ANALYSIS OF THE MERDEKA CURRICULUM AND CURRICULUM 13 ON MATHEMATICS LEARNING IN JUNIOR HIGH SCHOOL

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ABSTRAk

Penelitian ini bertujuan mengetahui penerapan kurikulum Merdeka dan kurikulum 13 terhadap hasil Pembelajaran matematika di SMP. Penelitian ini menggunakan metode kualitatif/literature review. Untuk pengambilan Teknik itu data yang digunakan bersumber dari database google scholar, scopus, semantic scolar, mendelay, jurnal sinta dengan kata kunci pencarian kurikulum 13, kurikulum Merdeka matematika dan perbandingan/penerapan kurikulum matematika didasari hasil assessment penilaian proses kemampuan matematika yang dilakukan oleh TIMSS dan PISA.. Hasil penelitian ini menunjukan bahwa kurikulum Merdeka diterapkan untuk meningkatkan juga menekankan kreativitas siswa dalam hal keterampilan berfikir kritis, berfikir kreatif, berfikir kritis dan pemecahan masalah, komunikasi, dan kolaborasi. guru juga dapat memilih metode tepat yang ada didalam kelas untuk pembelajaran berlangsung. kurikulum Merdeka juga menekankan pengajaran matematika menggunakan keterampilan berfikir komputasi dan etnomatematika dikelas. sedangkan kurikulum 13 di terapkan untuk guru berperan aktif sebagai motivator dan fasilitator pada pembelajaran sehingga pembelajaran lebih siswa. terpusat pada **Keywords**: Kurikulum 13, Kurikulum Merdeka, Matematika.

ABSTRACT

This study aims to determine the application of the Merdeka curriculum and curriculum 13 to the results of mathematics learning in junior high

schools. This research uses qualitative method / literature review. For the retrieval of the technique, the data used was sourced from the google scholar database, scopus, semantic scolar, delay, sinta journal with the keyword curriculum search 13, the Merdeka mathematics curriculum and the comparison / application of the mathematics curriculum based on the results of the assessment of the mathematical ability assessment process conducted by TIMSS and PISA. The results of this study show that the Merdeka curriculum is applied to improve and emphasize student creativity in terms of critical thinking skills, creative thinking, critical thinking and problem solving, communication, and collaboration. Teachers can also choose the right method in the classroom for learning to take place. The Merdeka curriculum also emphasizes the teaching of mathematics using computational thinking skills and ethnomathematics in the classroom. While curriculum 13 is applied for teachers to play an active role as motivators and facilitators in learning so that learning is more studentcentered.

INTRODUCTION

The curriculum system is an important aspect of the goals in achieving national education. To achieve national education goals, the curriculum is flexible in changing and developing over time (Mulyasa, 2013:43). The curriculum development process started from the 1964 Curriculum, 1968 Curriculum, 1975 Curriculum, 1984 Curriculum, 1994 Curriculum, in 2004 the Competency Based Curriculum (KBK) was implemented, in 2006 the Education Unit Level Curriculum (KTSP) was implemented, until in 2013 the implementation of the 2013 Curriculum simultaneously implemented in 2014 (Fussalam & Elmiati, 2018).

The curriculum has always been a hot topic of debate among academics, politicians and even lay people during the process of educational transformation in Indonesia. This is caused by a lack of clarity about how the curriculum is implemented. The curriculum can only achieve educational goals if it is not supported by the necessary facilities. These facilities include qualified teaching staff, validity of teaching sources and materials, appropriate methodology, and clear educational goal orientation.

The 2013 curriculum is a refinement of the previous curriculum, so that it will definitely have advantages and disadvantages. However, the most important thing is to support the government's efforts to realize change, such as improving the quality of implementation of the school curriculum in Indonesia, so that students can face international challenges while maintaining the characteristics of their nation.

The K13 curriculum is designed to prepare students with various competencies. The ability to handle all global challenges including communication skills, good moral attitudes, critical thinking skills, the ability to be a good citizen, the ability to live in a global society, the ability to tolerate different perspectives, readiness to work, intelligence appropriate to his talents, sense of responsibility towards the environment, and broad interest in life.

The independent curriculum is designed to improve Indonesian education, which had declined during the COVID-19 pandemic. This curriculum is designed to improve the abilities of each student. A free curriculum allows teachers and students to have the freedom to choose what to do to meet students' needs. Students

have the freedom to follow lessons and materials according to their development and needs.

