

## **PART II**

### **LITERATURE REVIEW**

#### **A. Learning During a Pandemic**

With the pandemic, the government has closed schools for the past few years. With the closure of schools, many researchers conducted research aimed at investigating the teaching and learning process during this period. There are several objectives of this research, such as seeing the extent to which school closures have disrupted teaching and learning practices in schools (United Nation, 2020), to find out whether teaching and learning practices have been carried out with sufficient intensity, including in the context of schools in disadvantaged areas (United Nations, 2020). Brooks, et al. 2020; Viner, et al. 2020; Snape and Viner, 2020; Vlachos, Hertegard, and Svaleryd, 2021), the struggles of parents and students economically during the uncertainty of working from home (Adams-Prassl, Boneva, Golin, and Rauh, 2020; Witteveen, and Velthorst, 2020), and the impact of the pandemic on student health and psychology (Brooks, et al., 2020; Golberstein, Wen, and Miller, 2020).

From some of these studies, learning practices during the pandemic are illustrated both globally and in Indonesia. Based on these studies, a number of problems were identified, both in cognitive and non-cognitive aspects. In the cognitive aspect, a number of problems were found, such as a decrease in student mastery levels in a number of subjects (Chetty, Friedman, Hendren, and Stepner, 2020) and an increase in the variance of student test scores (Delve Report, 2020).

In addition to problems in the cognitive aspect, a number of non-cognitive problems were also found, such as increasing students' social isolation attitudes (Brooks, et al., 2020; Golberstein, Wen, and Miller, 2020) and increasing domestic violence, which made students' conditions more

vulnerable. (Relief, and Diaz-Faes, 2020; Baron, Goldstein, and Wallace, 2020). In addition, there were also indications that students spent less time studying while studying from home, when compared to normal learning at school (Andrew, et al., 2020; Bansak and Starr (2021) Dietrich, Patzina, and Lerche (2020) Gra tz, and Lipps, O. (2020) Reimer, Smith, Andersen, and Sortkær (2021).Furthermore, the researchers also found that students tend to be less satisfied with online or remote learning (de Haas, Faber, and Hamersma, 2020), especially when their learning resources are insufficient in doing school assignments (Bol, 2020).The existence of these problems has a high chance of causing learning loss, or falling behind in learning during a pandemic.

## **B. Potential for Learning Loss**

The Education and Development Forum (2020) means that learning loss is a situation where students lose knowledge and skills, either in general or specifically, or there is an academic setback due to certain conditions such as a prolonged gap or the discontinuity of the educational process. Learning loss that is feared to occur is the limited interaction between educators and students, limited interaction between students and other students, learning time problems, lack of concentration and loss of focus, and lack of student absorption of the learning materials provided.

Not optimal learning in schools within a certain period of time has the potential to cause students to fall behind in learning. This learning lag is often also referred to as learning loss. A number of studies related to learning loss have been carried out, such as school closures during long holidays (Downey, Von Hippel, and Broh, 2004; von Hippel and Hamrock, 2019), or when schools are forced to close for some reason, such as during a disaster. Andriani, Subandowo, Karyono, & Gunawan, 2021; Donnelly & Patrinos, 2021; Engzell et al., 2021; Saifulloh & Darwis, 2020; Coal & Coal, 2020; Firman et al., 2021; Puspitorini, 2020; Kaffenberger, 2021; and Li et al., 2020).

From all these studies, it can be concluded that school closures within a certain period of time have a very large potential to cause learning loss. Learning loss is defined as a condition where students experience a degradation of knowledge and skills in learning due to not carrying out learning or education within a certain period of time (The Education and Development Forum, 2020; Kashyap et al., 2021; and Li et al., 2020) . Among the impacts that occur are the low interaction between teachers and students and between students and other students (Andriani, Subandowo, Karyono, & Gunawan, 2021), the lack of time spent studying at home (Andriani, Subandowo, Karyono, & Gunawan, 2021 ), reduced concentration of students and teachers, reduced ability of students to explain the material completely, and decreased absorption of students towards the learning delivered by the teacher (Donnelly & Patrinos, 2021; Engzell et al., 2021; Andriani, Subandowo, Karyono, & Gunawan , 2021) Donnelly & Patrinos, 2021; Engzell et al., 2021; Khan & Ahmed, 2021; Masterman, 2020).

In addition, Zacarias, et al (2021) reported that school closures cause learning loss in the form of reduced feelings of social attachment, and reduced willingness and ability of students to cooperate with other students. Furthermore, school closures result in an increase in criminal activity and the potential for violation of rules by students (Lochner 2011; Oreopoulos and Salvanes 2011).

