



Implementation of Independent Curriculum in Science Subjects at Elementary School 1 Tanggulangin Central Lampung

AUTHORS INFO

Sulis Anjarwati
Universitas Nahdlatul Ulama Lampung
sulis.anjarwati.sa@gmail.com
+6282312383444

Binti Khoiriyah
Universitas Nahdlatul Ulama Lampung
khoiriyahmaliki@gmail.com
+62 81391474838

ARTICLE INFO

E-ISSN: 2721-0804
P-ISSN: 2723-6838
Vol. 7, No. 1, June 2025
URL: <https://usnsj.id/index.php/biology>

Suggestion for the Citation and Bibliography

Citation in Text:

Anjarwati *et al.* (2024)

Bibliography:

Anjarwati, S. & Khoiriyah, B. (2025). Implementation of Independent Curriculum in Science Subjects at Elementary School 1 Tanggulangin Central Lampung. *Journal of Biological Science and Education*, 7(1), 45-50.

Abstract

Learning in schools always follow channel changes that occur, one of which is use continuous curriculum done evaluation in a way continuous in accordance with needs. Independent Learning Curriculum is current curriculum This used start level school aware until college high. Research objectives This For describe How implementation Independent Learning Curriculum in the Science Subject at SDN 1 Tanggulangin, Central Lampung. Research done in the year 2024/2025 academic semester odd semester . Primary data was obtained from the observation and interview process carried out together participant students and teachers. Supported with secondary data that is documentation activity learning. The results of the study show that the implementation of the independent learning curriculum in the science subject at SDN 1 Tanggulangin, Central Lampung has been running well and optimally, as evidenced by various learning activities that have involved all students. In addition, the use of learning methods used in the independent curriculum has also been good. Activities learning done in accordance with stages conveyed in the independent learning curriculum, start from preparation or planning, activities learning until evaluation . Activities science learning does not only done in the class but also outside class , activity students become the main target so that students become more happy and excited follow learning.

Keywords: *Implementation , Curriculum Independence , Science Subject*

A. Introduction

Education is one of the main foundations for students in facing future challenges (Putra & Sulastri, 2023). One of the references used to support the achievement of success in the world of education is the application of the curriculum in learning (Salabi, 2020). Curriculum in the world of education is dynamic (Cholilah , et al ., 2023) which is necessary evaluated in a way continuous in accordance with needs (Suryaman , 2020). Evaluation implementation curriculum in the world

of education in Indonesia always done in order to obtain appropriate foundation with need students so that impressed often changeable , but change curriculum this is for the sake of achieving expected educational goals . The curriculum used moment This that is Independent Learning curriculum (Ministry of Education, Culture , Research, and Technology, 2021). Independent learning is one of the curriculum form policies taken by the Ministry Education , Culture , Research, and Technology (Kemendikbudristek) for respond dynamics development of education in Indonesia. Use curriculum This aim For designing flexible education in accordance with need students For can more optimal in explore draft as well as competence in the himself (Khoirurrijal , et al ., 2022).

One of innovation from the Independent curriculum , namely existence eye lesson Knowledge Natural and Social Sciences which is combination from eye lesson knowledge knowledge natural sciences and science social studies. The objectives merger second eye lesson This that is For develop ability students namely skills inquiry , ability regulate self oneself and the environment or social (Zakarina , et al ., 2024; Barlian , et al ., 2022) and develop concepts and knowledge in learning (Iskandar, et al ., 2023). Implementation Independent Learning curriculum with the Science Subject already started since Elementary School (SD) level of education . Since appeared Independent learning curriculum every school elementary school (SD) has authority For arrange activity their respective learning . Each teacher has method For convey every material learning is one of them material science- based lessons Independence curriculum .

The implementation of science and social studies subjects in the Merdeka curriculum in the field has not been fully implemented optimally (Winarni & Ismaya, 2024), there are still many obstacles and barriers encountered in the learning process. Based on the results of interviews conducted with fourth-grade teachers at SDN 1 Tanggulangin, Central Lampung, the delivery of science and science learning in each school cannot be generalized, must be adjusted to the conditions or circumstances of each school and its environment. According to a study conducted by Putra and Sulastri (2023), it was found that the use of the independent curriculum in science subjects was known to be very effective. Learning activities using the independent curriculum can improve the quality of learning at SD Negeri 4 Abuan.

