Actualization of Science Literacy in the Freedom Era of Studying in the City of Semarang

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Abstract: Scientific literacy is part of implementing the independent curriculum in learning activities at SD Nasima. The research objective was to determine the independent curriculum implementation for grades 1, 2, 4, and 5 at SD Nasima, primarily scientific literacy. This study uses a qualitative method with a descriptive approach. The design used is a case study which means the researcher reveals and analyzes the problem in depth to get specific results. The subjects in this study were teachers, students, and school principals at Nasima Elementary School. Data collection uses primary and secondary sources. Primary sources include observations and interviews, while secondary sources come from books, journals, and scientific articles. The stages of data analysis include critical analysis, interpretation, and conclusions data validity techniques using source triangulation. The study results show that there is scientific literacy in the implementation of the independent curriculum, using learning resources and learning processes, and finding obstacles in its application.

Keywords: Independent Learning; Learning Activities; Science Literacy

Introduction

The world has entered the 21st century, which is a century or period that is synonymous with the use and utilization of information technology, especially now that almost all human activities across the face of the earth are carried out online, be it working, studying, eating, and so on, especially at this time where it is evident the use of information technology due to the Covid-19 Pandemic.

In the world’s current development, which has entered the era of the industrial revolution 4.0, the form of human life is information-based. Therefore, preparing quality graduates who can compete globally, and master the development of science and technology, is vital for everyone and the future of a Nation and a State. This impacts changes in every sector, including the education sector. Entering the 21st century, science and information technology development is multiplying.

In just seconds, information can be received quickly. The development of scientific literacy in the world of education is also progressing. A teacher must be able to keep up with the demands of the times (Rahayuningsih & Muhtar, 2022). Scientific literacy is critical; low literacy contributes to low country productivity, namely the amount of output produced in a period (Nuro et al., 2020). With various life difficulties, education must be able to be dynamic or adapt to follow and follow developments that occur in various scientific developments that can become provisions for students in living their lives.

A curriculum is a tool used as a reference in developing the process of implementing learning activities (Yolanda & Reinita, 2019). The curriculum is the essence of education. The curriculum can be interpreted as a set of plans and arrangements regarding objectives, content, learning materials, and methods used as guidelines for implementing learning activities to achieve specific educational goals (Safaruddin, 2020). Changes and improvements in the field of education are evident in the development or renewal of the educational curriculum. The main principle of
curriculum evaluation is that a comprehensive curriculum evaluation must systematically cover all aspects related to the curriculum (Somantrie, 2021). These changes were made to improve the quality and alignment of education (Chadha et al., 2022).

The curriculum in teaching materials is an essential tool for educational success. Curriculum changes are based on the awareness that developments and changes in society, the nation, and the state are inseparable from the effects of global change, developments in science and technology, and art and culture (Nurwiatin, 2022). Teachers must be involved in the development process for curriculum development to be effective and for schools to be successful. An effective curriculum must reflect the philosophy, goals, objectives, learning experiences, teaching resources, and assessment of specific educational programs (Alsubaie, 2016).

Scientific literacy is a part of the independent curriculum for grades 1, 2, 4, and 5 at Nasima Elementary School, which is direct instruction from the Semarang City Education Office. Scientific literacy is one of the 21st-century skills needed in the industrial reform era 4.0 (Safrizal, 2021). The 2013 Curriculum, which was adapted to the Covid 19 pandemic, encouraging the creation of an emergency curriculum or simplification of the curriculum, has its notes that can be a concern to continue to improve the quality of learning. Curriculum changes in response to limited learning conditions have binding provisions, starting from teaching and learning activities, facilities and infrastructure, learning facilities, and even evaluations that must be adjusted.

The curriculum continues to experience changes in each period; not even a few argue that the adjustment of this curriculum program is associated with changes and adjustments in government. The basis for curriculum development includes religious foundations, philosophical foundations (eternal, essentialism, existentialism, progressivism, reconstructivism), and juridical, psychological, sociological, socio-cultural, and organizational foundations (Safaruddin, 2020). The proposed curriculum development model is: (1) curriculum development is a practice-based process, (2) curriculum development is a process that focuses on problem-solving, (3) curriculum development is a continuous process (progress oriented), and (4) curriculum development is a context-dependent process (Saban, 2021).