The implementation of the independent learning curriculum is characteristically different from the curriculum that has previously been implemented in Indonesia. The implementation of the independent learning curriculum focuses more on practical activities in the form of projects with the theme of strengthening the Pancasila student profile and creating a pleasant learning environment for students (Sudarto et al., 2021). Apart from that, learning in the independent curriculum is also carried out in a differentiated manner (Aprima & Sari, 2022). Differentiated learning is learning based on an independent curriculum which is carried out by taking into account the various needs, talents and interests of students. The learning process in the independent curriculum refers to the formation of a Pancasila student profile which aims to produce graduates with high character values (Rahayu et al., 2021).

DISCUSSION

This research was conducted using the Systematic Literature Review (SLR) method. The SLR method uses a specific research methodology and development to collect and evaluate relevant research on a specific topic. (Lusiana and Suryani, 2018). One of the advantages of research using the SLR method is the ability to find, study, evaluate and interpret any available research with a topical focus on the phenomenon of interest. (Traiandini et al., 2019).SLR is a research method used to synthesize research results so that policy makers get more comprehensive and balanced facts(Amam & Rusdiana, 2022).

The aim of the SLR research method is to reveal or provide theories that are relevant to the research case and to find different approaches to dealing with problems. The Systematic Literature Review research method consists of five stages. The problem is formulated in the first stage. The second stage includes a literature search or identification of relevant journals and articles through academic databases such as Scopus, Pubmed, Crossref, and GoogleScholar. The third stage includes searching for appropriate literature and determining whether the information. The fourth stage covers the qualification requirements and discusses

the quality of the SLR method. The final stage is to make research conclusions, discuss the results of the logical analysis, make conclusions or brief explanations, and include answers to the questions asked in preparing the assignment. You must also be able to understand the results of the literature that has been summarized(Habibi & Artha Glory Romey Manurung, 2023).

Research Results Related to Comparison of Merrdeka Curriculum and Curriculum 13

 Researcher: Ari Anggara, Amini, Faridah, Maria Siregar, Muhammad Faraiddin, Nila Syafrida

Research result: Based on the description of the results and discussion above, it is concluded that the implementation of independent learning in schools cannot be separated from obstacles that are common in countries with many islands like Indonesia. Obstacles for school educators include not having the experience of freedom to learn, limited references, access to learning, time management and adequate competencies (skills). These obstacles are obstacles for teaching staff to be able to carry out education in accordance with the concept of independent learning(Anggara et al., 2023).

2. Researchers: Sofa Sari Miladiah, Nendi Sugandi, Rita Sulastini

Research results: After conducting research at Bina Taruna Middle School, it can be concluded that it is deep

planning process before implementing the Independent Curriculum, schools need to understand the regulations and prepare supporting documents in implementing the Independent Curriculum. In implementing the Independent Curriculum, there needs to be integration between all school stakeholders and students as input. Meanwhile, the integration of schools with students' parents can influence environmental input for the continuity of teaching and learning activities with the implementation of the Independent Curriculum.

The obstacles encountered in implementing the Independent Curriculum are the lack of understanding of the Independent Curriculum concept by educators, students, education staff, and even parents, thus hampering the implementation process. A lack of understanding by educators,

students, education staff, and even parents will result in an independent learning process that is not fully achieved according to the concept.

In implementing the Independent Curriculum at the planning stage, the Education Unit can develop an Education Unit Operational Curriculum that is contextual and in accordance with the aspirations of the Education Unit residents by involving all stakeholders, even parent and student representatives. At the implementation stage, the implementation of the Merdeka Project Curriculum begins with problem identification which is mostly carried out based on student initiative and facilitated by teachers and/or community partners who are involved as facilitators or resource persons so that project activities are oriented towards understanding concepts and/or problem solving according to theme. Apart from that, the Education unit can involve society/community/industry on an ongoing basis to support intracurricular learning and the Project for Strengthening the Pancasila Student Profile (P5)(Miladiah et al., 2023).

3. Researcher: Ika Wahyu Susiani

Research result :Based on the results of the research and discussion above, it can be concluded that the implementation of the independent curriculum at Darur Rohmah Middle School is outlined in three programs, namely recycling entrepreneurship, making traditional herbal medicine using flute techniques, and making batik. The implementation of these three programs is able to restore learning conditions, increase motivation and enthusiasm for learning, develop creativity, critical reasoning, independence, and strengthen the spirit of mutual cooperation and align student competencies. The obstacles faced in implementing this program are limited facilities and infrastructure, lack of teacher competence and the adaptation process of teachers and students is not fast enough. These problems can be overcome by deepening competence and more thorough preparation(Susiani, 2022).