At SDN 1 Tanggulangin, science learning has been widely implemented, but the implementation process has not been widely publicized. Based on this, it is interesting to explore information on how the Merdeka Belajar curriculum is implemented in science lessons by the teachers at SDN 1 Tanggulangin, Central Lampung. This information can be useful for teachers and prospective teachers who need information or references on the implementation of the independent curriculum in science lessons.

B. Literature Review

1. Independent Curriculum

Education serves as a platform for students to develop their abilities to face future challenges. The journey of education is accompanied by the implementation of curricula to achieve educational goals. The curriculum used must be appropriate so that students can achieve their abilities and targets as expected (Rahmadayanti & Hartoyo, 2022). The current curriculum is the Merdeka curriculum. The Merdeka curriculum is a curriculum implemented to improve the transitional curriculum previously implemented during the COVID-19 era. The Merdeka curriculum focuses on the essence of students being able to learn anywhere according to their respective fields and talents (Winarni & Ismaya, 2024). With the Merdeka curriculum, various intracurricular activities are expected to also make students more optimal in participating in learning activities so that students have concepts and are able to strengthen their competencies (Marlensi, et al., 2024). The presence of the Merdeka curriculum is expected to be a new breakthrough in the world of education, making it relevant to the needs of today's era (Suhandi & Robi'ah, 2022).

2. Natural and Social Sciences Subjects

The subject of Natural Sciences (IPAS) is one of the essential subjects in the Merdeka curriculum. The subject of IPAS is a combination of Natural Sciences (IPA) and Social Sciences (IPS). This combination of subjects is based on various considerations, taking into account the character of students who often see everything as a whole and integrated (Winarni & Ismaya, 2024). The purpose of this subject combination is also expected to improve students' abilities in managing the natural and social environment as a single entity. Natural and social science subjects are subjects that study living and non-living things in nature and their various interactions. In addition, IPAS also studies human life and also the function of humans as social

beings who interact with their environment. Learning IPAS is also expected to increase students' curiosity, make students more active, and develop their inquiry knowledge (Agustina et.a., 2022).

C. Methodology

1. Research Design

The research method used is descriptive qualitative. The research was conducted for 1 month at Tanggulangin 1 State Elementary School, Central Lampung in the odd semester of the 2024/2025 academic year, with the research subjects being the Principal, Deputy Curriculum, Science Teachers and Students at Tanggulangin 1 State Elementary School. This research method was used by collecting data in the field which was later compiled. Data was collected through interviews, recording activities in the field, documentation of activities, and others.

2. Instruments

Data collection techniques used were observation, interviews, and documentation. Observational data were obtained from field observations of the use of the Merdeka Belajar curriculum in science lessons in grade 4 of SDN 1 Tanggulangin. To strengthen the data collection results, the researchers also conducted a literature review based on the research object to strengthen the data obtained in the field as a secondary data source.

3. Technique of Data Analysis

The data analysis technique used an interactive qualitative analysis model (Miles and Hubberman, 1992). The data collected by the researchers through observation, interviews, and documentation were then supplemented with notes to obtain additional supporting evidence. The data was then reduced through selection, simplification, and transformation. The data was then presented and conclusions were drawn.

D. Findings and Discussion

1. Findings

Observations that have been made conducted by researchers related with implementation The Independent Learning curriculum in Science lessons at SDN 1 Tanggulangin, Central Lampung is known that activity learning at school Already focus on improvement literacy , numeracy , and strengthening character participant I don't know in accordance with profile Pancasila students . Educators or teacher at SDN 1 Tanggulangin Already apply learning in a way active , creative so that make students like in follow activity learning . Implementation Independent learning curriculum at school This No become constraint For Can maximize potential students , in fact make students more Can explore abilities possessed .

