Learning Loss Mitigation Model in Nonformal Education Era of Covid 19

Abdul Rahmat¹*, Ismaniar ², Mintarsih Arbarini ³ Abd. Hamid Isa¹, Achmad Hufad⁴, Froilan D. Mobo⁵

¹ Departement of Nonformal Education, Gorontalo State University, Indonesia
² Departement of Nonformal Education, Padang State University, Indonesia
³ Departement of Nonformal Education, Semarang State University, Indonesia
⁴ Departement of Nonformal Education, Universitas Pendidikan Indonesia, Indonesia
⁵ Philippine Merchant Marine Academy, Philippine

* Corresponding author. Email: abdulrahmat@ung.ac.id

Abstract — The Covid-19 pandemic has also affected the education sector. One of the impacts that we see from the education sector is the change from face-to-face learning to distance education. This policy has the risk of causing learning loss for students. Learning loss occurs due to lack of quality and facilities for children. So that ultimately has an impact on decreasing learning achievement. The cause of the learning loss was due to the implementation of the emergency curriculum. Actualization of learning models Learning loss mitigation is very important in distance education of non-formal education as an alternative solution to ensure the quality of learning. This research is Research and Development ADDIE model which consists of 5 stages, namely: (1) Analysis, (2) Design, (3) Development, (4) Implementation (5) Evaluation. The results of the study indicate the need for the use of an emergency curriculum, student assessment, differentiated learning, teacher training and mentoring, and community participation. This is a key step to anticipate greater losses due to learning loss.

Keywords— Curriculum, Distance Education, Learning Loss

1. INTRODUCTION

Based on the data from the initial observations and teaching experiences that have been carried out, the researchers see that 1) students prefer face-to-face learning activities directly compared to online learning because it is boring. 2) Facilities and infrastructure constraints such as unstable internet connection and not having a laptop. 3). It is difficult to understand the material presented by the lecturer because they are not familiar with online learning which causes students to not be able to interact directly with educators. 3) Students are at risk of learning loss or learning loss. Learning loss is a phenomenon where a generation loses the basic competencies that students should learn.[1]

This research is focused on efforts to find learning models for mitigating learning loss as a negative impact, students are limited in socializing with their friends, students lose motivation or lose their enthusiasm for learning, learning also depends on internet connections which are sometimes difficult, and the impact is very large during learning. Distance is making the child's discipline decline. The impact of distance learning during the Covid-19 pandemic made students who were isolated and had to take PJJ for months due to the Covid-19 pandemic, facing mental risks. Children spend more time in front of the gadget screen to do assignments and access the internet. Internet technology makes communication easier. But on the other hand it also has a dark room where sexual predators, hoaxes, and pornography are.

Children must be protected from cyber crime. As a result, children are vulnerable to health problems due to excessive use of online equipment. Another reason is the lack of rest to do the work. Distance learning online has the potential to prevent children from middle and lower economic families from participating in online learning and at risk of dropping out of school. Another effect is that they are vulnerable to exploitation, when children choose to drop out of school and their parents ask them to work/marry. The last impact is vulnerable to various types of violence.

This study will look at learning loss as an impact of distance education including the negative impact of learning. Limitations of Mastery of Information Technology by Teachers and Students. The condition of teachers is not entirely aware of the use of technology, especially teachers who are approaching retirement. Likewise, students, especially those in remote villages, do not master technology for learning. Inadequate Facilities and Infrastructure. Expensive technology support devices. Many students do not have cell phones. Even though during this Covid-19 pandemic they have to study online. [2]. A total of 9.25% of all students still have difficulty accessing distance learning (PJJ). Not all students can learn as effectively as in school. There are several factors that affect students such as difficulty understanding the material, and feeling lazy and difficult to concentrate. Learning media is one component of learning that has an important role in teaching and learning activities. The use of media should be a part that must get the attention of the teacher / facilitator in every learning activity.
Therefore, the teacher/facilitator needs to learn how to determine the learning media in order to effectively achieve the learning objectives in the teaching and learning process.[3].

![Figure 1. Gerlach and Ely Design Model, 1980](image1)

The presence of learning media as a medium between the teacher as the sender of information and the recipient of information must be communicative, especially for visualizing objects. In learning natural sciences, especially concepts related to the universe, the visuals are more prominent, so if someone only knows a word that represents an object, but does not know the object, it is called verbalism. Each media has its own characteristics according to the characteristics of students. The selection of media in accordance with the characteristics of students will further assist the success of teachers in learning. In detail, the function of the media allows students to see objects that exist but are difficult to see with the naked eye through the mediation of pictures, portraits, slides, and the like, resulting in students getting a real picture. [4].

Media or visual teaching aids are generally able to attract students' attention. Visual media also help to keep students' focus on the lesson delivered by the teacher. The role of visual media is increasingly important when learning is carried out online or remotely as it is now. And just like other teaching media, visual media can be made by the teacher himself. The following media, for example, are easy to create and use in distance digital learning. [5]

2. METHOD

Continuing the research in the previous year, this research model development research activity is designed by applying a research and development approach. Borg and Gall (1989; 624) argue that Research and Development is a strategy that aims to improve the quality of education.

