Learning Analysis: Implementation of the Independent Curriculum in Improving Numeracy Literacy in Elementary Schools

Santi Hindriyanti*, Astri Sutisnawati, Dyah Lyesmaya

Universitas Muhammadiyah Sukabumi, Indonesian
*Correspondence: E-mail: santihindriyanti11@ummi.ac.id

ABSTRACT

This research was conducted to find out and examine the implementation of the Independent Curriculum learning in increasing numeracy literacy at SDN Selaawi, Sukabumi Regency. This research was conducted using a descriptive qualitative method with a phenomenological approach. This approach was chosen because the problems studied concern issues that are currently developing in life, especially in the education unit curriculum. This research was conducted at Selaawi Elementary School, Sukabumi Regency, the subjects in this study were school principals, class I and IV teachers, and class I and IV students in the 2022/2023 academic year. Data collection was carried out using several techniques, namely: (1) observation; (2) interviews; and (3) documentation. The data analysis technique used is the data analysis technique of the model Miles & Huberman which has three flow of activities, namely: (1) data reduction; (2) data presentation; and (3) drawing conclusions. Based on the results of the research, it shows that the implementation of the Independent Curriculum has a positive impact on the learning process, and there is an increase in students' numeracy literacy with programs that support this increase.

ARTICLE INFO

Article History:
Submitted/Received 4 May 2023
First Revised 9 May 2022
Accepted 13 May 2023
First Available online 01 Jul 2023
Publication Date 01 Jul 2023

Keyword:
Independent curriculum,
Learning,
Numerical literacy.
1. INTRODUCTION

Education in Indonesia continues to experience changes and developments in learning design along with the development of an increasingly advanced era. This is done to meet the needs in accordance with the times in the success of a learning goal. With the hope that students can have competencies that are in accordance with the future.

Education is a process that cannot be separated from direct life and the life of the nation and state, thus the exclusive quality of the nation and state in education is influenced by the quality of the education process. A very important aspect of education is the educational curriculum which has a very large role in the progress of an education.

Education in Indonesia continues to experience changes and developments in learning design along with the development of an increasingly advanced era. This is done to meet the needs in accordance with the times in the success of a learning goal. With the hope that students can have competencies that are in accordance with the future. This year, the Merdeka Curriculum was officially launched by the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Nadiem Makariem. In accordance with the policy of the Ministry of Education, Culture, Research and Technology which has given flexibility to educational units as an additional option in the context of learning recovery during 2022-2024.

The Merdeka curriculum is an effort by the education unit to overcome learning loss, especially in literacy and numeracy, where students lack understanding of simple reading and apply basic mathematical concepts. According to (Wiguna & Tristraningrat, 2022) The Merdeka Curriculum was developed as a curriculum framework that is more flexible, while focusing on essential material and developing the character and competencies of students.

In the results of previous research conducted by (Jojor & Sihotang, 2022) showed that learning progress one year before the pandemic was 129 points for literacy and 78 points for arithmetic, and after the pandemic learning progress was significantly reduced. For literacy the learning loss is equal to 6 months of learning, and in math the learning loss is equal to 5 months of learning.

Implementation of the independent curriculum is an effort made by educational units to overcome learning loss. This learning loss occurs due to the Covid-19 pandemic which makes learning activities ineffective. Covid-19 has caused significant disruption to the education system which has an impact on students' learning progress resulting in learning loss (Donnelly & Patrinos, 2021). To overcome this crisis and challenges, the Ministry of Education and Culture developed this independent curriculum to restore learning that has experienced a long crisis. The Merdeka Curriculum is also an effort by education units to overcome learning loss, especially in literacy and numeracy, where students lack understanding of simple reading and apply basic math concepts.

Based on the results of preliminary observations at SDN Selaawi in the 2022/2023 academic year, it has started implementing the Merdeka Curriculum in grades I and IV. The school implements the Independent Learning Curriculum), in this independent curriculum there are three implementation options including: Independent learning, independent change, and independent sharing. Independent learning is an implementation of the Merdeka Curriculum that gives freedom to education units when implementing the curriculum without replacing the education unit curriculum that is being implemented in the education unit. In improving numeracy literacy, SDN Selaawi has implemented programs that can improve this. So this research was conducted to provide a real picture after implementing Merdeka Curriculum learning in improving numeracy literacy at SDN Selaawi.
2. LITERATURE REVIEW

Learning is a process of student interaction with educators and learning resources in a learning environment that helps students to learn well (Audie, 2019). Learning is a process of change that is carried out consciously and deliberately, which is intended to point to the existence of a systematic activity in each individual towards something better (Efendy, 2021). Learning is essentially a transactional communication process that is reciprocal between teachers and students to achieve a predetermined goal.