4. Researcher : Yahfenel Evi Fussalam, Elmiati

Research result :Based on the results of the research and discussion above, it can be concluded that the implementation of the 2013 curriculum was welcomed positively by SMP Negeri 2 Sarolangun. This is because the learning

method at K 13 is in accordance with the learning process in the era of globalization, namely the learning process using the Scientific Approach method. In general, the description of the implementation of K 13 at SMP Negeri 2 Sarolangun is as follows:

- 1. SMP Negeri 2 Sarolangun has implemented K 13 since SMP Negeri 2 Sarolangun was established as a K 13 pilot project in 2014. The implementation method is carried out through 3 components, namely socialization, preparation of teaching staff, and infrastructure.
- 2. In the implementation of K 13 there are supporting factors such as cooperation between all school components (teachers, parents, students, related agencies and the surrounding environment) in its implementation making students creative and innovative. On the other hand, inhibiting factors are also present in K 13, especially related to the lack of facilities. and infrastructure(Fussalam & Elmiati, 2018).
- 5. Researcher: Hendra Susanti; Fadriati; Asroa Faith. BS

Research results: The problems in implementing the independent curriculum at SMPN 5 Padang Panjang come from all aspects. Some originate from the teacher's own aspect due to their limited ability to study, understand and implement the independent learning curriculum at SMPN 5 Padang Panjang. There are also problems originating from the government side due to the lack of maximum socialization of the independent curriculum in various educational institutions. The government should promote more socialization regarding the use of an independent curriculum in education in Indonesia(Susanti et al., 2023).

6. Researchers: Afifah Zafirah, Nurhizrah Gistituati, Alwen Bentri, Ahmad Fauzan, Yerizon

Research results: The development of the mathematics curriculum in Indonesia aims to improve 21st century skills in order to prepare for the challenges and demands of changing times. The mathematics curriculum is designed to train students' abilities in computational thinking, critical thinking, problem solving and reasoning. The implementation of the 2013 curriculum has a student-

focused learning concept to develop abilities in the cognitive, affective and psychomotor domains. The 2013 curriculum is characterized by building knowledge through contextual problem-based learning. The learning characteristics of the 2013 curriculum are adjusted to 21st century skill indicators according to international ability standards. This is different from the independent curriculum which offers cultural and environmental based project learning which can be applied through an ethnomathematics approach. The independent curriculum has more flexible learning and focuses on essential material. This will improve students' abilities through the assessments provided so that they are able to compete at an international level(Zafirah et al., 2024).

Curriculum comes from Latin, namely "curriculae" which means the distance a runner must cover, which means the curriculum is the period of education that students must take with the aim of obtaining a diploma (Hamalik, 2015: 16). Based on Law Number 20 of 2003 article 1 paragraph 19, the curriculum is a set of plans and arrangements regarding objectives, content and learning materials as well as methods used as guidelines for organizing learning activities to achieve educational goals. A curriculum is something that is designed and structured to facilitate learning and teaching activities, guided and accountable by schools and educational institutions as well as teachers. It cannot be denied that the curriculum in Indonesia is subject to frequent changes which are always aimed at balancing efforts to improve the national education system. This change was based on the absence of any changes in terms of education which was felt to have not achieved the desired expectations. Therefore, regular revisions and changes and improvements to the educational curriculum must be carried out to form a generation of excellence and character in the future (Santika et al., 2022).

Curriculum 13 is a curriculum that has a competency and character base using a thematic and contextual approach (Tjahjono, 2013). According to (Mulyasa, 2013), curriculum 13 is a curriculum which emphasizes the development of character and certain competencies with certain performance standards, the results of which will be felt by students, namely in the form of mastery of certain competencies. Data analysis in the research shows that there were many changes in

the curriculum that occurred between the 2013 curriculum and the independent curriculum. The competency-based curriculum 13 focuses on the acquisition of certain competencies for students. Therefore, this curriculum contains several competencies and various learning objectives which are created in various forms, so that what is achieved can be seen in the form of students' traits or skills as a reference for their success. The teaching and learning process requires a direction so that it can help students understand at least a minimum level of competency, so that students can achieve the goals that have been set.

The 2013 curriculum is said to be a solution in facing current developments which emphasizes competencies integrated with character values. Approaches and strategies in the learning process enable students to construct new knowledge based on their learning experiences in the classroom and outside the classroom. Therefore, teaching staff or teachers need thorough preparation, which includes creating learning plans, implementing them, analyzing them and assessing them, so that the implementation of curriculum 13 can be implemented optimally. Apart from being competency-based, in implementing curriculum 13 there is also the application of character education in it.

The independent curriculum is an intracurricular learning curriculum which contains a variety of content which is arranged optimally so that students have sufficient time to explore concepts and strengthen their respective competencies (Kemdikbud, 2022). This independent curriculum was created for an easier curriculum and focuses on essential material and the development of student character.