Observation activity learning furthermore conducted in class IV with the class teacher that is Mother Sukarmini , S.Pd. , he is a fourth grade teacher at SDN 1 Tanggulangin . The results of the interview that have been done known that activity learning carried out by the mother Sukarmini , S. Pd., according to with Independent learning curriculum namely Making a plan learning with prepare teaching module , syllabus learning , and making channel objective learning (ATP). Implementation learning Merdeka curriculum learns from the Science Subject in grade IV of SDN 1 Tanggulangin done with three stages, namely :

In the activity introduction teacher prepares class with invite students For pray before start learning led by the chairman class. Next, the teacher takes the attendance list students , and prepare completeness learn, and continue delivery material as well as explain objective activity Study day This.

At the stage This teacher submitted a number of question to students related with Science material , namely about Plant Source Life on Earth. Some question submitted to students For dig knowledge beginning before continue learning, questions the including:

Table 1. List of Questions Before Start Learning

No	Question
1.	What are they? parts body plant ?
2.	What is the function from every part body plant ?

After submit a number of question to students, the teacher explains about objective learning that will be studied, namely material plant. During the process of learning science in class with use Independent curriculum , every students given chance For do discussion together friends group .

2. Discussion

The purpose of forming group For activity discussion that is For practice. students brave and capable disclose every ideas he has (Hasanah & Himami , 2021). Activities grouping also helps build a sense of responsibility answer from every member group when given order or not quite enough answer from Mother teachers, such as prepare or bring ingredients Study in accordance theme learning , namely bring plant in accordance with task each group.

Activity Study in a way interspersed groups with activity based project from every member students is one of the objective from implementation Independent curriculum, with activity like This so expected every students capable play a role in a way active in the class , to be more creative and innovative (Solissa, et al., 2024), so that activity Study become more fun and meaningful (Fadila & Fitriyeni, 2024). Activities science- based learning curriculum independent This focused on engagement all over students in activity learning , participants educate become more active look for experience, material or science to increase outlook for students.

Science learning for grade IV at SDN 1 Tanggulangin No only done in the class , besides discuss in the class , learning is also done outside class . This is aim For invite students capable observe environment around appropriate school or community environment with current material studied (Yanti, et al ., 2022; Mardani, et al., 2023). Activity Science learning conducted by teachers at SDN 1 Tanggulangin with invite students Study outside class be one of proof that the teacher has Ready in prepare activity learning with hope every objective learning Can achieved by participants educate . Learning outside class expected become how to get participants educate more fast understand current material studied , because students do practice or observation in a way directly (Fathiyah & Anwar, 2023).

Activity science- based learning the next Independent curriculum carried out by participants educate class IV at SDN 1 Tanggulangin Central Lampung , namely students requested For convey results observation parts plants that have done outside class . Mrs. Sukarmini , S.Pd. , as the class teacher try teach to participant his students For Can disclose opinion in front of class . Learning strategies the is activities that mothers do Sukarmini S.Pd. , do For increase skills think critical students . Designed learning in accordance with The Independent Learning curriculum is also expected can push students For No only capable accept information , but also able to analyze , evaluate until Finally Later capable disclose every the things they study (Sundari, 2023).

Science learning process carried out at SDN 1 Tanggulangin, Central Lampung with apply learning the Independent curriculum makes students more like so very interested For studying science. Another impact that is really felt that is students become more fast control material so that activity learning in the class become more active (Zahra, 2024).

E. Conclusion

Science learning activities using the Independent curriculum at SDN 1 Tanggulangin, Central Lampung, have been carried out well and optimally. The science learning process is not only conducted in the classroom but also outside of the classroom, following projects prepared by the teachers, thus making students more active and enthusiastic in participating in the learning process. Learning activities using the Independent curriculum require strong cooperation and joint efforts from various parties to achieve learning objectives. This activity aims to address and overcome various challenges and realize hopes for the progress of students.

