Post-Covid-19 Pandemic Learning Loss in 3T Regions, What Can We Try?

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Abstract. The Covid-19 pandemic has necessitated a shift from face-to-face learning to online learning. This transition has led to an alarming phenomenon known as learning loss, characterised by a decline in students' academic knowledge and skills. The impact of the Covid-19 pandemic makes them vulnerable to setbacks one of which is students in Disadvantaged, Frontier, and Outermost (3T) areas where inadequate infrastructure, such as limited internet access, and lack of technological proficiency hinder effective learning. The context of this article is in the 3T areas, especially Merauke. Addressing learning loss is crucial to prevent long-term consequences such as exacerbating educational disparities and reducing the overall quality of human capital. Meanwhile, there is a research gap investigating the impact of learning loss and proposing effective strategies to overcome this problem. This article uses descriptive analysis. This article comprehensively explores the impact of learning loss in 3T areas and presents effective mitigation approaches to address this challenge.

Keywords: learning loss, online learning, Covid-19, 3T areas, education

Abstrak. Pandemi Covid-19 telah menuntut kondisi peralihan dari system pembelajaran tatap muka menjadi pembelajaran online. Transisi ini telah menyebabkan fenomena yang mengkhawatirkan yang dikenal sebagai learning loss, yang ditandai dengan penurunan pengetahuan dan keterampilan akademis siswa. Dampak pandemic Covid-19 membuat rentan terhadap kemunduran salah satunya adalah siswa di daerah-daerah Tertinggal, Terdepan, dan Terluar (3T) dimana infrastruktur yang tidak memadai, seperti akses internet terbatas, dan kurangnya kemahiran teknologi menghambat pembelajaran yang efektif. Konteks artikel ini pada daerah 3T khususnya Merauke. Mengatasi learning loss sangat penting untuk mencegah konsekuensi jangka panjang seperti memperburuk disparitas pendidikan dan mengurangi kualitas keseluruhan modal SDM. Sementara itu, terdapat gap penelitian yang menyelidiki dampak learning loss dan mengusulkan strategi yang efektif mengatasi masalah ini. Penulisan artikel ini menggunakan analisis deskriptif. Artikel ini secara komprehensif mengeksplorasi dampak learning loss di daerah 3T dan menyajikan pendekatan mitigasi yang efektif untuk mengatasi tantangan ini.

Kata kunci: learning loss, pembelajaran online, Covid-19, daerah 3T, pendidikan

Introduction

Among the many aspects of life affected by the Covid-19 pandemic, one of them is the education sector. Based on research conducted by UNESCO in 2020, it is said that the pandemic has caused 94% of students in the world with a total of 1.6 billion students from 190 countries to have to close their schools or institutions where they study. The pandemic conditions that require maintaining this distance, change the pattern of the teaching and learning process. Thus, there is a shift in the learning system that originally required interaction between students and educators in the classroom, to virtual interaction or online learning that requires internet access (Widyasari, 2022).

The transition of learning from face-to-face to PJJ results in many things, one of which is learning loss. The term learning loss is used to illustrate the phenomenon of decreasing students' academic knowledge and skills academically (Pier, L., Hough, H. J., Christian, M., Bookman, N., Wilkenfeld, B., & Miller, 2021) which is caused by several things, ranging from dropping out of school, holidays, working, and studying at home for too long (Donnelly, R., (Donnelly, R., Patrinos, 2022; Engzella, P. Freya, A., & Verhagen, 2021) This learning loss is uneven between education levels, for example between elementary and junior high school students and high school students have different impacts. This also requires concentrated intensive recovery, for example by increasing the work effectiveness of teachers and staff in carrying out learning activities (Allensworth, E., Schwartz, 2020).

The phenomenon of learning loss in Indonesia has been studied previously by PSKP (Centre for Education Standards and Policy) under KEMDIKBUD

(Ministry of Education and Culture). The data was collected from a geographical coverage of western and eastern Indonesia consisting of 8 provinces (North Maluku, Southeast Sulawesi, East Nusa Tenggara, West Nusa Tenggara, South Kalimantan, North Kalimantan, East Java, and Jambi). A total of 18,370 learners, 1875 educators, 612 school principals, and 18,368 parents/guardians participated in the study. The results of the study explained that COVID-19 had an impact on the decline of literacy learning by 40% and numeracy by 5% from 2019/2020 and 2020/2021 in grade 1 and 2 students after 12 months of learning from home (Kemendikbudristek, 2021).