Indonesia is a developing country that is constantly experiencing curriculum changes and developments. The Indonesian curriculum changed approximately ten times, including the 1947 RPP, 1952, 1964, 1968, 1975/1976, 1984, and 1994 curricula. The 2002/2004 Competency-Based Curriculum, the 2006 Education Unit Level Curriculum, and the 2013 Curriculum, until now, the Independent Learning Curriculum (Hidayat, 2013). The curriculum development process uses a six-step approach: conducting a needs assessment, determining content, writing goals and objectives, choosing an educational strategy, implementing the curriculum, and finally, evaluating the curriculum (Schneiderhan et al., 2019).

Independent learning in 21st-century learning is planned by coordinating various mastery abilities and learning visions into the learning process described in the 21st-century learning structure. The framework or structure describes knowledge, skills, and expertise that benefit students' lives. Independent learning also concerns independent conditions in fulfilling learning objectives, methods, materials, and evaluations for teachers and students. The independent learning policy provides opportunities for tertiary institutions to carry out independent and flexible learning processes to create an innovative learning culture according to student needs (Baidhowi, 2020).

The independent learning curriculum answers the intense competition for human resources globally in the 21st century (Indarta et al., 2022). Applying every ability in the 21st century requires developing knowledge and understanding of academic subjects, with the hope that students can think critically, communicate effectively, solve problems, and work with others to build collaborations. As a policy, freedom of learning has meaning for students and teachers, namely freedom of thought, innovation, learning and creativity, and happiness. With the independent learning policy, the teacher's role in implementing it includes driving teachers, learning facilitators, innovative teachers, teachers with character as teachers, and creative and independent teachers (Daga, 2021).

The Independent Learning Curriculum creates active learning. This program does not replace an already running program but repairs an already running system. The independent curriculum is designed to catch up in literacy and numeracy. The independent curriculum can provide solutions for curriculum improvement. An independent curriculum can be implemented in stages according to the readiness of each school (Priantini et al., 2022). The freedom to learn offered by the Ministry of Education and Culture is a more straightforward learning process. It includes learning Implementation Plan is one sheet, meaning it is made simple and not as complicated as before; the zoning system for accepting new students is flexible in its implementation; minimum competency assessment and character survey replace the National Examination; and school Examinations with National Standards are diverted to continuous assessments such as portfolios (group assignments, papers, practicums).
The independent learning curriculum concept, as stated by Happy S & Bagia, explained that: 1) Project-based learning aims to develop soft skills and character according to the profile of Pancasila students. 2) Focus on essential material so there is time to deepen essential competencies such as literacy and numeracy. 3) The teacher's flexibility in applying to learning is differentiated based on the student's abilities (Kurniati et al., 2022).

Method

This study uses qualitative research techniques with a descriptive approach. Qualitative research produces information or information about descriptive data in the form of written and oral data. Qualitative research is research that intends to understand phenomena about what is experienced by research subjects, for example, behavior, perceptions, motivations, and actions, holistically and using descriptions in the form of words and language in specific natural contexts and by utilizing various natural methods (Moleong, 2016). Qualitative research is descriptive (Romlah, 2021). A qualitative approach is an approach that produces descriptive data in the form of written or spoken words from people and behavior that can be observed and carried out in natural settings (Putri & Sukma, 2020). The data collected in qualitative research is presented in the form of words and pictures. This research also uses a purposive sampling technique, namely sampling, that focuses on informants selected because they have knowledge or sources that are feasible to be explored and researched.

In this study, two data sources were used, namely primary and secondary data sources. First, primary data includes; observation and interviews. This study's informants needed to collect data included teachers, students, and school principals. The two secondary data sources are data collected through literature, including books, articles, or scientific journals relevant to the problem.

The collection of information used is. First, the researcher seeks information and gathers information about the problem. Second, data analysis uses the content analysis method. The research method is carried out by identifying information objectively and systematically. In data analysis techniques, after data that is considered relevant has been collected, the data is analyzed using a descriptive-analytic approach. The approach is carried out in three stages: a critical analysis of the collected information or data. The information or data collected relates to research themes and material objects. Second, critical interpretation of the information or data collected and described to provide conclusions on the formulation of the problem that has been determined. Third, conclude. Based on these objectives, the content analysis method describes and concludes the data found. After the data is analyzed, conclusions are made.