F. References

- Agustina, N. S., Robandi, B., Rosmiati, I., & Maulana, Y. (2022). Analisis Pedagogical Content Knowledge terhadap Buku Guru IPAS pada Muatan IPA Sekolah Dasar Kurikulum Merdeka. *Jurnal Basicedu*, 6(5), 9180–9187. <https://doi.org/10.31004/basicedu.v6i5.3662>.
- Barlian , UC, Solekah , S., & Rahayu, P. (2022). Implementasi Kurikulum Merdeka Dalam Meningkatkan Mutu Pendidikan. *Journal of Educational and Language Research* . Vol. 1, No. 12, July 2022. <https://bajangjournal.com/index.php/joel/article/view/3015>

- Cholilah , M., Tatuwo , AGP, Komariah , & Rosdiana , SP. (2023). Pengembangan Kurikulum Merdeka Dalam Satuan Pendidikan Serta Implementasi Kurikulum Merdeka Pada Pembelajaran Abad 2. *Sanskara Pendidikan dan Pengajaran*, 1(02), 56–67. <https://sj.eastasouth-institute.com/index.php/spp/article/view/110>
- Fadila, F. & Fitriyeni. 2024. Impelementasi Kurikulum Merdeka pada Pembelajaran IPAS di Sekolah Dasar. *Didaktika: Jurnal Kependidikan*, Vol. 13, No. 4, November 2024. <https://jurnaldidaktika.org/contents/article/view/1243>
- Fathiyah, R., & Anwar, A. S. 2023. Meningkatkan motivasi belajar siswa pada anak sekolah dasar melalui metode learning by doing. *Abdima: Jurnal Pengabdian Mahasiswa*, 2(1), 1811–1815.
- Hasanah, Z. & Himami, A.S. 2021. Model Pembelajaran Kooperatif dalam Menumbuhkan Keaktifan Belajar Siswa. *IRSYADUNA: Jurnal Studi Kemahasiswaan*. Vol. 1, No. 1, April 2021. https://www.researchgate.net/publication/372801803_MODEL_PEMBELAJARAN_KOOPERATIF_DALAM_MENUMBUHKAN_KEAKTIFAN_BELAJAR_SISWA
- Iskandar, S., *et.al.* (2023) .Implementasi Kurikulum Merdeka Di Sekolah Dasar. *Journal Of Social Science Research*, 3(2), 2322–2336. <https://j-innovative.org/index.php/Innovative>
- Kemendikbudristek. (2021). Kurikulum Untuk Pemulihan Pembelajaran. Pusat Kurikulum Dan Pembelajaran.
- Khoirurrijal, Fadriati, Sofia, Makrufi, A. D., Gandi, S., Muin, A., Tajeri, Fakhruddin, A., Hamdani, & Suprapno. (2022). Pengembangan Kurikulum Merdeka.
- Mardani, D., Susiawati, I., & Fathimah, N. S. 2023. Kurikulum merdeka dalam demokratisasi pendidikan islam di Indonesia. *Islamic Management: Jurnal Manajemen Pendidikan Islam*, 6(1), 25–36. <https://jurnal.staialhidayahbogor.ac.id/index.php/jim/article/view/3310?articlesBySimilarityPage=13>
- Marlensi, L., Adisel, & Giyarsi. (2024). Problematika Penerapan Kurikulum Merdeka Dalam Pembelajaran IPAS Pada Kelas IV Di Min 01 Bengkulu. *Jurnal Review Pendidikan dan Pengajaran*, Volume 7 Nomor 2, 2024. <https://journal.universitaspahlawan.ac.id/index.php/jrpp>
- Napsawati. (2020). Analisis Situasi Pembelajaran IPA Fisika Dengan Metode Daring Di Tengah Wabah Covid-19 (Studi Kasus Peserta Didik Mts Ddi Seppange Kabupaten Bone). *Karst: Jurnal Pendidikan Fisika Dan Terapannya*, 3(1), 96–102. <https://ejournals.umma.ac.id/index.php/karts/article/view/546>
- Putra, IKDA., & Sulastri, DPS. (2023). Analisis Implementasi Metode Pembelajaran Ipa Dalam Merdeka Belajar Di Kelas Iv Sd Negeri 4 Abuan. *Jurnal Pendidikan Dasar Rare Pustaka*, Vo. 5, No. 2, Desember 2023. <https://jurnal.markandeyabali.ac.id/index.php/rarepustaka/article/view/157>
- Putra, IKDAS & Sulastri, D.P.S. (2023). Analisis Implementasi Metode Pembelajaran IPA dalam Merdeka Belajar di Kelas IV SD Negeri 4 Abuan. *Jurnal Pendidikan Dasar Rare Pustaka*. Vol. 5, No. 2. <https://jurnal.markandeyabali.ac.id/index.php/rarepustaka/article/view/157>
- Rahmadayanti, D., dan Hartoyo, A. (2022). Potret Kurikulum Merdeka, Wujud Merdeka Belajar di Sekolah Dasar. *Jurnal Basicedu*, 6 (4), 7174–7187. <https://jbasic.org/index.php/basicedu/article/view/3431/pdf>
- Salabi, A.S. 2020. Efektivitas dalam Implementasi Kurikulum Sekolah. *Education Achievement: Journal of Science and Research*. Volume 1, Issue 1, Nopember 2020. <https://pusdikrapublishing.com/index.php/jsr/article/view/177>
- Solissa, E. M., Rakhmawati, E., Maulinda, R., Syamsuri, S., & Putri, I. D. A. 2024. Analisis Implementasi Metode Pembelajaran Berbasis Proyek dalam Meningkatkan Prestasi Belajar di Sekolah Dasar. *Al-Madrasah Jurnal Pendidikan Madrasah Ibtidaiyah*, 8(2) 558. <https://jurnal.stiq-amuntai.ac.id/index.php/al-madrasah/article/view/3284>
- Suhandi, A. M., & Robi'ah, F. (2022). Guru dan Tantangan Kurikulum Baru: Analisis Peran Guru dalam Kebijakan Kurikulum Baru. *Jurnal Basicedu*, 6(4), 5936–5945. <https://jbasic.org/index.php/basicedu/article/view/3172>
- Sundari, A. (2023). Kemampuan Berpikir Kritis Siswa dalam Pembelajaran Matematika Berbasis Model Pembelajaran Problem Solving. *Jurnal Pendidikan Matematika*, 1(1), 15–20.
- Suryaman, M. (2020). Pengembangan Kurikulum Merdeka Belajar Program Studi Pendidikan Bahasa Indonesia. *Prosiding Seminar Daring Nasional : Pengembangan Kurikulum Merdeka Belajar*, 13–28. <https://ejournal.unib.ac.id/semiba/issue/view/956>

