et al., 2020)? Likewise, what qualification measures can help systems have choices to make during a pandemic response? In a paper well completed during the pandemic, the government proposes strategies to demonstrate aid and learning outcomes in low-paying, non-learning-focused countries (Jones, 2018). This customized online learning model provides a technique for investigating possible learning outcomes in the long term from school closures from elementary school to college, which we report in a new "Information Note."

Using the model to introduce surprises, field study results in This shows that children in the country developing countries like Indonesia with low pay and lack of focus can lose more than a full year of learning progress even from the final three months of schooling as difficulties continue to increase after students return to school. We also used the model to examine two easing methodologies: learning or "emergency" remediation and comparable remediation advancing multiple directions to student learning levels (Reich et al., 2020). The latter both reduce the difficulty of shock and beat learning in counterfactuals without progress for more than a year of pandemic-interrupted learning. This solution believes that learning disruptions can be contained—and that the education system can return to being more grounded than it already was because it requires regulating that need to begin now in the new normal (Anderson et al., 2021).

The Sum Learning Might be Lost?

If nothing was done to guide the outcome, we investigated what school closures would mean for current third through grade 10 student learning (Viner et al., 2020). Most likely, the school will run similar assessments for students of other grades in approaching work. The model shows that receiving learning in third grade is reduced by 33%, in general, how various long children may be out of school, learning rates in grade 10 will be one year lower than if there were no surprises (Zierer, 2021). This is because young people have fallen behind the level of guidance upon leaving school and are further lagging in the learning arrangements once they return. How will introducing a second or "emergency" remediation program impact this long learning outcome? (Engzell et al., 2021). We familiarize this with the model by expecting that when these youth return to fourth grade, part of the third-grade instructive program is covered before moving on to fourth-grade topics. In fifth grade, revert to pre-pandemic predefined learning settings and valuable levels. These remedial efforts in the year young people return to school substantially reduce lengthy learning difficulties but at the same time leave a more significant share of children a year behind where they should be in grade 10 without encouraging results (Albrecht et al., 2022).

The latest situation is entering the new normal in Indonesia. We monitor the initial guidance framework when students start entering school. What is needed is for schools to "work back better." So that student learning can be recovered (Kundu and Bej, 2021). The implication is that the education system must take the lead in improving tutoring, including carrying out assessments to identify the level of learning loss, getting ready, and attracting teachers to change direction and teaching practices. They teach to the level and needs of students and focus on achieving the basic abilities of children who have lost during the pandemic (Darling-Hammond and Hyler, 2020). Many strategies have been shown to create further learning beyond crises. For example, the "Teaching at the right level" approach, led by the government through the referral service, has shown that a direction appropriate to a child's learning level can improve outcomes. This approach should have been widespread through remedial in Indonesia. Various assignments, for example, conducting afternoon study supplements, have shown the results to be expected from working with state-run organizations to redirect instructive arrangements and educational assistance to teachers to target critical capacities and ensure all learning youth can cover learning loss (Gouëdard et al., 2020).

Copyrights @Kalahari Journals

One way to "work back better" is to use the teacher's acquired capacity in implementing improvements to shift the direction to children's results-oriented learning levels on an ongoing basis until loss of improvement is achieved (Angrist et al., 2021). For example, teachers arranging to review student gains when they return from school closures could continue to assess student learning at a standard range over the long term and change course to meet students where they have fallen behind in lessons. We model such a state where "emergency" remediation is carried out in tandem, advancing multiple directions to a better level of children's learning (Kuhfeld et al., 2020).

The current state of affairs reduces the difficulty of obtaining a long-term school termination and gives young people a year of learning more than there were no surprises. Due to the COVID-19 response, school dropouts may have several long-term impacts on children today (Azevedo et al., 2021). Another projection of lost remuneration suggests this age could lose 10 trillion in profits over their lifetime as they drop out of school for up to two years. Regardless, old lost learning should not be one of the results. Tutoring frameworks can now be set up for remediation programs when schools resume. When they do, they must create the effort and train teacher instructors in habits that can continue to provide benefits across the period to return from the crisis more down to earth than ever before. In this way, students will be helped by learning loss failures (Dhawan, 2020).