![Figure 2. Model Analysis-Design-Development-Implementation-Evaluation](image2)

The ADDIE model [6] is often used to describe a systematic approach to instructional development. In addition, the ADDIE model is a general learning model and is suitable for development research. Activities at the analysis stage to determine the components needed for the next stage of development are: (1) determining the characteristics of learners; (2) analyze the needs of students in learning; (3) create a concept map based on initial research. Followed by designing a flow chart providing a clear direction for product production; (4) determine the type of media to be developed; (5) analyze the constraints found; (6) designing an assessment to test the competence of learners. Accuracy in completing assignments, worksheets, quizzes, etc.; (7) analyze the difference between web and regular classes; and (8) considering online pedagogy. Verbal, visual, tactical, auditory, etc. The stages that need to be carried out in the design process are: first to formulate SMAR learning objectives.[7]

Development is the process of turning the blue-print or design into reality. Implementation is a real step to implement the developed learning system. That is, at this stage everything that has been developed is installed or set in such a way according to its role or function so that it can be implemented. The evaluation stage in this study was carried out until formative evaluation aimed at the need for revision. Based on the results of expert reviews and field trials that have been carried out at the implementation stage, two stages of data analysis were carried out, namely qualitative and quantitative data analysis.[8]

The locations used as research sites are Gorontalo, Semarang, Padang, West Java and the Philippines. Year 2021. Research data were collected through interviews, observations, questionnaires, documentation studies, and focus group discussions.

3. RESULT

Constraints faced by students in distance learning that occur to students also exist in teachers such as not having an Android cellphone; data packets and signal networks. These obstacles can be obstacles in the learning process. However, the teacher certainly understands this situation and provides solutions and solutions to the problems faced by students so that students can continue to follow the learning process. Assignments can be picked up and collected at school when conditions are safe and still adhere to health protocols. Network
or signal interference by providing a longer processing time so that the task is not a heavy burden.

With various limitations in the Covid-19 pandemic situation, it is a challenge for a teacher to continue to want to learn and practice online learning. Besides that, teachers must be able to present fun and innovative learning to overcome the learning difficulties they face and collaborate with learning media so that learning is not monotonous and can still present an interactive learning atmosphere between teachers and students. The technical implementation of online learning requires the support of mobile devices such as smartphones, laptops, computers, and tablets that can be used to access information anytime and anywhere.

There are many obstacles faced during the online learning, ranging from technical problems to the learning process, such as the network and internet quota fees which are quite expensive. But now the issue of fees for internet quotas is no longer a problem because the government provides free study quotas every month to make it easier for students to carry out online. Even though the government has provided free quotas to students, the problem again is the unstable internet network which causes delays in video conferencing that is being carried out or often leaves suddenly. In addition, the problem of operating the Google Meet, Google Classroom, Zoom, and E-learning applications with the correct procedures is also an obstacle that cannot be underestimated.[1]

The distance learning process organized by schools/teachers, both online and offline, has not yet found the right format. The pandemic has magnified inequality in the education system. These include unequal access to computers and the Internet, lack of a supportive home environment for learning, and the failure of schools to attract gifted teachers into the classroom. A children who come from disadvantaged backgrounds are unable to close the widening gap. At the time the test was conducted, the results showed that most of the Package B students reading abilities were equivalent to the reading age of 11-year-old children (note: the reading test used was test material to measure students reading age). Furthermore, the student concerned was given a retest in reading, and the results did not change, the same as the test results 6 months ago; the reading age of children is equivalent to the reading age of 11 year olds. This result explains that this group of students has lost 6 months of learning because it is expected that students will get an average score of 11 years plus 6 months. Because for six months of learning from home it is assumed that they will show progress in learning to read. In the intermediate scenario, the average student will lose 16 points as a result of school closures or the equivalent of less than half a year of learning. In the optimistic scenario, students will lose 7 points, and in the pessimistic scenario, lose 27 points.

4. DISCUSSION

Mitigation Although studies related to potential learning loss for children aged 4-17 years have never been carried out and the condition of students has not been carefully mapped nationally, it does not mean that schools will be free from the responsibility to maintain the quality of student learning. Schools may not have to rely on standardized assessments to determine student standing, but rather with diagnostic assessments designed by teachers or groups of cognate teachers. Distance education during a pandemic that demands autonomy, capacity for self-study, self-monitoring, and capacity for online learning continues to be strengthened and accelerated when schools are able to reopen. In addition, it is important to build on the ongoing efforts to build online and offline learning infrastructure. Schools must continue to develop the capacity of students and teachers so that they are able to optimize learning through online and offline (in the form of learning modules). It is important to be aware of the many good experiences learned during the pandemic that will not be lost when things return to 'normal'.

The experience will provide inspiration for further educational development. Learning during the pandemic is focused on topics/themes and skills that are essential and useful for students to pursue educational careers and the world of work in the future. Curriculum content is reviewed to suit future needs. To realize useful learning requires not only understanding the content, but also more emphasis on meaning. Deeper learning can be understood as the process of a person becoming able to take advantage of what has been learned in one situation, and being able to apply it to new situations — in other words; learning for transformation (transformational learning). Through deeper learning, students gain expertise in a discipline or subject area that goes beyond simply memorizing facts or procedures; they understand when, how, and why to apply the knowledge they have learned. Mitigation of potential learning loss not only pays attention to the inclusion of information technology elements, but also requires a curriculum reorganization that is more in line with 21st century skills (including changing the mindset of teachers, students, and all education providers).

5. CONCLUSION

The impact of learning loss will not stop, even if schools are opened, if there is no policy regarding the restoration of learning abilities first. The impact of global learning loss on students is very large in that students who lose learning opportunities for 1.5 years will lose 15% of their income as adults. While students who lost opportunities. There must be use of an emergency curriculum, student assessments, differentiated learning, teacher training and mentoring, and community participation. This is a key step to anticipate greater losses due to learning loss.

REFERENCES