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Impact of the COVID-19 Pandemic on Online Home Learning: An Explorative Study of Primary Schools in Indonesia

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Abstract

The purpose of this study was to identify the constraints of the online teaching and learning process at home as a result of the unprecedented situation with the pandemic COVID-19. The study used an exploratory case study, and for the research approach, a qualitative case study method was used to obtain information about the constraints and consequences of the pandemic COVID-19 on teaching and learning activities in primary schools. In this study, the respondents were 15 teachers and parents of two primary schools in Tangerang, Indonesia. A list of semi-structured interview questions was developed based on the related literature and was used to collect in-depth information from the respondents. The findings of this research revealed some challenges and constraints experienced by students, teachers, and parents in online learning. The challenges related to students were: limited communication and socializing among students, a higher challenge for students with special education needs, and longer screen time. Parents saw the problem was more related to a lack of learning discipline at home, more time spent to assist their children's learning at home - especially for children below Grade 4 in Primary School, a lack of technology skills, and higher internet bills. Teachers identified more challenges and constraints, including some restrictions in the choices of teaching methods normally applicable in a regular face-to-face class, less coverage of curriculum content, lack of technology skills that hinder the potential of online learning, the lacks of e-resources in Indonesian language resulting in more time needed to develop e-contents, longer screen time as a result of e-content creating and giving feedback on students' work, more intense and time-consuming communication with parents, the challenge for better coordination with colleague teachers, principals, and a higher internet bill.

Keywords: *teaching and learning process, Covid-19, pandemic, explorative study, online learning, home learning*

INTRODUCTION

The pandemic COVID-19 is the first and foremost health crisis in the world. Many countries have decided to close schools, colleges, and universities as a precaution measure to its spread. The United Nations (UN) claimed that education is one of the sectors affected significantly by the pandemic. Even worse, school closures happened on a broad scale, and so unprecedented that disturb learning and teaching. The ABC News (March 7, 2020) reported that school closures have occurred in more than dozens of countries due to the COVID-19 outbreak. The UNESCO states that this corona pandemic threatens 577 million students in the world.

Although Indonesian governments and school leaders had started on the watch of further spreading outside China, still the announcement of school closures was a shock for

most educators and parents. As a consequence, the government and related institutions must present alternative educational processes to replace face-to-face interaction in a regular class. By mid of March 2020, started by international schools in Jakarta and Tangerang area, more and more schools have begun home learning. A few days later, the Indonesian government released the policy of learning from home for schools and higher education. In a relatively short lead-time, all educational institutions were shifted from face-to-face to online learning. This sudden change resulted in "chaos", especially because students were approaching the national exam in Indonesia, which was normally conducted in March, April, or May, depending on their grade level. It was to all related parties' relief that the government announced the cancellation of the National Examination (UN) this year. In fact, the national exams for Grade 6 of Primary School (SD), Grade 9 of Middle School (SMP), and Grade 12 of High School (SMA) were previously planned to be eliminated in 2021. The plan was pushed forward to the year 2020 as a response to the COVID outbreak, in line with government regulation about social restrictions.

All levels of education from elementary schools/ ibtidaiyah, Junior High Schools/ Madrasah Stanawiyah, and High Schools/ Madrasah Aliyah, to tertiary institutions under the Indonesian Ministry of Education and Culture and those under the Indonesian Ministry of Religion are impacted by the school closure. Not all educational institutions are ready for the sudden shift. Some schools may be equipped with some sort of technology embedded in their regular face-to-face class. Even so, they find it quite challenging to upskill their shareholders with the technology required for distant online learning and teaching in such a short time. Most schools in Indonesia, however, do not have such a privilege in terms of resources and facilities for online learning. Such a condition has posed extra challenges to their school communities. Not all students are accustomed to online learning. Moreover, many teachers and lecturers are not yet proficient in teaching using internet technology, especially in various regions in Indonesia.

The purpose of this study was to obtain information on the impact of Covid-19 pandemic on learning and teaching in primary schools in Tangerang. The study used a qualitative explorative method for obtaining the information.

