

JURNAL BASICEDU

Volume 6 Nomor 2 Tahun 2022 Halaman 3114 - 3122 Research & Learning in Elementary Education https://jbasic.org/index.php/basicedu



Development of MI/SD IPA Curriculum (Analysis of 2013 Curriculum Policy **Formulating Patterns**)

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Abstrak

Penelitian ini bertujuan untuk menganalisa kebijakan kurikulum 2013 jenjang MI/SD. Adapun fokus kajiannya yakni tentang pengembangan kurikulum IPA jenjang MI/SD. Penelitian ini menggunakan pendekatan kualitatif dengan metode studi deskriptif analitis berbasis kajian pustaka (*library research*). Penggunaan bahan referensi ilmiah merupakan sumber data dan "alat" analisa data penelitian ini, yang dikutip dari laman kredibel meliputi Google Scholar, DOAJ, Sinta, Science Direct, dan Tandfonline. Hasil penelitian ini menunjukkan bahwa kurikulum 2013 merupakan bentuk penyempurnaan dari kurikulum sebelumnya terkait aspek pola pikir perumusan kurikulum berbasis kebutuhan peserta didik dan inovatif terhadap perubahan serta perkembangan zaman yang amat pesat. Hal ini ditandai dari aspek Standar Kompetensi Lulusan (SKL) yang memprioritaskan kebutuhan peserta didik, Standar Isi (SI) yang integral dalam mata pelajaran meliputi pembentukan sikap pengetahuan dan keterampilan. Lebih lanjut, penguatan proses penyempurnaan ini dilakukan melalui penggunaan konsep pendekatan saintifik untuk melatih keterampilan berpikir tingkat tinggi (HOTS) pada siswa, serta penilaian berbasis proses kerja dan menggunakan portofolio pembelajaran siswa.

Kata Kunci: IPA MI/SD, Kurikulum 2013, Pengembangan Kurikulum.

Abstract

This study aims to analyze the 2013 curriculum policy for MI/SD. The focus of the study is on developing the science curriculum at the MI/SD level. This research uses a qualitative approach with a descriptive-analytical study method based on library research. The use of scientific reference materials is a source of data and "tools" for data analysis of this research, which are quoted from credible pages including Google Scholar, DOAJ, Sinta, Science Direct, and Tandfonline. The results of this study indicate that the 2013 curriculum is a form of improvement from the previous curriculum related to aspects of the mindset of curriculum formulation based on the needs of students and innovative to the changes and developments of the times that are very fast. This is marked from the aspect of Graduate Competency Standards (SKL) which prioritizes the needs of students, Content Standards (SI) which is integral in subjects including the formation of knowledge and skills attitudes. Furthermore, strengthening the improvement process is carried out through the use of scientific approach concepts to train students' higher-order thinking skills (HOTS), as well as work process-based assessments and using student learning portfolios.

Keywords: MI/SD IPA, 2013 Curriculum, Curriculum Development.

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ISSN 2580-3735 (Media Cetak) : https://doi.org/10.31004/basicedu.v6i2.2536 ISSN 2580-1147 (Media Online) DOI

> Jurnal Basicedu Vol 6 No 2 Tahun 2022 p-ISSN 2580-3735 e-ISSN 2580-1147

INTRODUCTION

The curriculum is a series of main components in the educational process (Sidik, 2020). It includes systematic planning, implementation, and assessment in the educational process (Nidawati, 2021: 22-42). On this basis, various concepts and contexts of learning in the educational process, refer to and lead to the applicable curriculum. Thus, the curriculum has a significant impact on the education process in Indonesia.

The term "change the minister of education, change the curriculum" is a form of label given by the community to various changes in curriculum terms (terms) and concepts. Starting from the competency-based curriculum (KBK), the education unit level curriculum (KTSP), the 2013 curriculum, to the independent learning curriculum for independent campuses (Muhammedi, 2016; Machali, 2014: 71-94; Ritonga, 2018). In fact, according to Alhaddad (2018: 57-66), this change is based on the acceleration of the progress of the times and the sophistication of technology which necessitates changes to the education system in Indonesia.

According to Wirianto (2014), changes in the curriculum do not necessarily merge with the political aspects that are labeled by the relevant ministries, but rather changes that are meaningful in curriculum development. In line with this, Rahayu (2017: 22-42) explains that curriculum changes occur due to changes in individual education needs. Suhardi, *et.al.* (2020) added, the change in question is also based on the demands of the community for superior human resources (HR) in the future.