Revealing Learning Loss during Closing School

Reports on learning loss further come as specialists specifically suggest that specialists such as school leaders and teacher councils should consider program quality – and learning loss treatment products – in their decisions to pursue learning programs early in 2022 (Spiro et al., 2021). "The COVID-19 pandemic has exposed the awkward nature that joins the current government-backed preparations, the proximity to disproportionate resources and money-related learning space that various families experience. Could it be that students in this city hold learning outcomes high enough to reduce confusion about how enlightening resources are released to families?" (Lane et al., 2021). Last year, school boards were created by experts in a study of the quality of study corridors in several regions in Indonesia. Field reports show the lower quality of learning outcomes in centers serving children in suburban schools at a higher rate in some places within 2021. Likewise, it shows that primary school businesses run by affiliates environmentalists scored possibly higher on two widely used significant score levels than those administered by the Ministry of Education in several Indonesian cities (Fatimah et al., 2020).

Learning Loss as Limited Resources

During the pandemic, education is conducted online with gaps in access and quality of learning. This is what causes the emergence of learning loss and decreased student learning achievement. Factors causing this learning loss include The transition of distance learning/online learning into limited face-to-face/offline learning without mature transitional treatment (Hartshorn and McMurry, 2020). Inadequate infrastructure and facilities in distance learning. Learning loss is often the result of teaching methods that are only transferred from the classroom and fully adopted to online learning (Espino-Díaz et al., 2020). In this situation, the teacher distributes information and communication in only one direction, which then causes students to feel bored quickly and not enthusiastic about learning. Meanwhile, the expert asked the learning pioneers during the pandemic to consider which primary school teacher duties might help children who have lost their chance to dominate. "Given the limited resources for early childhood education, we need to identify, measure, and convey the important parts that significantly impact youth," "It is incredibly much greater given the hopelessness, stress, and food shortages that cause experienced by more youth in the state because of the pandemic."

The article was linked to a paper arguing that the state's structure for assessing the quality of early learning programs, called Quality Counts schools, maybe off the mark (Trust and Whalen, 2020). In particular, the tools used to measure quality – which is a comparison for the New York study – do not always have a strong relationship with child outcomes, similar to the development of new social enthusiasm and early educational capacity. Fuller agrees that these commonly used quality markers have "limited power," "basically they give us quality checks across the neighborhood [and] social affairs section." For stake-level pioneers, the more transient concerns revolve around how they arise in children who have lost the learning and emotional bond with teachers or are now moving to kindergarten without the usual successful personal progress. This is why drop learning during a pandemic only relies on unprepared technology (Code et al., 2020).

Learning Loss among Young Students

For literacy (learning loss), this is equivalent to 6 months of learning, while for numeracy (learning loss), it is five months. The data is the result of research by the Ministry of Education and Culture, Research and Technology taken from a sample of 3,391 elementary school students from 7 districts/cities in 4 provinces in January 2020 and April 2021 (Engzell et al., 2021). The government acknowledged that distance learning created the most significant learning loss in history in Indonesia. The government said children in Indonesia lost a year of learning due to distance learning during the pandemic. The result is a loss of children's knowledge (learning loss Researchers with the Illuminate Education assessment bundle separated more than 500,000 PC flexible scores in exams and math from kindergarten through 5th-grade students in research and math between the fall and spring tests in the 2018 school year and 2019-20 (Coley et al., 2020).

The data expanded the developed differentiation between two years and learning accident rates at each level and subject. They noticed that students in all grades and subjects experienced learning disasters during pandemic school stoppages this spring,

Copyrights @Kalahari Journals

but they followed a different model (Amorim et al., 2020). Kindergarten and first graders lost the most places in regular upgrades, but up-and-coming fifth graders lost the most experience by researching so that anyone could hear. Students lose more learning in mathematics than in research; missing two to four and a half extensive ranges of learning appeared to differ about short reading time. Researchers with the Illuminate Education assessment pool explored more than 500,000 customizable PC scores in exams and math from kindergarten to 5th graders in exams and maths between the fall and spring exams in the 2018-19 and 2019-school years. 20. These data are used to extend the qualifications developed between two years and the level of learning disaster at each level and subject (Dorn et al., 2020).