RESEARCH METHODS

This research is an explorative case study to obtain information about the consequences of Covid-19 pandemic on learning and teaching in primary schools. The sample size was determined based on the need to achieve depth and wealth of description. According to Guetterman (2015), the sample size is not a matter of representative opinions and views, but rather a matter of wealth of information. In this study, the respondents were 15 teachers and parents of two primary schools located in Tangerang, Indonesia. One of the schools is a national school, and the other is an international school. For confidentiality purposes, respondents are given the initials R1-R15.

Table 1. Profile of Respondents

Initial	Gender	Age	Status	Education
R1	Male	27	Married	S1
R2	Female	38	Married	S1
R3	Female	46	Married	S1
R4	Male	38	Single	S1
R5	Female	44	Married	S1

R6	Male	36	Married	S1
R7	Female	38	Married	S1
R8	Female	39	Married	S2
R9	Female	27	Single	S1
R10	Female	52	Single	S1
R11	Female	51	Married	S2
R12	Female	54	Married	S2
R13	Male	43	Married	S1
R14	Female	41	Married	S2
R15	Female	36	Single	S2

Primary data was collected through semi-structured interviews with teachers and parents, while the secondary data was from published articles, journals, and books. The sample size was limited to 15 respondents who live in Tangerang, Banten, Indonesia. The area was chosen because of its unique position as a satellite city of Jakarta, which is the capital city of Indonesia. Its strategic location makes Tangerang one of the areas quickly impacted by any changes made in the capital city, including policies and regulations. According to the data from Dinas Pendidikan dan Kebudayaan Provinsi Banten, there are 1,016 Primary Schools in Tangerang region, consisting of 759 public schools and 257 private schools (Dikdasmen, 2020) in the 153.9 kilometer-square area. The number includes at least 20 international schools in the area. The number excludes the number of Ibtidaiyahs (Islam-based schools) in the area. The closure of schools in the Tangerang has affected all schools in the area.

This research is an exploratory case study, and the samples were selected using the purposive sampling method to achieve the research objectives. There is no limit to the number of respondents to make a purposive sample, provided the desired information can be obtained and generated (Bernard, 2002). To conduct a case study research, Creswell (2013) provides some recommendations for observations and sample size, ranging from no more than four to five. In the case study, the respondents are interviewed until data saturation was reached, and no more new information is obtained (Guest et al., 2006; Krysik and Finn, 2010). The interviews were recorded, then verbally transcribed. For the analysis and interpretation of data, thematic data analysis guidelines (Creswell, 2009) are used because it is the most appropriate for any research that seeks to explore several interpretations (Alhojailan, 2012). In the thematic analysis, "all possible interpretations are possible" (Alhojailan, 2012, p. 10). The reason for choosing thematic analysis is that "a rigorous thematic approach can produce in-depth analysis that answers certain research questions" (Braun and Clarke, 2006, p. 97). After a rigorous analysis, researchers describe the findings in four main themes.

The following interview questions were used to obtain information about the impact or Covid-19 pandemic on learning and teaching:

1. Explain the impact of the Covid-19 pandemic experienced by students related to their learning and teaching activities
2. Explain the impact of the Covid-19 pandemic experienced by parents related to learning and teaching activities
3. Explain the impact of the Covid-19 pandemic experienced by teachers on learning and teaching activities

RESEARCH RESULTS

The purpose of this study was to obtain information about the impact of the Covid-19 pandemic on learning and teaching activities in elementary schools in Tangerang. The statements are the English translation of participants' original responses without any editing.

One of the respondents (R6) stated that *"the students are 'forced' to do distance learning without any adequate facilities and infrastructure at home"* (R6). Another respondent (R5) added, *"Students have not had a culture of distance learning yet because so far the learning system implemented is through face-to-face,"* also *"not all teachers are adept at using internet technology or social media as a learning tool"*.

Some respondents mentioned the standards as their main concerns.

"No standard system as guidelines for home learning yet" (R3).

"There is no standard system in supervising students and teachers in the home learning process" (R2).

Some respondents expressed their concerns about the extra expense they had to pay.

"Extra expense for buying internet quota" (R1).