The phenomenon shows that educators consider curriculum change as a confusing thing because 1 (one) complete policy has not been implemented, a curriculum has been replaced with other curriculum policies. When referring to the administrative aspect, this change is seen as a result of the immaturity of the determination, implementation, and assessment of a policy. However, when examined from the side of the world's rapid development, policy changes are an effort to revitalize education so that it is adaptive to future human resource needs (Ahmad, 2014).

Observing the above phenomenon, Kuntarti (2018: 67-80) states that curriculum change is a necessity, but creating a characteristic of education in Indonesia is a hope. Lubis (2015) added that what really changed was not the substance and material of education as a whole, but rather an effort to perfect the teaching curriculum according to the needs of the community. Thus, changing the curriculum does not necessarily change all existing components, but rather an effort to improve the previous curriculum (policy).

Science material is a subject that integrates natural and scientific concepts in the learning process (Sinti, 2021; Assingkily, *et.al.*, 2021; Setiawan, 2020). On this basis, science material is not enough to be taught verbally in class, or practice in the wild (fields, parks, etc.), but requires experimental practicum as a scientific step in understanding a change in nature (Rafiqah, 2015; Mujizatullah, 2019: 19-31). This shows that science material is always adaptive to various developments, because it is integral in scientific and natural, especially science teaching which is intended for elementary-aged children at the MI/SD level.

Indeed, the literature review of relevant research on science curriculum development has been investigated from various aspects, including the curriculum development model (Nafi'ah, 2019: 21-38), curriculum development management (Kisbiyanto, 2016: 387-414; Huda, 2017: 52-75), improving students' basic and scientific process skills (Rofiah, 2014), dynamics of curriculum change (Istiqomah, 2016: 39-52), and life skills education through the science process (Shawmi, 2015: 240-252).

Observing the literature review above, it can be seen that the study of curriculum development was prioritized by previous researchers from the aspects of policy change, curriculum improvement, adjustment to the development (progress) of the times, and policy implementation. However, when examined further, the analysis of the mindset of formulating a "new" curriculum policy and the integral concept of presenting its teaching towards efforts to create a superior generation (HR) for the nation, has not been studied in-depth and specifically. Therefore, researchers seek to examine the theme, especially in MI/SD science learning entitled, "Development of MI/SD Science Curriculum (Analysis of Patterns for Curriculum Policy Formulation 2013)".

METHOD

This research uses a qualitative approach with a literature study method. The focus of this research analysis, namely the pattern of curriculum policy formulation in 2013 in the context of MI/SD science curriculum development. The source of data as well as "material" for this research analysis is obtained through citations of scientific sources (references) from credible websites, namely Google Scholar, DOAJ, SINTA, Science Direct, and Tandfonline. The data analysis process that the author does includes classifying the data according to the topic of discussion, describing the data, and describing the research findings systematically (methodologically) according to the research theme (Assingkily, 2021).

RESULTS AND DISCUSSION

The Nature of the Basic Education Curriculum

The curriculum is a regular learning guide in the educational process (Hernawan & Andriyani, 2011). The curriculum is determined nationally by the relevant ministries, then derived by the institution (educational institution) as the principle of making learning guidelines that are adapted to local wisdom and the learning climate in educational institutions. On this basis, the curriculum is constantly being updated as an adaptive effort to the progress of the times (Ansyar, 2017).

Changes in curriculum components are commonly termed curriculum development. This is based on the context of the changes that perfected the previous curriculum, not replacing it completely from the previous one (Samad, 2021: 97-108). Of course, the main purpose of this curriculum change (development) is to improve the quality (quality) of education because quality education is the right of the nation's children as capital and provision for themselves in carrying out their obligations to make the nation proud and prosperous.

According to Joni (2000: 34-36), there are 5 classifications of curriculum, namely ideal, formal, instructional, operational, and experiential. First, is the ideal curriculum, which reflects the expectations of the entire community for the fulfillment of quality education with high expectations in giving birth to a superior generation (human resources). Second, is the formal curriculum, which is the curriculum set by the ministry of national education and the ministry of religion. Third, is the instructional curriculum, which is a derivative part of the formal curriculum implemented by teachers (educators) in the learning process. Fourth, is the operational curriculum, namely the reality of the implementation of the instructional curriculum during the learning process. Then, fifth, the experiential curriculum, namely the meaning of the learning experiences obtained by students and teachers.