Scholarly Loss more than Anticipated

The latest research from the World Bank shows that distance learning is too long, and the length of time schools are closed to is one of the fundamental causes of learning loss (Azevedo et al., 2021). The research stated that if the effectiveness of distance learning were reduced by 40%, there would be a learning loss of up to 6.9 years. If learning effectiveness is reduced by 20%, the learning loss will reach 6.7 years. If the learning effectiveness is reduced by 10%, the learning loss will be 6.6 years (Rahman and Sharma, 2021). So, what exactly is learning loss? What is the impact on the younger generation? The Glossary of Education Reform page states that learning loss is the loss of specific or general knowledge and skills or academic decline (Engzell et al., 2021). This problem most often occurs because of a prolonged gap or discontinuity in education for students. The report explains several factors that cause learning loss, including summer vacations, closed formal education, dropping out of school again, absenteeism from school (could be due to health problems) in the long term, ineffective teaching, and uncoordinated lesson schedule design. Well. The point is that there are barriers to access to sources of knowledge (Zhang et al., 2020).

The COVID-19 pandemic has made the education system what it used to be. Another study by McKinsey assessed that computers would not replace the classroom atmosphere. McKinsey asked teachers in eight countries to rate the effectiveness of distance learning since the pandemic began. They were asked to give an average score of 5 out of 10. Japan and the United States scored very poorly when nearly 60% rated the effectiveness of distance learning at only 3 out of 10. That is Japan and America, significantly developed countries. How about Indonesia? Maybe the problem is twofold. In addition to low effectiveness, the availability of online learning facilities is also not wholly overcome. Not to mention the economic limitations, so students cannot buy credit quotas. So, the phenomenon of learning loss is most likely to occur in children from the middle to lower economic class, who cannot use and access gadgets, as well as the internet, to study. In Jakarta, for example, there is one family with three children who have to fight over their gadgets when they want to study from home (Ferri et al., 2020).

It is wasteful to use a laptop; there are only two simple devices. Their parents used to make a living as online motorcycle taxi drivers. Only one more device must be used by three. Their education levels are different: the first child is in high school, the second is in junior high school, and the youngest is in elementary school (Andriani et al., 2021). We can imagine how much knowledge they can get if they cannot afford basic facilities and infrastructure. We understand as much as possible if the Minister of Education and Research and Technology continues to insist that face-to-face learning be started immediately. The condition is the gradual and disciplined implementation of health protocols. It is not an easy matter, nor is sim sala bim directly able to break the chain of knowledge loss, but at least it can prevent the severity of learning loss. There is nothing wrong with starting when the daily positive cases of COVID-19 begin to slant below 1,000 cases with a death rate below 100 and even under 50. That is because there is no more terrible disaster for a nation than the loss of generation due to the loss of knowledge—learning loss (Rahmat et al., 2021).

Learning Loss and How to Cover it

Many reports have explained that there has been lost learning related to the pandemic outbreak, and the government's response in 2020 has sent students home and continued learning online, raising concerns about the condition of students - how much learning was lost? (Aristovnik et al., 2020). While reports on opening up opportunities for students are limited given the paucity of available data and ambiguity in responses at the school level, there has been a collection of critical judgments related to drop learning - the unavoidable learning difficulties of student knowledge in a time of pandemic after students are forced to study from disrupted homes, because of the pandemic, from a fast and direct direction (Aliyyah et al., 2020). Considering this scientific report, everyone knows three things: Students from low-income families struggle more than their friends from wealthy families. Primary and secondary school students will regularly experience poor learning experiences, especially at the same time as low entry incomes. Students from generally assigned and handled packages experienced more significant entrance openings associated with sudden school closures that looked different from their friends accustomed to online learning (Hasan and Bao, 2020).

Next, we present the journey with recommendations: Focus on the direct, face-to-face direction for students in primary schools, with a strong focus on overseeing doorway openings for commonly assigned and oppressed get-togethers, particularly students experiencing low monetary entry. Provide short-span, intensive central training for all students (Ewing and Vu, 2021). They influence development (e.g., informing) to provide surprising contact (usually every two weeks) to families, emphasizing rapid assessment, sustained interventions, and improvement practices that families can use to help students. Deliver books to students in their homes (Fura and Negash, 2020). Implement interventions at home that allow families to blend in with student direction.