The Covid-19 pandemic has an impact on increasing the risk of children dropping out of school in indonesia. This condition is exacerbated by public perceptions regarding the role of school in during distance learning. In addition, other impact felt, among others, students background, scenery stress in children so that achievements appear learning due to difference in access and quality of education during distance learning. Up to the level of numbers dropping out the school can trigger learning loss in Indonesia during distance learning.

Scope of assessment by educators Assessment of learning outcomes by educators includes aspects of attitudes, aspects of knowledge, and aspects of skills.

## 1. Cognitive

### a. Knowledge

Knowledge assessment is carried out to determine the level of mastery of students' thinking skills. The ability of the thought process in question, successively from low to high, includes remembering, understanding, applying, analyzing, evaluating, and creating. Thinking processes of remembering, understanding, and applying are categorized as low-level thinking skills. While analyzing, Therefore, the assessment must cover all dimensions of knowledge with all levels of thinking skills. in accordance with the demands of competency achievement indicators that have been correctly formulated (derived) from KD.

### b. Skills

Assess students' ability to apply knowledge in performing certain tasks. Skills assessment is an assessment carried out to assess the ability of students to apply knowledge in carrying out certain tasks. in various contexts according to indicators of competency achievement.

## 2. Noncognitive

### a. Attitude

Attitude assessment was conducted to determine the level of development of students' spiritual attitudes and social attitudes. Referring to Permendikbud Number 23 of 2016 and Permendikbud Number 53 of 2015, attitude assessment is carried out to determine the level of development of students' spiritual attitudes and social attitudes.

Taking into account Permendikbud Number 21 of 2016, the spiritual attitude in question includes faith and piety. Meanwhile, social attitudes include honesty, discipline, politeness, self-confidence, caring (tolerance, cooperation, and mutual assistance), and a sense of responsibility.

### **C. Loss of Learning and Declining Quality of School Graduates**

From the results of the research that has been reviewed in this study, it can be recalled that learning losses on students may have a tremendous impact in the short and long term. Hanushek, & Woessmann (2020) stated that this learning loss is possible to permanently reduce students' abilities, even to enter the world of work. Furthermore, Hanushek, & Woessmann, (2020) believe that if this is allowed to continue, it will have an economic impact on students and also on a country in general. In this case, they believe that if this learning loss is left unchecked, then when they enter the world of work, these students will get a reduction in income of up to 3%, even more for students who are in special areas, such as in remote areas. In the long term, this estimated loss could continue to grow (Lustig et al., 2020), because this learning loss will reduce student competitiveness in a significant proportion (Bobonis & Morrow, 2014).

Besides being economically detrimental, learning loss is also believed to have an effect on increasing the number of students dropping out of school. (Kan, M. J., & Ahmed, J. (2021) estimated that during the pandemic, there were at least 7.2 million students who dropped out of school. And this impact tends to be greater for students from poor families Kuhfeld et al., 2020; Mundy & Hares, 2020 and in students whose parents have low education (Kuhfeld et al., 2020; Mundy & Hares, 2020), which is believed to increase the gap between students, which in turn has an effect on increasing the number of students dropping out of school.

Learning loss occurs because of inequality infrastructure, differences in teacher pedagogical abilities, and prolonged school closures. Beside that, lack of quality and facilities for children who running distance learning, gap quality between those who have access to technology and what doesn't get bigger so there is a risk of having a generation with learning loss.

The failure of the teaching and learning process if not handle immediately can lead to learning loss, and an increase in the dropout rates due

to the loss of student learning motivation. One indicator of the occurrence of learning loss is the decline in student achievement. This is accordance with the result of research which states that student learning outcomes out based on sufficient time allocation (Mauliyda, Efan, & Hidayati, 2021). Teaching and learning is not optimal. Learning loss does not only appear during a pandemic but can also occur due to natural disasters that result in school closure, thus making students have to study from home.

The closure of educational institution globally can result in significant disruptions to student learning processes, disruption to internal assesment and cancellation or substitution of assessments for public qualification exams (Simon Burgess, 2020). Enforcement of online learning without supporting infrastucture can have a significant negative impact on the principles pedagogical foundation include student interaction, access to learning resources, attention, regularity, time management, and assesment (Manazir & Rubina, 2020). The learning process carried out at home has an impact on the psychology of students who are accustomed to face to face learning at school. Change in the learning process from face to face learning. Advance to online learning suddently cause symptoms of anxiety and depression for student due to the increased workload (Fawaz & Samaha, 2021). In addition, there is no time limit between play time, study time and rest time (Roshini Chakrabarty, 2021) and feelings of excessive workload (Aristovnik et al. 2020) can exacerbate the impact of learning process.