Referring to the five curriculum classifications above, it can be interpreted that a series of learning components contained in the curriculum have a direct impact (implicative) on the attitudes and character of students (students). In addition, aspects of skills and material (intellectual) mastery are the main targets for students in the learning process. Thus, it is concluded that the basic education curriculum is the main guideline in carrying out the learning process for students, with the orientation of students' abilities, skills, and attitude (character) formation.

Foundations and Principles of Curriculum Development 2013

1. 2013 Curriculum Development Foundation

Indeed, there are 3 (three) main foundations in the 2013 curriculum development effort, namely the juridical, philosophical, and empirical foundations. *First*, the philosophical foundation is interpreted as the basic footing on the direction of education (especially the curriculum) in giving birth to a superior generation, meaning that the expected quality of graduates has been aligned with the prepared learning components. The philosophical foundation of curriculum development refers to 2 (two) outlines, namely the Pancasila philosophy and the philosophy (values) of education (Halek, 2019: 1-10).

According to Mulyasa (2013: 64-65), Pancasila philosophy is the "spirit" of the development of all aspects of nationality, including education. Furthermore, the philosophy of education is interpreted as the character of national development, including noble values, culture, and local wisdom, as well as the suitability of education with the needs of the community. Based on these two philosophies, the development of the educational curriculum (especially 2013) is adaptive to various developments of the times, and still maintains the characteristic of Pancasila-based nationality.

Second, the juridical basis is interpreted as a "legal umbrella" for the development of education. The consensus on the establishment of the nation which is officially regulated in the 1945 Constitution lowers several other regulations that can "overshadow" educational policies. This is intended so that the concept and context of education remain in harmony with the goals and ideals of the founding of the nation.

In detail, Majid (2014: 29) mentions that the foundations for curriculum development in 2013 include the 1945 Constitution, Law Number 20 of 2003 concerning the National Education System, Government Regulation Number 19 of 2005 concerning National Education Standards, the National Medium Term Development Plan (RPJMN), and Presidential Instructions. RI of 2010 concerning Character Education, Active Learning, and Entrepreneurship Education.

Third, empirical foundation. The empirical basis or also known as the conceptual foundation is a form of direction or orientation for the implementation of the curriculum applied in educational institutions in accordance with local wisdom. Furthermore, Majid (2014: 29) suggests that several aspects need to be considered in the reference to the empirical (conceptual) basis, namely the relevance of education, competency and character-based curriculum, contextual learning, active learning, and valid, intact, and comprehensive assessments.

Observing the description above, it can be interpreted that the foundation of curriculum development in 2013 serves as a "basic footing", "legal umbrella", and orientation for curriculum development to be appropriate (adaptive) to the times and able to maintain the nation's characteristics through the practice of the values of precepts in Pancasila. Thus, the 2013 curriculum has been arranged in such a way as to strengthen the potential development of students based on character and local wisdom.

2. 2013 Curriculum Development Principles

The principles of curriculum development must refer to the following 12 (twelve) principles: (Slameto, 2015: 1-9; Siregar, *et.al.*, 2022)

- a. Development of curriculum based on national education standards (SNP).
- b. Curriculum development adjusts the level of education units and local wisdom (regional potential).
- c. Curriculum development is oriented towards competency achievement.
- d. Graduate Competency Standards (SKL) are described based on national education goals and standards, as well as the needs of the global community.
- e. Content Standards (SI) are translated from SKL.
- f. Process Standards (SP) are translated from SI.
- g. Assessment Standards are translated from SKL, SI, and SP.
- h. Basic Competencies refer to the SKL and are contextualized in each teaching material.
- i. The education unit curriculum is divided into 3 (three), the national level curriculum (developed by the central government), the regional level curriculum (developed by the regional government), and the education unit level curriculum (developed by the educational institution/unit).
- j. Curriculum development should be able to create a conducive learning climate.
- k. Assessment of learning outcomes based on process and product (output).
- 1. Scientific-based learning process.