Therefore, learning difficulties after COVID-19 are unavoidable, and taking all things into account, students are generally centered around and persecuted get-togethers, and elementary school students will face an open entrance to learning that is sorely

Copyrights @Kalahari Journals

missing. While the summative effects of 2020's events will remain obscured for some time, understanding past assessments such as those for mid-year slides can help schools, stakes, and families make short, taught decisions to facilitate the opening up of opportunities (Hartshorn and McMurry, 2020). In order to select a specifically communicated and informed decision, the employer must understand which students benefit from one direction to the other, which students are most likely to experience the best entrance opening if they do not get the appropriate direction, and what research is retained. The exercise will discuss the open-entry openings associated with the events of 2020. Given that, this update is likely to continue with the question: From what we know about being aware of incidents related to the mid-year slide, which the masses of students may experience openings best entrance? How should schools and districts reduce the incidence of lost learning related to nearly two years of pandemic events (García and Weiss, 2020).

CONCLUSION

We repeat the purpose of this study to understand the lessons that have been lost due to government policies in responding to the dangers of the COVID-19 pandemic in Indonesia and various other countries in the world. In the form of reports from various studies at the international level, we understand how what happens when a pandemic hits education globally. The findings in the form of evidence from scientific studies have indeed confirmed that it is true that the impact of the pandemic outbreak is not only disturbing human health but also in other activity processes, including learning activities at the elementary school to college level. Various studies have been carried out, which of course will be able to highlight how this happened due to government policies, and this means that it is a setback in the given section because the pandemic, which was thought to be very devastating, turned out to not be a severe problem, all because of the policies of each country that are committed to solving the pandemic problem.

Well, as for what has been successful, we have tried, among other things, to try to get clear evidence of how to understand the learning during the pandemic response through the policy of sending students home and then continuing their learning in a net called distance learning. Due to the school closing policy, which was considered very sudden, there were weaknesses in many things, especially the readiness of the school to continue learning remotely and the inability of families to support learning that relies on technology such as HP laptops and various others. The following results include the government, schools, and parents. Veer back the lost learning is essential because from various parts of the world it is reported that each country has shown different ways of dealing with it, so from the various evidence reported in various studies will be away rather than the Indonesian government, in this case, how do they return the lost payments. We also saw his smile, and it happened as understood below, it is indeed extraordinary, where almost 70% have experienced for almost two years of learning and the way to cover it is the implementation of various remedies with various teaching programs so that students are not disadvantaged by learning loss.

Furthermore, we also get white evidence how this happened due to school closures as described above that this is as suggested by specialists because of the weakness of schools in learning, so the communication network is cut off through each running alone has not been able to make learning at home full support with various enlightenments so that it was not cut off suddenly but what happened was indeed cut off due to the government's incompetence. Thus the description of the conclusions from the exposure of the findings of our study from various sources that we have studied in the hope that it has answered the core problems of this study. We believe that the study of the findings of the economic study certainly has a weakness in terms of exposure to qualitative data, so it requires constructive feedback and inside to improve and improve the quality of this study in the future.

ACKNOWLEDGMENT

The author is pleased to express his infinite gratitude to all colleagues who have provided support in the form of solutions, ideas, and feedback, as well as funding support from the ministry of fisheries and significant change and research for all parties; we thank you.

REFERENCES

- [1] Albrecht, J.N., Werner, H., Rieger, N., Widmer, N., Janisch, D., Huber, R., Jenni, O.G., 2022. Association between homeschooling and adolescent sleep duration and health during COVID-19 pandemic high school closures. *JAMA network open 5*, e2142100–e2142100.
- [2] Aliyyah, R.R., Rachmadtullah, R., Samsudin, A., Syaodih, E., Nurtanto, M., Tambunan, A.R.S., 2020. The perceptions of primary school teachers of online learning during the COVID-19 pandemic period: A case study in Indonesia. *Journal of Ethnic and Cultural Studies* 7, 90–109.
- [3] Allo, M.D.G., 2020. Is the online learning good in the midst of Covid-19 Pandemic? *The case of EFL learners. Jurnal Sinestesia 10*, 1–10.
- [4] Al-Samarrai, S., Gangwar, M., Gala, P., 2020. The impact of the COVID-19 pandemic on education financing.
- [5] Amorim, V., Piza, C., Lautharte Junior, I.J., 2020. The Effect of the H1N1 Pandemic on Learning.
- [6] Anderson, J., Rainie, L., Vogels, E.A., 2021. Experts say the 'new normal'in 2025 will be far more tech-driven, presenting more big challenges. *Pew Research Center* 18.