- Winarni, A., & Ismaya, E.A. (2024). Implementasi Kurikulum Merdeka Belajar dalam Pembelajaran IPAS di SD 1 Tanjungrejo. *Jurnal Ilmiah Wahana Pendidikan*, September 2024, 10 (17), 171-177. <https://jurnal.peneliti.net/index.php/IIWP/article/view/7985>
- Yanti, M., Egok, A. S., & Firdiansyah, D. (2022). Penerapan metode outdoor study dengan inquiry learning pada pembelajaran IPA sekolah dasar. *Jurnal Basicedu*, 6(3), 4451-4460. <https://jbasic.org/index.php/basicedu/article/view/2664>
- Zahra, N.U. (2024). Transformasi Pembelajaran IPAS di Sekolah Dasar Melalui Kurikulum Merdeka: Tantangan dan Peluang. *Jurnal Pendidikan Dasar Indonesia*. Volum 9, Nomor 3 Bulan September Tahun 2024. Pages 157-160. <https://journal.stkipsingkawang.ac.id/index.php/JPDI/article/view/6105>
- Zakarina, U., Ramadya, A.D., Sudai, R., Pattipeillohi, A. (2024). Integrasi Mata Pelajaran IPA dan IPS dalam Kurikulum Merdeka Belajar dalam Upaya Penguatan Literasi Sains dan Sosial di Sekolah Dasar. *Damhil Education Journal*. Volume 4 Nomor 1, Tahun 2024. <https://ejurnal.pps.ung.ac.id/index.php/DEJ/article/view/2487>