"Need to buy more internet quota" (R4)

"Teachers' expenses increase in buying quota." (R3)

"Teachers need to buy more internet quota" (R2)

Some respondents pointed out problems faced by parents:

"As a parent, I must spend more extra time with my children, helping them with their home learning" (R3).

"Parents become teachers for their children." (R1).

"I have to learn together with my children." (R3)

"I have a headache arranging Zoom schedules of my three children. I always look forward to weekends." (R7)

"As a parent and a teacher as well, I have to divide my attention between teaching my sixth-grade students and teaching my own two little children. It is not easy, sometimes." (R14)

"Parents of students with special learning needs must closely monitor and help their children." (R15)

The impacts on students were said as follows:

"Schools have been closed for such a long time, making children bored." (R6)

"Children begin to get bored at home and want to go to school soon to play with their friends." (R2)

"I think children lose their social life. At school, they can play and interact with their friends, but this time they cannot." (R5)

"This home learning is even harder for students with special learning needs. In the regular face-to-face class, some of them have had difficulty concentrating, even more in online learning like this." (R15)

As for teachers, the responses include the following:

"Teachers' expenses increase for quota purchases." (R3)

"Teachers feel tired of staying at home and want to return to school to interact with students soon." (R5)

"Bored being at home starts to kick in." (R6)

"I have to work until late at night to prepare for home learning." (R8)

"Checking and giving feedback to students took a long time. (R9)

As with technology, teachers stated:

"I don't know how to do this and that. I need help with technology, and I have to learn fast."(R11)

"My internet is unstable at home. I was suddenly logged out from my online class when teaching." (R10)

Related to the effects on the curriculum and assessment, teachers pointed out some main points:

"As an art teacher, I have to find something students can still do at home with materials they can simply find at home. I have to modify my learning outcomes." (R11)

"Some aspects of learning cannot be observed, such as their social skills and cooperation. I understand it is hard for fourth graders to collaborate online. This condition will affect assessment and reporting." (R12)

"I cannot cover the learning outcomes as fast as a face-to-face class." (R8)

"I have to check with students what sports equipment they have at home before I can plan my PE (Physical Education) class. I try to find something to substitute for the proper equipment." (R13)

DISCUSSION

The respondents' statements were analyzed under students, parents, and teachers for ease of reference.

Impact on Students

Respondents reported that students feel they were forced to shift to home learning without adequate facilities and infrastructure at home. Laptops, computers, or mobile phones and internet access are crucial for smooth home learning. Respondents from the international school said that the obstacle was not on the readiness of the facilities. Students with adequate infrastructure at home may also experience challenges with home learning because distance learning is not part of the learning culture yet. Most schooling depends heavily on face-to-face, with some blended learning in more advanced schools. Students are accustomed to being in school to interact socially and physically meet with their friends. Although the interactive online sessions enable students to meet virtually with their teachers and friends, a respondent who teaches the first graders stated that the interaction is awkward. Not all students responded the same as they normally do in face-to-face interaction.

In addition to getting used to socializing through an online platform, students need time to adapt to distance learning. Some respondents reported it took more teachers' effort than the normal face-to-face class to build students' understanding.

The significant increase in children's screen time also becomes a concern. Participation in synchronous online interactive learning where the class virtually meet and access to asynchronous learning materials posted in the learning platforms used by the schools are at least two of the main reasons for the increase of screen time.

Students with special learning needs are struggling with the distance learning setting. A respondent who is part of the learning support team mentioned that most of the students with special learning needs have a shorter attention span. These students are impacted greatly by online home learning. The learning support team has a periodical checking in with the students, but parents would mostly have to spend time assisting or monitoring these students' learning at home.

According to Zapalska (2006), a student who learns best in a particular way must be exposed to a variety of learning experiences to become a more flexible online learner. Drago's (2004) findings show that online students are more likely to have a stronger visual and read-and-write learning style. Furthermore, students with strong read-and-write and those with strength in all four other learning styles tend to evaluate the effectiveness of the course lower than others. On the other hand, students with aural or read-and-write, and students who are not strong in any learning style tend to evaluate the effectiveness of the course higher than other students.