Copyrights @Kalahari Journals

Vol.7 No.2 (February, 2022)

International Journal of Mechanical Engineering

- [7] Andriani, W., Subandowo, M., Karyono, H., Gunawan, W., 2021. Learning loss dalam pembelajaran daring di masa pandemi corona, *In: Seminar Nasional Teknologi Pembelajaran*. pp. 484–501.
- [8] Angrist, N., de Barros, A., Bhula, R., Chakera, S., Cummiskey, C., DeStefano, J., Floretta, J., Kaffenberger, M., Piper, B., Stern, J., 2021. Building back better to avert a learning catastrophe: Estimating learning loss from COVID-19 school shutdowns in Africa and facilitating short-term and long-term learning recovery. *International Journal of Educational Development* 84, 102397.
- [9] 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, 8438.
- [10] Azevedo, J.P., Hasan, A., Goldemberg, D., Geven, K., Iqbal, S.A., 2021. Simulating the potential impacts of COVID-19 school closures on schooling and learning outcomes: A set of global estimates. *The World Bank Research Observer 36*, 1–40.
- [11] Azhari, B., Fajri, I., 2021. Distance learning during the COVID-19 pandemic: School closure in Indonesia. *International Journal of Mathematical Education in Science and Technology* 1–21.
- [12] Baldwin, J.R., Pingault, J.-B., Schoeler, T., Sallis, H.M., Munafò, M.R., 2022. Protecting against researcher bias in secondary data analysis: Challenges and potential solutions. *European journal of epidemiology* 1–10.
- [13] Cairney, P., 2019. Understanding public policy: theories and issues. Bloomsbury Publishing.
- [14] Churiyah, M., Sholikhan, 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, 491–507.
- [15] Code, J., Ralph, R., Forde, K., 2020. Pandemic designs for the future: perspectives of technology education teachers during COVID-19. *Information and Learning Sciences*.
- [16] Coley, R.L., Kruzik, C., Votruba-Drzal, E., 2020. Do family investments explain growing socioeconomic disparities in children's reading, math, and science achievement during school versus summer months? *Journal of Educational Psychology* 112, 1183.
- [17] Conto, C.A., Akseer, S., Dreesen, T., Kamei, A., Mizunoya, S., Rigole, A., 2021. Potential effects of COVID-19 school closures on foundational skills and Country responses for mitigating learning loss. *International Journal of Educational Development* 87, 102434.
- [18] Crowe, S., Cresswell, K., Robertson, A., Huby, G., Avery, A., & Sheikh, A., 2011. The case study approach. *BMC medical research methodology 11*, 1-9.
- [19] Darling-Hammond, L., Hyler, M.E., 2020. Preparing educators for the time of COVID... and beyond. European Journal of Teacher Education 43, 457-465.
- [20] Dawadi, S., Giri, R.A., Simkhada, P., 2020. Impact of COVID-19 on the Education Sector in Nepal: Challenges and Coping Strategies. *Online Submission*.
- [21] Dhawan, S., 2020. Online learning: A panacea in the time of COVID-19 crisis. *Journal of educational technology systems 49*, 5–22.
- [22] Dorn, E., Hancock, B., Sarakatsannis, J., Viruleg, E., 2020. COVID-19 and learning loss—disparities grow and students need help. McKinsey & Company, December 8, 224–228.
- [23] Engzell, P., Frey, A., Verhagen, M.D., 2021. Learning loss due to school closures during the COVID-19 pandemic. Proceedings of the National Academy of Sciences, 118.
- [24] Espino-Díaz, L., Fernandez-Caminero, G., Hernandez-Lloret, C.-M., Gonzalez-Gonzalez, H., Alvarez-Castillo, J.-L., 2020. Analyzing the Impact of COVID-19 on Education Professionals. Toward a Paradigm Shift: ICT and Neuroeducation as a Binomial of Action. *Sustainability* 12, 5646. https://doi.org/10.3390/su12145646
- [25] Ewing, L.A., Vu, H.Q., 2021. Navigating 'home schooling'during COVID-19: Australian public response on twitter. *Media International Australia 178*, 77–86.
- [26] Fatimah, Y.A., Govindan, K., Murniningsih, R., Setiawan, A., 2020. Industry 4.0 based sustainable circular economy approach for smart waste management system to achieve sustainable development goals: A case study of Indonesia. https://doi.org/10.1016/j.jclepro.2020.122263
- [27] Ferri, F., Grifoni, P., Guzzo, T., 2020. Online learning and emergency remote teaching: Opportunities and challenges in emergency situations. Societies 10, 86.
- [28] Fura, D.L., Negash, S.D., 2020. A study on the living experiences of people during the COVID-19 pandemic: the case of wolisso town home-Stayed University students. *J Psychol Psychother 10*, 1–11.
- [29] García, E., Weiss, E., 2020. COVID-19 and Student Performance, Equity, and US Education Policy: Lessons from Pre-Pandemic Research to Inform Relief, Recovery, and Rebuilding. *Economic Policy Institute*.
- [30] Gouëdard, P., Pont, B., Viennet, R., 2020. Education responses to COVID-19: Implementing a way forward.