Result and Discussion

Supporting Facilities for Freedom of Learning

Means are anything that is used as a tool to achieve goals and objectives. Many factors play a role in the success of educational programs, including the availability of adequate educational facilities and infrastructure and the efficiency of their use and implementation. One of the most essential and primary resources that support the educational process in schools is educational facilities and infrastructure. Facilities and infrastructure are equipment and supplies directly used in teaching and learning, such as buildings, classrooms, chairs, tables, and teaching media (Padlan et al., 2022). Incomplete learning facilities will affect learning achievement (Bosedele Alokan et al., 2013; Utami, 2020). Learning facilities positively and significantly affect student achievement (A. D. Rahmawati et al., 2021). Its implementation must be obtained with the expected results. The quality of school physical facilities is a significant determinant of academic outcomes, including the availability of science tools that support learning. This affects the success and smoothness of learning in the classroom and is strongly influenced by the completeness and availability of educational facilities at school (Santika et al., 2021). Adequate facilities or media are needed to convey learning messages effectively (Bakhruddin et al., 2021). Supporting facilities are also of particular concern to the ministries and pillars of education (Santoso, 2022).

The learning process of the Independent Learning Curriculum at SD Nasima views that one of the resources needed in schools is physical facilities that support the teaching and learning process, including technology and science practices. Independent learning education programs and curricula will be successful if learning facilities are available. In this case, school buildings and infrastructure must be in good condition and managed as well as possible. One factor that determines the quality of education in Indonesia is the facilities and infrastructure, including studying science. Educational facilities and infrastructure can help students learn comfortably and are closely related to student achievement (Hopland, 2013; Manurung et al., 2020). Management of educational and science technology facilities and infrastructure is one of the efforts to be used in independent learning. Facilities management is intended so that an educational
Institution can make maximum use of buildings and infrastructure with policies. Management of facilities and infrastructure is an activity in science education and practice that contributes to the success of the independent learning process at Nasima Elementary School. Factors that influence scientific literacy learning outcomes are psychological (interest and motivation to learn), family factors (educational background and parental guidance), and school factors (teacher teaching methods, facilities, and infrastructure) (Jufrida et al., 2019).

PISA defines scientific literacy as the ability to use scientific knowledge, identify questions, and draw conclusions based on evidence to understand and make decisions regarding nature and changes made to nature through human activities (Zuriyani, 2017). Scientific literacy is using scientific knowledge to identify questions, acquire new knowledge, explain scientific phenomena, and draw conclusions based on scientific evidence (Fuadi et al., 2020). Scientific literacy means knowledge and understanding of scientific concepts and processes needed for personal decision-making, participation, and economic productivity (Yuliati, 2017).

Adequate facilities at school support high student motivation, so it is believed that the learning outcomes obtained by students will be satisfactory, and of course, learning achievement will increase (D. I. Rahmawati & Rosy, 2021). Facilities and infrastructure play a role in implementing the independent learning policy (Mustari, 2022). Facilities and infrastructure play an essential role in implementing the independent learning policy. Facilities and infrastructure must provide a sense of security and fun so that the teaching and learning process can take place in a conducive environment during the learning process. Nasima Elementary School’s learning facilities include everything from classroom furniture and learning media ranging from books to other teaching materials ranging from teaching materials, classrooms, laboratories, libraries, teachers’ rooms, executive rooms, sports fields, houses of worship, and so on. Includes all educational facilities. Infrastructure is provided at Nasima Elementary School to assist during the independent learning process. Scientific literacy skills are influenced by external factors such as learning styles, parents' background and roles, the availability of facilities and infrastructure, and the learning process of teachers (Natalina & Suryawati, 2019).

Good facilities and infrastructure must involve a variety of activities, starting from considering all school supplies ideas submitted by each work unit or making a list of shortages of school supplies, compiling a school supplies budget for a certain period, using school finances or budgets, and ending with plans for needs and requirements. Other things are needed to support success during the learning process of freedom of learning. Management of facilities and infrastructure is an important activity in schools because their existence supports the success of the learning process in schools (Owoeye & Yara, 2011; Rahmiga, 2019). Educational infrastructure is an essential instrument in supporting the learning process in schools. Therefore, good management that can provide comfort in the teaching and learning process needs to be done (Fathurrahman & Putri Dewi, 2019). Standard facilities and infrastructure are needed to support learning because if the facilities and infrastructure in a school are excellent and complete, it can place the school in great demand by the community (Firdausi et al., 2020).

Learning Resources

Everything in the learning environment that can be utilized and facilitates learning can be referred to as a learning resource (Aslam, 2020). Learning resources can contain messages conveyed through tools or by themselves and can be used to convey messages stored in the learning material provided (Hafid, 2011). Learning resources include people, tools, materials, activities, and the environment. All of these can be utilized by students in the learning process, revealing that learning resources are defined as information presented and stored in various forms of media as an embodiment of the curriculum (Majid, 2014). The forms of learning resources are unlimited, whether in print, video, software, or a combination of several forms that students and teachers can use.