In addition, there is a widening gap in student learning achievement. Other research also shows that learning loss from online learning due to the COVID-19 pandemic is more vulnerable for students from less educated families (Engzella, Freya, & Verhagen, 2021), low economic status (Cerelia, 2021; Kemendikbudristek, 2021), and 3T (Disadvantaged, Frontier, and Outermost) regions in Indonesia (Cerelia, 2021). Almost the majority of 3T regions in Indonesia are geographically distant from the local provincial capital. This makes these areas lag behind in terms of infrastructure development (Arkiang, 2021).

In the context of education, even before the pandemic, the 3T regions in Indonesia already had various obstacles, ranging from difficult road access from home to school, poor condition of school buildings, supporting facilities, and many other problems. Not yet solved, education in the 3T areas is faced with the COVID-19 pandemic, which has led to the emergence of new problems. The low utilisation of technology and information, as well as the lack of signals that can be accessed by people in 3T areas, is a challenge in the learning process during a pandemic (Muskania, Ricka, Zulela, 2021). This makes 3T areas more vulnerable to learning loss due to the pandemic than non-3T areas.

The phenomenon of learning loss in 3T areas, if not addressed immediately, will result in short and long term problems to the quality of education. In the short term, learning loss causes students to experience deterioration in cognitive function

and decreased academic performance (Hanafiah, 2022). Meanwhile, the long-term impact of not addressing learning loss is the increasing education gap between the 3T and non-3T regions in Indonesia. The decline in the quality of education is also in line with the decline in the quality of human resources in a country. Since good education in a country is the first step in producing a superior generation (Ugras, M., Zengin, E., Papadakis, S., Kalogiannakis, 2023), the magnitude of the impact of learning loss in the 3T areas makes it important to create a strategy to deal with the effects of learning loss.

Method

This research uses a literature study with qualitative descriptive analysis techniques. Literature study is a data collection technique in which researchers review readings and results of previous studies that are relevant to the issue under study (Sheppard, 2021; Sugiyono., 2016). The data sources used are books, articles, journal articles, and research reports. The analysis technique used is descriptive, namely the researcher describes the picture and then provides an understanding and explanation of the issue under study. This study adopts a literature review methodology to explore the phenomenon of learning loss in 3T areas during the COVID-19 pandemic. Utilizing qualitative descriptive data analysis, it investigates the underlying causes, observed impacts, and proposed mitigation strategies. The data comprises 25 sources, including journal articles, national and international research reports, and relevant textbooks. These sources were selected using keywords such as "learning loss," "COVID-19," "3T areas," and "education," with inclusion criteria focusing on research published within the last five years and accessible via databases like Google Scholar, PubMed, and Scopus. The literature review process began with identifying primary keywords and selecting relevant articles, followed by synthesizing data to uncover patterns of learning loss in 3T areas and corresponding mitigation approaches.

Result

There are several impacts experienced by students in the 3T areas that differentiate them from the impacts felt by students outside the 3T areas. The first issue is that students in the 3T areas are vulnerable to decreased learning motivation. When students in the 3T areas face learning difficulties in accessing education, their learning motivation can also decline. Frustration, boredom and lack of hope can affect students' interest to continue learning and actively participate in the learning process. This can lead to a lack of interest in continuing education to the next level of education for students who are in the graduation year. A number of studies have shown that students in 3T areas have lower motivation to learn, especially in exact subjects and generally other subjects (Rahmadi, 2020).

The second issue is the larger learning gap. Limited accessibility, technology and educational resources in the 3T areas may lead to a larger learning gap. Students in these areas may experience delays in understanding the material, limited access to learning materials and lack of adequate educational support. As well as road access to the educational environment, namely schools, which still need further handling even though the government through the Ministry of National Development Planning or Bappenas is to overcome disparities between regions (Bappenas., 2016). This gap includes student interest in learning as well, as according to research by Yaya, H., Gusniwati (2021) states that online learning is very influential on student interest in learning because learning is different from classroom learning as well as the development of children's emotional intelligence which experiences changes in sources of inspiration and objects that become sources of imitation for students in managing their attitudes. Students also experience a decrease in motivation because they have to study at home not with their peers as they do at school, while in general children in the 3T areas have a kinesthetic

learning type so many of them are more comfortable learning in the open air, or even outside the classroom.

The third issue is the decline in academic and non-academic skills. Students may experience difficulties in reading, writing and calculating and lack skills such as critical thinking skills, collaboration skills and problem solving skills (Meinck et.al., 2022). The results of brief interviews with several teachers in the 3T areas show that the majority of students can master reading skills around the age of 9-12 years, this figure is quite behind when compared to 3T students who are not in rural areas or non-3T students. Therefore, if learning loss occurs, it will have a greater impact on those in the 3T areas due to the distortion of teaching materials because they are only understood textually, which the teacher should be able to explain contextually (Caesaria, 2021).