Copyrights @Kalahari Journals

- [31] Hartshorn, K.J., McMurry, B.L., 2020. The effects of the COVID-19 pandemic on ESL learners and TESOL practitioners in the United States. *International Journal of TESOL Studies 2*, 140–156.
- [32] Hasan, N., Bao, Y., 2020. Impact of "e-Learning crack-up" perception on psychological distress among college students during COVID-19 pandemic: A mediating role of "fear of academic year loss." *Children and youth services review 118*, 105355.
- [33] Hermanto, H., Rai, N.G.M., Fahmi, A., 2021. Students' opinions about studying from home during the COVID-19 pandemic in Indonesia. *Cypriot Journal of Educational Sciences* 16, 499–510.
- [34] Hilmy, M., Niam, K., 2020. Winning the battle of authorities: the muslim disputes over the covid-19 pandemic plague in contemporary Indonesia. *QIJIS: qudus international journal of islamic studies 8*, 293–236.
- [35] Indrawati, M., Prihadi, C., Siantoro, A., 2020. The Covid-19 Pandemic Impact on Children's Education in Disadvantaged and Rural Area Across Indonesia. *International Journal of Education (IJE)* 8, 19–33.
- [36] Jones, K., 2018. Literacy and numeracy support for homeless adults: an exploration of third sector employment and skills provision. Lancaster University (United Kingdom).
- [37] Kuhfeld, M., Soland, J., Tarasawa, B., Johnson, A., Ruzek, E., Liu, J., 2020. Projecting the potential impact of COVID-19 school closures on academic achievement. *Educational Researcher* 49, 549–565.
- [38] Kundu, A., Bej, T., 2021. COVID 19 response: An analysis of teachers' perception on pedagogical successes and challenges of digital teaching practice during new normal. *Education and information technologies 1*.
- [39] Lane, K.L., Cabell, S.Q., Drew, S.V., 2021. A productive scholar's guide to respectful, responsible inquiry during the COVID-19 pandemic: Moving forward. *Journal of Learning Disabilities* 54, 388–399.
- [40] Lewis, S., 2015. Qualitative inquiry and research design: Choosing among five approaches. *Health promotion practice 16*, 473–475.
- [41] Manullang, S.O., Mardani, M., Aslan, A., 2021. The Effectiveness of Al-Quran Memorization Methods for Millennials Santri During Covid-19 in Indonesia. *Nazhruna: Jurnal Pendidikan Islam 4*, 195–207.
- [42] Ngwacho, A.G., 2020. COVID-19 pandemic impact on Kenyan education sector: Learner challenges and mitigations. *Journal* of research innovation and implications in education 4, 128–139.
- [43] Nugroho, D., Jeon, Y., Kamei, A., Lopez Boo, F., 2021. It's Not Too Late to Act on Early Learning: Understanding and Recovering from the Impact of Pre-Primary Education Closures during COVID-19. *Innocenti Research Brief 2021-03*. UNICEF.
- [44] O'Sullivan, E., Rassel, G., Berner, M., Taliaferro, J., 2016. Research methods for public administrators. Routledge.
- [45] Purwanto, A., Asbari, M., Fahlevi, M., Mufid, A., Agistiawati, E., Cahyono, Y., & Suryani, P., 2020. Impact of work from home (WFH) on Indonesian teachers performance during the Covid-19 pandemic: An exploratory study. *International Journal of Advanced Science and Technology*, 29, 6235-6244.