Learning resources are essential to the science learning process, including at SD Nasima. Learning resources are all resources, whether in the form of energy, humans, the environment, or certain forms that are used to support a more efficient and effective teaching and learning process to facilitate students (Sulistiyani, 2022). The existence of a mix of media and more learning resources will answer various learning problems and create more optimal learning outcomes (Mulyono & Ampo, 2021). The availability of learning resources can improve students’ ability to understand teaching materials. In traditional learning systems, learning resources are still limited to the information provided by the teacher, so student learning activities still need to be developed. Along with advances in science and technology and an independent learning curriculum, learning resources at SD Nasima are more developed inside and outside the classroom. Teachers carry out science learning inside and outside the classroom; even using science learning outside the classroom is more targeted (Sari et al., 2015).
Given the role of learning resources in learning is essential for the success and achievement of the expected child development process, if there are problems related to a lack of learning resources in institutions, the teacher is more creative in utilizing the environment. As a learning resource to improve and streamline learning (Dewi, 2021). Learning resources can provide new experiences that are more concrete and direct in explaining things that are impossible to hold and broaden one's horizons. Students can think critically and positively, as well as provide accurate and up-to-date information so that students are motivated to learn in a fun way (Suhrman, 2018). At SD Nasima, available learning resources and science play an important role in learning. Adequate learning resources are learning resources that support the achievement of learning objectives (Wulandari, 2020).

Relevant learning resources used in the independent curriculum learning process at Nasima Elementary School include the independent curriculum book for learning by the Ministry of Education and Culture and the independent learning curriculum package book for grades 1, 2, 4, and 5. In addition, it is also still used to supplement supporting book materials. These supporting books include learning development books, independent teacher and student curriculum books, and independent learning books for US SD/MI 2022.

**Implementation of the Independent Learning Curriculum at SD Nasima**

The Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) issued an independent curriculum development policy to academic units as an additional option for learning restoration during 2022-2024. The Ministry of Education and Culture’s policies related to the national curriculum will be reviewed again in 2024 based on evaluations during the learning recovery period. The learning process in the Merdeka Learning Curriculum is more to the needs of students (student centers). Unlike before, learning is still centered on the teacher or educator (Indarta et al., 2022). Independent learning also concerns independent conditions in fulfilling learning objectives, methods, materials, and teacher and student evaluations. The learning process in the 21st century emphasizes meaningful and student-centered learning so that students can learn actively and independently by mastering technology as a learning tool (Inayati, 2022).

This refers to conditions where the COVID-19 pandemic creates many obstacles in the learning process in academic units that have a significant impact, including learning science content. The 2013 curriculum used before the pandemic was the only curriculum used by academic units in learning. During the 2020 to 2021 pandemic, the Ministry of Education and Culture issued a policy on using the 2013 and Emergency Curriculum (Simplified Curriculum-2013) as a reference for the academic unit curriculum. During the 2021 to 2022 pandemic, the Ministry of Education and Culture issued a policy on using 2013, Emergency and Independent Curriculum in Mobilizing Schools (Cultivating Schools) and Vocational Schools of Excellence. During the pandemic, learning was carried out using cell phones, where the learning process coincided between educators and students (Nurfadhillah et al., 2021). The government stated that education must continue, but public health is the priority. Educational institutions must prepare a unique strategy for learning during a pandemic because the learning process is not carried out face-to-face or face-to-face but with an online system (Sumarbin & Hasanah, 2021).

During the pre-pandemic period, the Ministry of Education and Culture issued a policy on using the 2013 Curriculum, which was then simplified into an emergency curriculum, making it easy for academic units to learn more quickly with essential material substances. The latest Ministry of Education and Culture policy is an emergency curriculum for academic units under certain conditions (Haryadi & Mahmudah, 2021). The government has an essential role in overcoming this problem by issuing an emergency education curriculum. The curriculum is the same as the National Curriculum because it is a simplification (Bangkit & Rastini, 2020). The independent curriculum at the Mobilization School and the Center of Excellence Vocational School is a breath of fresh air in efforts to improve and restore learning launched for the first time in 2021.