Completing the 2013 Curriculum Formulation Mindset

Completion of the mindset of curriculum formulation can be described in the following table:

Table 1
The Mindset of 2013 Curriculum Formulation, KTSP, and KBK.

No.	KBK 2004	KTSP 2006	2013 Curriculum
1.	Graduate Competency Sta	ndards are derived from	Graduate Competency Standards are
	Content Standards		derived from needs
2.	Content Standards are form	nulated based on Subject	Content Standards are derived from
	Objectives (Subject Gradu	ate Competency Standards)	Graduate Competency Standards
	which are broken down in	to Competency Standards	through subject-free Core competencies
	and Subject Basic Compet	encies	
3.	The separation between at	titude-forming, skill-	All subjects must contribute to the
	forming, and knowledge-fe	orming subjects	formation of attitudes, knowledge, and
			skills
4.	Competence is derived fro	m the subject	Subjects are derived from the
			competencies to be achieved
5.	Subjects are independent of	of each other, like a set of	All subjects are bound by core
	separate subjects		competencies (according to; each class)

Observing table (1) above, it is understood that the 2013 curriculum has 5 (five) dimensions of improving the mindset, namely (a) prioritizing the needs of the global community (derived in the SKL), (b) Through the SKL, an explicit Content Standard (SI) is obtained. core competencies (KI) in each subject, (c) learning based on the formation of attitudes (character), knowledge, and skills, (d) competency-based subjects to be achieved, and (e) all subjects referring to core competencies (Al Faris, 2016: 316-338).

Sudarisman (2015) argues that there are several improvements to the 2013 curriculum mindset, namely (1) student-centered, (2) interactive, collaborative, and cooperative learning activities, (3) utilizing the environment as a network and learning resource, (4) active learning, scientific and contextual, (5) learning using multimedia, (6) learning based on interdisciplinary, multidisciplinary, and transdisciplinary, (7) students are given space to be creative and explore, and (8) learning based on multi-source or multiliteracy.

Based on the description above, it can be interpreted that the improvement of the mindset of the 2013 curriculum puts forward efforts to facilitate students to gain the broadest scientific-based experience, as capital for the development and formation of students' character, skills, and knowledge. In addition, teaching materials and teaching resources are scientifically based and multiliterate and are supported by collaborative, active, scientific, and interactive learning activities.

Elements of Changes in Curriculum 2013 Science Materials at MI/SD Level

According to Zaini (2015: 15-31), elements of the 2013 curriculum change are contained in 4 (four) standards that have been set by the National Education Standards Agency (BSNP), namely graduate competency standards (SKL), process standards (SP), content standards (SI), and assessment standards (SP). Further, it is described in the table below:

Table 2
Elements of 2013 Curriculum Change

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Standard	Element of Change				
Graduate	Holistic construction				
Competency	Supported by all materials or subjects				
Standards	Integrated vertically or horizontally				
Content	Developed based on competence to meet the aspects of suitability and adequacy				
Standards	Accommodating local, national, and international content (including PISA, PIRLS)				
Process	Oriented to competency characteristics				
Standards	- Attitude (Krathwohl): accept, run, appreciate, live, and practice.				
·					

	- Skills (Dyers): observing, asking, trying, reasoning, presenting, and creating.
	- Knowledge (Bloom & Anderson): knowing, understanding, applying, analyzing,
	evaluating, creating.
	Using a scientific approach, competency characteristics according to level (SD:
	Integrated Thematic; Middle School: Integrated Thematic-IPA and Social Sciences
	and Subjects; Senior High School: Thematics and Subjects)
	Prioritizing discovery learning and project-based learning
	Test and non-test (portfolio) based
Assessment	Assessing processes and outputs using authentic assessment.
Standards	The report card contains a quantitative assessment of knowledge and a qualitative
	description of attitudes and skills of adequacy

In more detail, the elements of these changes are described in the table below:

Table 3
The Description of 2013 Curriculum Change Elements.