In learning, there are important things to support, namely the curriculum. Curriculum as a basic guideline for implementation in educational practice so that teachers are able to provide experience to students (Muhammad, 2013). The curriculum is a list of lessons along with the details that students must learn to reach a level that is adjusted to predetermined goals (Wahyuni, 2015). The curriculum will always undergo changes due to renewal and improvement influenced by various factors. Therefore, there is no other choice but to compensate for this by continuing to make updates and improvements to the tools that will continue to be used, namely the Curriculum.

This year, the Merdeka Curriculum was officially launched by the Minister of Education, Culture, Research and Technology of the Republic of Indonesia Nadiem Makariem. In accordance with the policy of the Ministry of Education, Culture, Research and Technology which has provided flexibility to educational units as an additional option in the context of learning recovery during 2022—2024.

Merdeka Curriculum is a curriculum with diverse intracurricular learning where content will be optimized so that students have sufficient time to explore concepts and strengthen competencies. Teachers have the flexibility to choose various teaching tools so that learning can be tailored to the learning needs and interests of students.

This change occurs because of adjustments that are adjusted to the progress and development of the times. This curriculum change also occurred due to the Covid-19 pandemic, the Ministry of Education and Culture issued Decree of the Minister of Education and Culture of the Republic of Indonesia Number 719/P concerning Guidelines for Implementing the Curriculum in Education Units in Special Conditions. According to (Angga et al., 2022) The Merdeka Curriculum is an idea in the transformation of Indonesian education to produce a superior future generation. This curriculum is implemented in schools that have been selected as driving schools, and at this time it is starting to be implemented in all schools which are adjusted to the readiness of each school.

Kemendikbudristek simplified the curriculum under special conditions/emergency curriculum to mitigate learning loss during the pandemic. The results, from 31.5% of schools using the emergency curriculum, show that the use of emergency curriculum can reduce the impact of the pandemic by 73% (literacy) and 86% (numeracy) (Kemendikbud, 2023). Merdeka Curriculum, which is the development of the Prototype Curriculum as a curriculum framework that is more flexible, focuses on essential material, and develops students' character and competencies.

The purpose of literacy is to help increase one's knowledge through reading activities, help improve understanding in drawing conclusions from the information read, improve critical assessment of a written work, help foster one's good character, improve personality values, and improve the quality of time use (Darwanto & Putri, 2021).

Numeracy literacy is a fundamental competency and the two are interrelated. Literacy is to understand and respond appropriately to text, and numeracy as the ability to apply
numerical concepts in everyday life. Education in Indonesia is experiencing changes in the learning system due to the Covid-19 pandemic which has decreased, in various national and international studies show that education in Indonesia has experienced a long learning crisis. These studies show that many Indonesian children are unable to understand simple reading or apply basic math concepts. Supported by the results of research from (Darwanto & Putri, 2021) which reveals that not all learning delivered using technology can be fully conveyed so that it is necessary to strengthen literacy and numeracy skills to support the learning process.

3. METHODOLOGY

The type of research in this study uses qualitative methods, because in studying the problem the author will process data and analyze a problem. Qualitative research as an approach in conducting research that is oriented towards natural phenomena or symptoms (Abdussamad, 2021). The research design used in this research is descriptive Qualitative Research with a phenomenological approach.

The time used by researchers in this study was carried out in the 2022/2023 academic year and the place for this research was SD Negeri Selaawi, Sukabumi Regency. The subjects in this study were the principal, grade I and IV teachers, and grade I and IV students at SDN Selaawi in the 2022/2023 academic year.

The instrument in this research is the researcher himself in determining informants as data sources, assessing, analyzing, interpreting data to conclude on his findings. The data collection techniques in this study, namely: (1) observation, researchers use participatory observation, where researchers will be involved with the daily activities of people who are being observed or used as sources of research data; (2) interviews, researchers will use structured, semistructured and unstructured interviews to find out what the respondent knows about the matter being studied, how he views the matter being studied, and things that researchers do not know through observation; (3) documentation, to complement the data obtained from interviews and observations sourced from documents and recordings; and (4) triangulation, used by researchers to collect data while testing the reliability of the data. The data analysis technique that researchers will use is the M.B. Miles & A.M. Huberman model which consists of (1) data reduction; (2) data presentation; and (3) conclusion drawing (Abdussamad, 2021).

4. RESULT AND DISCUSSION

Based on the results of the research conducted on the implementation of the Merdeka Curriculum at SD Negeri Selaawi, it is found that the Merdeka Curriculum is implemented in educational units as an effort to overcome learning loss, especially in improving numeracy literacy in elementary schools.