According to Watjatrakul (2016), neuroticism and openness to experience affect students' intention to adopt online learning through the perceived values of online learning. Specifically, students who are open to experience pay more attention to the quality of online learning. On the other side, more neurotic students avoid stress because they are not familiar with the situation in which they learn. Besides, students tend to adopt online learning when they feel it meets their emotional and social needs. For example, students want new and exciting courses, and online learning meet those needs. Online learning also provides flexibility in which students work at their own pace and level of ability and enjoy the challenges, freedom, and independence.

Impact on parents

Parents were quick to point out that the expense on internet quota increased as the consequence of online learning, and it was an extra expense that parents had to bear. Next to extra spending on the internet, parents also pointed out the relatively demanding time they have to spend assisting their children in home learning. It is notably higher when their children are in lower grades of Primary School because they have to assist their children in setting up and troubleshooting the device for online learning while they themselves can be technologically challenged. Parents working from home had to tackle double roles as workers and parents, while parents who still had to go to work faced another dilemma for their unavailability for assisting their children's learning from home.

Impact on teachers

The sudden shift from face-to-face to long-distance online learning forced teachers to use the technology. Not only the facilities and infrastructure that schools had to ensure teachers had available in order to run home learning, but also their technical skills. Many had to acquire the required technology in a short time to respond to the need for online home learning. Respondents identified that more senior teachers struggled more with the use of technology than their fellow younger teachers. Schools provided training and technical support to teachers. Nevertheless, it took time for teachers to adapt to the new mode of learning and teaching, resulting in the possibility for an adverse impact on the quality of learning and teaching.

Chakraborty (2014) revealed several factors that can create exciting learning experiences for online learners. The main factors are as follows: creating and maintaining a positive learning environment, build learning communities, provide consistent feedback in a timely manner, and use the right technology to deliver the right content. All respondents of the study who are teachers showed an understanding of the factors mentioned by Chakraborty. Some mentioned that the school's guideline for home learning included those some of those factors.

The fact is, the culture of distance learning has not been part of Indonesian life yet. The country has been going to more digital learning; yet, distance learning, especially for younger students, has not been firmly established. Most, if not of all this time, learning is conducted through face-to-face. Teachers are accustomed to being in school to interact with students. If technology is used, it is normally used in a blended learning setting.

Unprecedented distance learning compels teachers to make adjustments to the written, taught, and assessed curriculum. Some of the learning outcomes of the fourth

term may need adjustments due to the constraints of home learning. The Physical Education and Visual Arts programs, for example, have to be revamped to adjust with whatever is doable at home. Likewise, learning outcomes of other subjects must be revisited to ensure that they can be delivered through online home learning, without handing over the responsibility to teach to parents at home.

Likewise, adjustment is needed to the taught curriculum or the learning and teaching method. Developing the strategies needed to teach and learn online successfully requires an understanding of learning styles and how they can be handled well in the online environment (Lewis, 2015). As is the case in face-to-face classes, when teaching online, the use of particular teaching styles or series of styles must be varied to address students' different learning styles. Successful learning and teaching depends on all participants who have the attitude needed to succeed in the online environment. Juggling students' identified learning styles, the constraints of online teaching, and the technical skills teachers possessed, teachers must plan what is best for the students. It is not an easy task, particularly with the challenge of the students' young age. A respondent pointed out that it was hard to invite students for a virtual class discussion. In a face-to-face class, students can see each other, and it seems more motivating for students to see other students raising their hands to offer their own opinions or building on each other's ideas. Less students' engagement was reported in the online class.

As teachers have their students work and submit their assignments online, teachers are held responsible for giving prompt feedback to the submitted work. Respondents who are teachers of young children expressed that not only they were expected by the school to give feedback, but parents also looked forward to immediate teachers' feedback. This condition creates pressure on teachers. Given the condition that an assignment for young children normally takes a maximum of 30 minutes to complete, teachers have to provide, on average, 4-6 assignments for a day. While in a face-to-face class setting formative assessments and feedback can be done more quickly, distance learning makes teachers take a longer time to give feedback. Teachers check students' uploaded work one by one, write the feedback, identify misconceptions, and reteach individual students as needed. More individualized feedback was given compared to group feedback. On one side, it is ideal for students. On the other side, it is time-consuming for teachers.