The Ministry of Education, Culture, Research, and Technology (Kemendikbudristek) provides three curriculum options that can be applied by academic units in learning: the 2013 curriculum, the emergency curriculum, and the prototype curriculum. The emergency curriculum simplified the 2013 curriculum, which began to be implemented in 2020 during the Covid-19 pandemic (Wiguna & Tristaningrat, 2022). The government has an essential role in overcoming educational problems during a pandemic by developing an Emergency Curriculum. The curriculum is curriculum that has similarities with the National Curriculum because it is a simplification of it. The emergency curriculum is an adaptation step and a process toward normal conditions, primarily to fulfill the educational rights of Indonesian citizens (Mabruri, 2021). Learning recovery from 2022 to 2024, the Ministry of Education and Culture issued a policy that schools that are not ready to use the independent curriculum can still use the 2013 curriculum as the basis for learning.
management, as well as the emergency curriculum, namely modifications to the 2013 curriculum can still be used by academic units.

Independent Learning Episode 15 Independent Curriculum and Independent Teaching Platform is followed up with the implementation of an independent curriculum as a form of facilitation by the Ministry of Education and Culture through the Directorate General of Teachers and Education Personnel. This policy is aimed at teachers, principals, principals, and PKBM heads preparing for their involvement in the Independent Curriculum from this year to the following year. Independent learning encourages competency-based pedagogy, values, curriculum, assessment, and individual needs-based student-centered approaches in the pedagogy category. Furthermore, Mandiri Learning aims to form a competency-based curriculum as a framework/menu, focusing on soft skills and character development. For the assessment system, independent learning seeks to provide formative/supportive; and assessment based on a portfolio (Sabon, 2020).

Nasima School is one of the schools that has implemented learning with the Free Learning Curriculum in 2022. During this period, independent learning was implemented for elementary school students in grades 1, 2, 4, and 5. In order to welcome the new school year 2022/2023, the Nasima school foundation is conducting independent curriculum training. All teachers from each unit participated in the training. The Nasima Elementary School unit is no exception. Teachers are given seminars and training by government officials and independent school places by bringing in resource persons. In the end, Nasima Elementary School was appointed by the Semarang City Education Center to be one of the private schools that implemented the Free Learning Curriculum.

The implementation of learning starts from the preparation of making teaching materials in the form of planning and studying materials to the teaching aids that will be used for the learning process. On the other hand, teachers at Nasima Elementary School have also implemented a program of making learning videos for scientific literacy that align with students’ needs. At that time, scientific literacy through videos was seen as appropriate to reduce physical contact with large groups. Learning videos can add references to learning media and are part of scientific literacy for Nasima Elementary School students. The use of videos is effective for scientific literacy (Yusnia, 2019). Learning videos are helpful in online learning (Susiyanti & Nugraheni, 2020). Learning video media was effectively applied during the Covid-19 pandemic because it made it easier for educators to teach material and students to understand learning material (Wahyuni & Aryani, 2021). Thus, SD Nasima is ready to implement the Free Learning Curriculum. Teachers and students carry out the learning process according to the guidelines, requiring students to be more flexible in directing and acting in developing and finding solutions to learning material problems and to do more practical learning, problem assessment, performance, observation, and research. SD Nasima provides science learning materials that suit the characteristics of all students. Adjustments are still made to students whose abilities cannot be compared to others.

Textbooks as learning resources make students independent and easily understand the subject (Anisah & Azizah, 2016). Textbooks play an essential role in building students' scientific literacy competencies. Therefore textbooks must integrate balanced scientific literacy competencies (Lasminawati et al., 2019). Books are learning resources from the government used to develop and adapt to the Nasima school environment. During the evaluation and assessment stage, SD Nasima improvised at several points, including providing a minimum CALO limit (Criteria for Achieving Learning Objectives). In the provisions of the Free Learning Curriculum, CALO is given by the limitations and conditions of each student's ability, that students cannot be the

The Independent Learning Cur gives evaluation questions for the student's ability level. There are varying degrees of difficulty in evaluating questions. Evaluation is to be able to find out whether the learning objectives that have been set are achieved or not, and it does not rule out the possibility for those involved in the education sector to improve the learning process in the sense of improving goals and improving the learning process (Bamualim, 2020; Thomas, 2023). SD Nasima, in its implementation, still uses the same evaluation questions for all students. Results varied between students with less, moderate, and high abilities. However, in this way, teachers can better know the limits of their students' abilities in detail and accurately so that intense and appropriate handling solutions can be taken for students whose abilities are still low. Teachers must understand the purpose and function of learning evaluation to prepare reliable strategic methods to create comfortable, fun, and exciting learning. Ultimately, the evaluation activities went well (Suwardi, 2021).