4.1. Implementation of the merdeka curriculum

Based on the results of observations and interviews that have been conducted, it shows that the implementation of Merdeka Curriculum learning at SDN Selaawi began to be implemented in the 2022/2023 academic year, by taking the Merdeka Independent Learning Curriculum option which is applied to grades I and IV. In implementing the Merdeka Curriculum, it runs effectively and systematically, namely with the Merdeka Teaching platform and debriefing from the Teacher Working Group (KKG) activities which help smooth the implementation of the Merdeka Curriculum.
The Merdeka Teaching Platform (PMM) is a tool to support the implementation of the Merdeka Curriculum which can assist educators in gaining an understanding of the Merdeka Curriculum. PMM is a technology that has been prepared by the Ministry of Education and Culture to assist and facilitate educators in carrying out the learning process and optimizing the Implementation of the Merdeka Curriculum. PMM is also a forum for educators to become a driving force for educators in teaching, learning, and working. Meanwhile, the Teacher Working Group (KKG) is a forum to improve teachers' professional abilities in managing learning at school, with these activities providing flexibility and innovation in the learning process (Sukirman, 2020).

The process of planning learning activities at SDN Selaawi has been adjusted to the seven stages in Merdeka Curriculum learning planning, in (Asrijanty, 2021) shows the seven stages, namely:
1. Analyzing learning outcomes, learning objectives, and the flow of learning objectives in the Merdeka Curriculum is important in making lesson plans, because when this is fulfilled, it will create teaching modules that are appropriate and in accordance with the characteristics of the students being taught.
2. Planning and implementation of diagnostic assessments in the Merdeka Curriculum This assessment is carried out specifically with the aim of identifying the characteristics, competencies, strengths, and weaknesses of learners.
3. Developing teaching modules in the Merdeka Curriculum aims to develop teaching tools that guide educators to carry out learning.
4. Adjustment of learning to the stage of achievement and characteristics of learners.
5. Planning, implementing, and processing formative and summative assessments in the Merdeka Curriculum Formative assessment is self-assessment and interdepartmental assessment which functions as a material for self-reflection as data/information for educators to confirm the achievement of learner learning outcomes. Meanwhile, summative assessment is carried out to ensure the achievement of all learning objectives.
6. Learning progress reporting in the Merdeka Curriculum is how schools communicate/describe the progress of the learner learning process, identify areas that need to be developed, and contribute to the effectiveness of learning. Such as portfolios, discussions/conferences, work exhibitions, and learning outcome reports.
7. Learning evaluation and assessment in the Merdeka Curriculum are divided into three stages, namely:
   a. Reflect on the learning and assessment that has been done in each teaching module.
   b. Identify what works and what needs to be improved.
   c. Follow up by modifying the teaching module.

4.2. Numeracy literacy program

The implementation of Merdeka Curriculum learning in improving numeracy literacy at SDN Selaawi is the readiness of the principal, teachers as well as students to implement the independent curriculum and create school programs that support improving numeracy literacy. Based on the observation results, there is a program planning that can improve students' numeracy literacy skills. The programs that have been implemented to improve students' literacy are:
1. Read books 15 minutes before learning

The 15-minute book reading program before learning is implemented in learning at SDN Selaawi which aims to familiarize students with the aim of improving students' low literacy. This is also supported by research conducted by (Septiani & Wardhana, 2022) which shows positive results with the 15-minute reading program before learning because it can increase students' interest and love of reading. The activity of reading books for 15 minutes is also one of the activities as a school literacy movement in creating literate learning organizations and fostering the character of school residents (Budiharto et al., 2018).

2. Reading corner

The reading corner is a mini library provided by the school library to facilitate students in reading in a more strategic place than the school library (Faradina, 2017). The reading corner at SDN Selaawi is located in the corner of the class, this is done by the school as an effort to make it easier for students to read books and there are no restrictions like in a library. The role of the reading corner in improving students' literacy, namely: as a reading facility in the classroom, and as reading material in obtaining the nearest reading.

3. Library reading schedule

The school library is an information facility for students and educators in the school environment to support the teaching and learning process (Alfarisy, 2015). Based on the results of interviews conducted, the researcher explained that the reading schedule in this library was made to help the mobility of students visiting the library. The purpose of the scheduling is to help condition students who visit the library. According to (Setiawan & Sudigdo, 2019) strengthening literacy with a library visit program has several benefits in increasing the ability of four aspects of students' language, namely the ability to read, write, listen, and speak. In addition, because students often make visits to the library will increase their interest in reading and students will have the ability to understand the contents of the reading.