Another aspect of assessment, the summative assessment, has also become a big concern for teachers. With the enforcement of Indonesian government policy on restriction of social gathering, gathering students for a summative assessment is not an option. Consequently, teachers have to rack their brains to come up with an alternative for authentic assessment.

Just like their students, after weeks of home learning, teachers were bored and longed for interaction with their fellow teachers. For some teachers, weekly online meetings with other teachers became something they look forward to. Some others pointed out that more time spent on communication and coordination with students, parents, other teachers, and school principals.

Teachers also spoke of the significant increase in expenses for internet quota. Besides, time spent to communicate with parents and to provide technical support to parents were two other immaterial expenses teachers considered as an extra cost.

With Work from Home (WFH), teachers reported longer, even unlimited working hours. Most of their time was spent on content-creating and giving feedback to students. Teachers' low skills in technology may result in a longer time needed to create content for online learning. Another reason is the school's choice of online learning platform may have some limitations, making content creating more challenging. Subjects and language of instruction may pose another challenge. Not many ready-to-use online materials are available in Indonesian language, so that teachers have no choice but to create on their own.

CONCLUSION

Covid-19 pandemic has brought a drastic change in how learning and teaching are conducted in the world of education, including in Indonesia. The problem is that distance learning has not been part of most educational institutions in Indonesia. Relying heavily on face-to-face learning, educational institutions in Indonesia are greatly impacted by the sudden shift to online home learning. Shifting to online home learning is even harder in primary schools because young students generally need more assistance in their learning. The condition creates tension between schools and homes. At the school's side, teachers are struggling with the drastic change causing an interruption in learning and teaching. At home, not all parents are not ready with what is required to facilitate home learning.

The objective of this study was to explore the impact of Covid-19 to primary schools in Tangerang, Indonesia. Respondents (n=15) from a national school and an international school were chosen through purposive sampling. The respondents represented parents and teachers from the two schools. Based on an in-depth semi-structured interview, some themes expressing their concerns were identified.

Both parents and teachers acknowledged that adequate facilities are the basic pre-requirement to run the home learning. Not only the device for accessing or creating online materials, but stable and fast internet access was also an issue in many places. The prolonged internet access results in additional expenses that must be born both by parents and teachers. For parents, the other perceived cost of home learning includes the time spent to assist their children with home learning. A significant increment in the children's screen time has been another notable concern. For teachers, in addition to the significant increase of the internet bill, the perceived cost includes prolonged work hours as online content creators, teaching, assessing, and communication and coordination with parents, teaching teams, and principals.

The fact that both students and teachers have not had a culture and skills of distance learning caused another tension. Teachers, students, and parents need time to adapt to the new learning system. Teachers' limited technical skills demanded the educational institutions to provide intensive training in a short time to maintain the quality of learning and teaching.

The sudden shift from face-to-face to online learning resulted in adjustments to written, taught, and assessed curriculum due to the constraints related to the availability of resources at home and applicability to conduct through online learning. As a result, the three aspects of assessment, namely assessing, recording, and reporting, may look different in term four of the academic year 2020. Teachers must find a way to give feedback and provide an authentic assessment under the current unique circumstance.

Lastly, boredom and social life aspects of students and teachers are another concern as home learning gets longer than expected.

Physical distancing and social restriction to stop the spread of Covid-19 must be supported by all components of the society, including education. The drastic and sudden change has caused disruptions to the life of all school shareholders. All agree, however, that education is too important to put into a halt. Learning from home through online distance learning has become the most sensible alternative for formal education at this time, regardless of the lacking of skills and infrastructure.

Students, parents, and teachers face many challenges from the sudden shift face-to-face class to online home learning. Primary school children who need more assistance in their learning process have been significantly impacted. Support from schools, related institutions, and home, can relieve some of the burdens and ensure the sustainability of home learning until it is the time to back to regular schooling again.

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