SD Nasima uses a systematic curriculum and independent learning techniques while still adjusting the CALO and the types of evaluation questions that are still the same. To maintain the quality of learning and learning outcomes obtained by students. Students with low learning outcomes receive extraordinary guidance from teachers up to the CALO standard level. Students
do not feel the difference because SD Nasima continues to conduct togetherness activities to explore students according to their abilities. Through the Pancasila Student Profile Strengthening Project (PSPPP) activities, students can determine themes, activities and plan activities. Teachers as companions and directors of PSPPP activities.

Obstacles to the Implementation of Scientific Literacy in the Independent Learning Curriculum

SD Nasima has implemented a learning program with an independent curriculum for almost a year. Implementing scientific literacy still needs to overcome several obstacles, including incomplete learning book sources, some teachers still using textbook learning models and limitations in developing learning methods and media. The obstacles to implementing the independent learning curriculum experienced by SDN 21 Koto Tuo teachers were literacy, references, digital access, teacher competence, and time management (Sasmita & Darmansyah, 2022).

For the 2022-2023 school year, Nasima Elementary School has carried out the learning process of the Independent Learning Curriculum at the student level in grades 1, 2, 4, and 5. Learning scientific literacy, sourced from independent curriculum textbooks for grades 2 and 5 in 2022-2023, still need to be prepared for use. No Pancasila books, Sports and Health Education, or art and culture books exist. So far, SD Nasima has developed its book sources from the Free Learning Curriculum set prepared by the government. In addition, the obstacle faced is that some teachers still need to develop their teaching methods optimally. They still use books as the primary source and everything (textbooks). Constraints to using textbooks are the relatively high price, the limited number of textbooks, the use of libraries that could be more optimal, and the limited use of information technology from the internet. These constraints are factors that hinder the use of textbooks (Paramita, 2011).

The independent learning curriculum demands teacher innovation and creativity in teaching. More active in innovating and insightful in developing learning materials and media. However, teachers still feel lacking and run out of ideas when they are required to teach creatively every day. Therefore, SD Nasima continues to conduct training and workshops in developing appropriate teaching strategies in this era of the Free Learning Curriculum. In addition, it also carries out periodic and continuous scientific literacy to improve the ability and competence of teachers in science to fill in science content in several lessons. Creative learning methods, such as experiential learning, storytelling, case studies, and role-playing, can be used in learning. Using creative methods in learning makes the learning atmosphere more enjoyable (Sunarti, 2021). The teacher acts as a planner, guides, and directs in motivating so that an interactive process occurs, allowing the learning process to occur well (Mitro, 2019). Many factors, such as the educational approach and model given, greatly influence the actualization of creativity. The development of creativity in the classroom (learning) produces creative students, and creative students generally have higher abilities and are more challenging than ordinary students who are not creative. The ability to think creatively as a creative component produces effective learning or further develops high reasoning power that can be used to solve learning problems (Fachruddin, 2019).

Conclusion

SD Nasima, for the 2022-2023 academic year, has implemented a learning program with the Free Learning Curriculum for grades 1, 2, 4, and 5, strengthening scientific literacy for teachers and students. In its implementation, it is strongly supported by the readiness of learning facilities and learning resources. Nasima Elementary School implements the Free Learning Curriculum by continuing to improvise and adapt to conditions and needs, especially highlighting the field of science. These adjustments are contained in the CALO (Criteria for Achieving Learning Objectives) and the same evaluation questions for all students. This is done to maintain the learning quality and outcomes students obtain. Students with low learning outcomes receive unique guidance from the teacher up to the CALO standard level. In the learning process, Nasima Elementary School also carries out regular scientific literacy activities and the Pancasila Student Profile Strengthening Project; students can determine themes and activities and plan activities. Teachers as companions and directors of PSPPP activities. Thus, all Nasima Elementary School students can be involved in the freedom of learning.

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Author Contributions

Deni Setiawan, as head of research who manages and conducts data analysis. Ria Budi Ashari, as the second writer, played the role of data collector and manager in the field, survey team, and part of the administration team at Nasima Elementary School. Isa Ansori, as the third author, served as a member of the data collection and survey team, as well as conducting interviews with the school principal. Moh. Fathurrahman, as
the fourth writer, served as a member of the data collection and survey team, as well as conducting interviews with teachers. Siti Maryatul Kiptiyah, as the fifth writer, acted as a member of the data collection and survey team, as well as observing the learning process of students in class. Dewi Nilaem Tyas, as the sixth writer, served as a member of the data collection and survey team, as well as collecting data on learning facilities at Nasima elementary school.

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