The programs that have been implemented to improve students' numeracy at SDN Selaawi are:

1. Mathematic Finger Game Habituation

Mathematic Finger Game is a combination of three finger games hompimpah, Indonesian suit, and Japanese suit associated with multiplication counting operations (Ambarwati, 2021). Based on the results of observations made by researchers, this Mathematic Finger Game habituation is carried out before entering the classroom, as for the stages of this habituation, namely as follows.
   a. In the initial stage, students line up led by the class leader to make 2 rows facing each other.
   b. In the next step, learners use their hands to give each other numbers that are multiplied by the person in front of them.
   c. In the last stage, one of the students can answer the multiplication result.

2. Application of basic math concepts in daily learning.

3. Procurement of learning media to support the creation of a numeracy-rich ecosystem.

4.3. Barries and effort

The obstacles to implementing the Merdeka Curriculum in improving numeracy literacy at SDN Selaawi based on the results of observations and interviews are as follows.
1. The unavailability of the Merdeka Curriculum book in the 2022/2023 semester I academic year, as for the efforts made by the school is to use the Merdeka Curriculum e-book which can be accessed at the Indonesian Book Information System (SIBI).
2. There are limited fiction and nonfiction reading books available, as for the efforts made by the school by striving for each student to bring their own reading books to be stored in the reading corner.
3. Limited references to the Merdeka Curriculum, as for the efforts made by educators to increase knowledge about the Merdeka Curriculum is to continue to study the content contained in the Merdeka Teaching Platform.

4.4. Impact of independent curriculum implementation

Based on the results of interviews conducted by researchers, the implementation of the Merdeka Curriculum in improving numeracy literacy certainly has an impact on all parties implementing this Merdeka Curriculum. The positive impact or negative impact in implementing the curriculum depends on each individual who implements it. (Rahmadhani et al., 2022) revealed that curriculum changes have a positive impact on the learning process that continues to keep up with the times, qualified educators who are able to provide lessons that can be digested properly by students, and students are able to think critically in every lesson. The positive impact of implementing the Merdeka Curriculum in improving numeracy literacy at SDN Selaawi is as follows.

1. Learning can be tailored to the needs of learners’ interests or talents. Adjustment of learning to the interests and talents of learners can facilitate learners in making choices about the profession of interest, collaboration, and elaboration in each element (Khanesa et al., 2022).
2. Educators are more free to design a learning process that is tailored to the needs of students. By meeting the needs of students, the learning process will be more meaningful (Khoiri, 2021).
3. There is project learning to strengthen the profile of Pancasila students which makes students accustomed to applying critical thinking. With P5, it is able to encourage students to contribute to their environment, become lifelong learners, intelligent, competent and have character in accordance with the Pancasila student profile (Ulandari & Rapita, 2023).
4. Educators become more creative in developing more interesting teaching tools.

The negative impact of implementing the Merdeka Curriculum in improving numeracy literacy at SDN Selaawi is that learning tools are not fully available, which provides its own obstacles for schools that are just starting to implement the Merdeka Curriculum. The implementation of the Merdeka Curriculum on educators and students at SDN Selaawi tends to have a positive impact because even though the school implemented it along with the previous curriculum, the learning process became more active. Especially in this independent curriculum, in each material, students are given a lot of practice which helps students to clarify the material they learn quickly. In addition, the implementation of the Independent Curriculum has a good impact on assessing the competence of students because of the suitability of the learning that students get, so that competencies that have not previously been achieved can still be achieved within a span of two school years.

The direct or short-term impact of implementing the Merdeka Curriculum on educators and students at SDN Selaawi in the learning process received a positive response from
students so that it could increase students' interest in learning. In student learning outcomes with the implementation of this independent curriculum, each learner is also able to achieve each predetermined learning outcome.

5. CONCLUSION

Based on the results of research on Learning Analysis: Implementation of Merdeka Curriculum in Improving Numeracy Literacy in Elementary Schools, it can be concluded that Merdeka Curriculum is a curriculum developed to overcome learning loss after the Covid-19 pandemic and as a strategy to strengthen numeracy literacy. The implementation of the Merdeka Curriculum in improving numeracy literacy is also supported by the existence of literacy programs that can increase students' interest and love of reading, such as: reading 15 minutes before learning, reading corners, and reading schedules in the library and numeracy programs that can increase the application of basic mathematics concepts in everyday life, such as habituation to Mathemetic Finger Game, application of basic mathematics concepts in learning, and procurement of learning media.

Various obstacles in implementing the Merdeka Curriculum in improving numeracy literacy at SDN Selaawi can be resolved with the efforts that have been made. So that the implementation of the Merdeka Curriculum can be implemented effectively and systematically. The positive impacts of implementing the Merdeka Curriculum, namely: (1) learning is tailored to the needs of students; (2) educators are free to design the learning process; (3) there is P5 learning, and (4) educators become more creative in developing more interesting teaching tools. In student learning outcomes with the implementation of this independent curriculum, each student is able to achieve each predetermined learning outcome.

5. REFERENCES