The implementation of the Merdeka Belajar curriculum is the importance of formulating a maximum curriculum because it involves partners to achieve learning outcomes in education units (SMP). By implementing the Merdeka curriculum, it will be more relevant and interactive, where project-based learning will provide broad opportunities for students to actively explore factual issues (Rahayuetal., 2022).

The characteristics or objectives of this curriculum are to support healing in learning. The characteristics of this curriculum are 1) project-based learning activities to develop soft skills and traits in accordance with the Pancasila learning

profile. 2) focus on essential material so that students have plenty of time for learning, especially numeracy and literacy. 3) make learning more flexible for teachers to carry out differentiated learning activities according to students' abilities and make adjustments to local context and content.

According to Amir (2021), implementing project-based activities can be done through familiarization activities or practice-based learning activities in which the activity applies Pancasila lesson profile learning. (1) believe, have faith in God Almighty and have noble morals, (2) have global diversity, (3) work together, (4) be independent, (5) reason critically, and (6) be creative. The application of Pancasila Profile learning can also be applied in Indonesian language subjects. Implementing the values of the Pancasila Student Profile is very important for strengthening student character(Sari et al., 2022).

CONCLUSION

The curriculum is a system of collections of subjects and educational programs provided by educational service institutions and contains lesson plans that will be taught to students over a certain period of time at the educational level.

The 2013 curriculum is an effort to improve the previous curriculum, which has advantages and disadvantages. The K13 curriculum is to prepare students with competencies, namely responding to global challenges, communication skills, moral attitudes, critical thinking skills, citizen skills, the ability to live in a global society, tolerance for views, readiness to work, intelligence, a sense of responsibility towards environment. The independent curriculum is a curriculum prepared to restore education in Indonesia which has declined due to the Covid-19 pandemic. It is designed to improve the abilities of each student individually. Independent learning is carried out with teachers and students, and its characteristics are different from the curriculum that has previously been implemented in Indonesia. Independent learning is also carried out in a differentiated manner and takes into account the various needs, talents and interests of students.

We cannot choose the best curriculum because there are advantages and disadvantages to each curriculum, but we can encourage the government to choose

or even create the best curriculum for the progress of the country. The government must improve education policies, adequate outreach and good teacher training because teachers are the first people to interact with students.

REFERENCES

- Amam, A., & Rusdiana, S. (2022). The Role of Animal Husbandry Institutions, An Existence Not Just a Dream: A Review Using the Systematic Literature Review (SLR) Method. Journal of Animal Husbandry, 19(1), 9. https://doi.org/10.24014/jupet.v19i1.14244
- Anggara, A., Amini, F., Siregar, M., Muhammad, F., & Syafrida, N. (2023). Implementation of the Independent Learning Curriculum in Middle School Level Education Units. Journal of Education and Counseling, 5(1), 1899–1904.
- Fussalam, YE, & Elmiati. (2018). Implementation of the 2013 Curriculum (K13) at SMP Negeri 2 Sarolangun. Journal of Educational Estuaries, 3(1), 45–55. https://ejournal.ummuba.ac.id/index.php/mp/article/view/49
- Habibi, R., & Artha Glory Romey Manurung. (2023). SLR Systematic Literature Review: Employee Performance Appraisal Methods Using Human Performance Technology. Journal of Applied Computer Science and Technology, 4(2), 100–107. https://doi.org/10.52158/jacost.v4i2.511
- Miladiah, SS, Sugandi, N., & Sulastini, R. (2023). Analysis of the Implementation of the Independent Curriculum in Bandung Regency Youth Development Middle School. Mandala Education Scientific Journal, 9(1), 312–318. https://doi.org/10.58258/jime.v9i1.4589
- Sari, FI, Sunedar, D., & Anshori, D. (2022). Analysis of the Differences between the 2013 Curriculum and the Independent Curriculum. Journal of Education and Counseling, Vol. 5(1), 146–151.
- Susanti, H., Fadriati, F., & BS, IA (2023). Problems of Implementing the Independent Curriculum at SMP Negeri 5 Padang Panjang. Alsys, 3(1), 54–65. https://doi.org/10.58578/alsys.v3i1.766
- Susiani, IW (2022). Implementation of the Independent Curriculum at Darur

ICONIE FTIK UIN KH ABDURRAHMAN WAHID PEKALONGAN

Rohmah Gandu Mlarak Middle School, Ponorogo. Proceedings of the 3rd International Conference on Islamic Studies (ICIS), 3, 296–306.

Zafirah, A., Gistituati, N., Bentri, A., Fauzan, A., & Yerizon, Y. (2024). Comparative Study of the Implementation of the Independent Curriculum and the 2013 Curriculum in Mathematics Subjects: Literature Review. Scholar's Journal: Journal of Mathematics Education, 8(1), 276–304. https://doi.org/10.31004/cendekia.v8i1.2210