Another issue is the low opportunities for further education. The impact of severe learning loss in the 3T areas can result in low opportunities for further education for students (Pratiwi, 2021). When they do not get an adequate educational foundation, it is difficult for them to continue to higher education or get a job that is suitable for the required educational qualifications. The last issue is the larger social and economic impact. Learning loss in the 3T areas can lead to greater poverty, unemployment and social inequality. Without adequate education, it is difficult for people in these areas to cope with the social and economic challenges they face. Parents' varying abilities and socioeconomic conditions also affect children's learning at home (Chotimah, Ani, Widodo, 2017).

Overcoming learning loss in the 3T areas is not just the task of educators or school principals (Sulfasyah & Nur, 2016), but all stakeholders require collaborative efforts and commitment from the government, educational institutions, communities, and related stakeholders as well to ensure that all students have fair access and equal opportunities in obtaining quality and sustainable education.

Discussion

The impact of learning loss after COVID-19, especially in the 3T areas, is very significant. Considering that there are more triggering factors than what happens in areas outside the 3Ts. Students in these areas may experience difficulties in accessing education during the pandemic, either due to limited accessibility, technology or educational resources. However, there are several efforts that can be made to prevent the impact of learning loss in the 3T areas.

The first is the development of infrastructure to support distance learning. The government and relevant institutions should focus on developing distance learning infrastructure and platforms that can be accessed by students in the 3T areas. These measures may include providing internet access, distribution of devices, and development of relevant learning content.

The second effort is to maximise resources. Investments need to be made in providing adequate educational resources in 3T areas, including technology devices, laboratories, textbooks and other sports facilities. This can help create an adequate learning environment for students.

The third effort is teacher and principal training. Teachers in the 3T areas need to receive adequate training in the use of educational technology and effective learning methods. This training will help them to face the challenges of distance learning and improve the quality of learning. According to MoEC (2021), such competencies can be realised by using various teaching resources such as online platforms provided by MoEC (Guru Belajar dan Berbagi) or platforms from provinces/districts, promoting teachers' and principals' working groups (such as MGMP/KKG/KKKS) to improve teachers' skills in distance learning, diagnosis and remediation of basic skills, and coordination during the pandemic. In addition, another effort at the local level is to have experienced teachers as facilitators in MGMP/KKG/KKKS by utilising the Guru Belajar dan Berbagi platform.

The fourth effort is to establish partnerships. It is important to build partnerships between government, non-government organisations, private institutions and local communities to support education in the 3T areas. This collaboration involves providing scholarships, mentoring programmes or other forms of support.

The fifth measure is emotional and psychosocial recovery: in the face of learning loss, it is important to pay attention to the emotional and psychosocial recovery of students in the 3T areas. This could involve providing counselling support and socioemotional skills development programs.

The sixth effort is an affirmative policy which optimises groups that are more vulnerable to learning loss, namely children with low economic status families in the 3Ts. These include facilitating support programmes (such as KIP or Kartu Indonesia Pintar), allocating regional and village funds to purchase information technology equipment for underprivileged students.

The seventh effort is to support local policy makers and resources to facilitate learning activities. This can be realised by establishing community-level voluntary programmes for basic learning such as numeracy and literacy. In addition, there is a need to provide training and resources to volunteers such as the Teaching Campus Programme.

The last effort is tutoring provided by teachers to students either individually or in small groups. From the results of the systematic literature review, these programmes are very effective for children aged 3-18 years and for English, mathematics and literacy subjects (Page MJ, McKenzie JE, Bossuyt PM, Boutron I, Hoffmann TC, Mulrow CD, 2021). In terms of time, Nickow A, Oreopoulos P, (2020) research shows that tutoring is more effective if it is done during the school day and provided by teachers and tutoring paraprofessionals rather than parents or non-professionals. As for the material, it should focus on basic skills such as literacy and numeracy. Apart from being the most significant areas of decline, literacy and

numeracy are also important skills that affect students' daily lives, such as decision-making and problem-solving.

Conclusion

Students who attend schools in 3T areas are more vulnerable to learning loss after COVID-19. This is due to the lack of easy access to the Internet and the lack of schools providing infrastructure or teachers to master technology-based learning. Unaddressed learning loss also has a negative impact both in the short term, such as low motivation to learn, and in the long term, such as increasing educational disparities and decreasing human quality. The interventions that can be applied are both systemic in nature such as infrastructure development and those provided directly by teachers such as tutoring.

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