- [46] Putra, P., Liriwati, F.Y., Tahrim, T., Syafrudin, S., Aslan, A., 2020. The Students Learning from Home Experiences during Covid-19 School Closures Policy In Indonesia. *Jurnal Iqra': Kajian Ilmu Pendidikan 5*, 30–42. https://doi.org/10.25217/ji.v5i2.1019
- [47] Rahman, T., Sharma, U., 2021. A simulation of COVID-19 school closure impact on student learning in Bangladesh.
- [48] Rahmat, A., Isa, A.H., Ismaniar, M.P., Mintarsih Arbarini, M.P., 2021. Model Mitigasi Learning Loss Era Covid 19: Studi pada Pendidikan Nonformal Dampak Pendidikan Jarak Jauh. Samudra Biru.
- [49] Reich, J., Buttimer, C.J., Fang, A., Hillaire, G., Hirsch, K., Larke, L.R., Littenberg-Tobias, J., Moussapour, R.M., Napier, A., Thompson, M., 2020. Remote learning guidance from state education agencies during the COVID-19 pandemic: A first look.
- [50] Sabates, R., Carter, E., Stern, J.M., 2021. Using educational transitions to estimate learning loss due to COVID-19 school closures: The case of Complementary Basic Education in Ghana. *International Journal of Educational Development* 82, 102377.
- [51] Skar, G.B., Lei, P.-W., Graham, S., Aasen, A.J., Johansen, M.B., Kvistad, A.H., 2022. Handwriting fluency and the quality of primary grade students' writing. *Reading and Writing 35*, 509–538.
- [52] Spiro, N., Perkins, R., Kaye, S., Tymoszuk, U., Mason-Bertrand, A., Cossette, I., Glasser, S., Williamon, A., 2021. The effects of COVID-19 lockdown 1.0 on working patterns, income, and wellbeing among performing arts professionals in the United Kingdom (April–June 2020). *Frontiers in psychology 11*, 4105.
- [53] Sudarmo, Nugraha, M.S., Mardhiah, R. I.liow, F.E., Aslan, 2021. The Identification of Online Strategy Learning Results While Students Learn from Home During the Disruption of the COVID-19 Pandemic in Indonesia. *Journal of Contemporary Issues in Business and Government* 27, 1950–1956. https://doi.org/10.47750/cibg.2021.27.02.205
- [54] Trust, T., Whalen, J., 2020. Should Teachers be Trained in Emergency Remote Teaching? Lessons Learned from the COVID-19 Pandemic. *Journal of Technology and Teacher Education* 28, 189–199.

Copyrights @Kalahari Journals

- [55] Unger, S., Meiran, W.R., 2020. Student attitudes towards online education during the COVID-19 viral outbreak of 2020: Distance learning in a time of social distance. *International Journal of Technology in Education and Science* 4, 256–266.
- [56] Viner, R.M., Russell, S.J., Croker, H., Packer, J., Ward, J., Stansfield, C., Mytton, O., Bonell, C., Booy, R., 2020. School closure and management practices during coronavirus outbreaks including COVID-19: a rapid systematic review. *The Lancet Child & Adolescent Health 4*, 397–404.
- [57] Wang, C.J., Ng, C.Y., Brook, R.H., 2020. Response to COVID-19 in Taiwan: big data analytics, new technology, and proactive testing. *Jama 323*, 1341–1342.
- [58] Zhang, L., Li, H., Chen, K., 2020. Effective risk communication for public health emergency: Reflection on the COVID-19 (2019-nCoV) outbreak in Wuhan, China, in: Healthcare. *Multidisciplinary Digital Publishing Institute*, 64.
- [59] Zierer, K., 2021. Effects of pandemic-related school closures on pupils' performance and learning in selected countries: A rapid review. *Education Sciences 11*, 252.