The Description of 2013 Curriculum Change Elements.					
Element	Description				
Liement	SD/MI				
Competence of	There is an increase and balance of soft skills and hard skills which include				
graduates	aspects of attitude, skills, and knowledge competencies				
Subject Position	Competencies that were originally derived from subjects turned into subjects				
(ISI)	developed from competencies				
Approach (ISI)	Competence is developed through; integrated thematic in all subjects.				
Curriculum	1. Science-based holistic (nature, social, and culture)				
Structure (Subjects	2. Number of subjects from 10 to 6				
and Time	3. The number of hours increased by 4 Lesson Hours (JP) per week due to				
Allocation) (ISI)	changes in learning approaches				
Learning process	 Process Standards which were originally focused on Exploration, Elaboration, and Confirmation are equipped with Observing, Questioning, Processing, Presenting, Inferring, and Creating. Learning does not only occur in the classroom but also in the school and community environment. Teachers are not the only source of learning. Attitudes are not taught verbally but through examples and examples. 				
	Unified thematic				
Assessment of Learning Results	 Competency-based assessment Shifting from assessment through tests (measuring knowledge competencies based on results only), towards authentic assessments (measuring all attitudes, knowledge, and skills competencies based on processes and results) Strengthening the PAP (Based Reference Assessment), namely the achievement of learning outcomes based on the position of the score obtained against the ideal score (maximum) Assessment is not only at the Basic Competency (KD) level but also core competencies and Graduate Competency Standards (SI and SKL) Encourage the use of student-made portfolios as the main instrument of assessment. 				
Extracurricular	 Scouts (mandatory) UKS PMR English 				

Furthermore, the essential differences between the 2013 curriculum and the previous curriculum (KTSP 2006) are described in the following table:

Table 4
Essential Changes in the 2013 Curriculum

KTSP 2006	2013 Curriculum	Information
Certain subjects support certain competencies	Each subject supports all competencies (attitudes, knowledge, and skills)	All levels
Subjects are designed to stand alone and have their basic competencies	Subjects are designed to be related to one another and have basic competencies that are bound by the core competencies of each class	All levels
Indonesian is on par with other subjects	Indonesian as the initiator of other subjects (attitudes and language skills)	SD/MI
Each subject is taught with a different approach	All subjects are taught with the same approach (scientific) through observing, asking, trying, reasoning, communicating.	All levels
Each type of learning content is taught separately (separated	Various types of learning content are taught related and integrated (cross-curriculum or integrated curriculum).	SD/MI
curriculum)	Science content is integrated and used as a driver for other learning content	SD/MI
Thematic for grades I-III (not yet integrative)	Integrative thematic for grades I-VI	SD/MI

Referring to the elements of the 2013 curriculum change above (see tables 2 and 3), it can be interpreted that changes in the MI/SD science material are contained in 5 (five) points, namely, (1) the presentation of science material which was originally separated has now become integrated between biology, chemistry, and physics, (2) a learning platform based on natural phenomena and events to discover the importance of the interaction and combination of biology, chemistry, and physics, (3) enrichment of teaching materials by adding earth and space science materials according to international standards, (4) methods learning based on student needs to stimulate critical thinking in students, and (5) teaching material in an integrated and integral way by one teacher, not different teachers (team teaching) (Hakim, 2017; Assingkily & Barus, 2019).

Observing the description above, it can be concluded that the development of the 2013 curriculum is an improvement from the previous curriculum (KBK and KTSP). The main priority is to create scientific-based and integrated learning in helping students develop according to their potential, as well as the formation of students' character, skills, and knowledge. Furthermore, in science learning integrated thematic learning further strengthens the integral position of chemistry, physics, and biology lessons in science material, and teaching materials on each theme are tailored to the needs of students and the community.

CONCLUSION

Based on the results of the research above, it is concluded that the main stream of curriculum development in 2013 is based on the needs of students and is innovative towards changes and rapid developments of the times. This is marked from the aspect of Graduate Competency Standards (SKL) which prioritizes the needs of students, Content Standards (SI) which are integral in subjects including the formation of knowledge and skills attitudes. Furthermore, strengthening the improvement process is carried out through the use of scientific approach concepts to train students' higher-order thinking skills (HOTS), as well as work process-based assessments and using student learning portfolios.

BIBLIOGRAPHY

Ahmad, S. 2014. Problematika Kurikulum 2013 dan Kepemimpinan Instruksional Kepala Sekolah. *Jurnal Pencerahan*, 8(2). http://www.jurnal.unsyiah.ac.id/JPP/article/view/2158.

- 3121 Development of MI/SD IPA Curriculum (Analysis of 2013 Curriculum Policy Formulating Patterns) Safran DOI: https://doi.org/10.31004/basicedu.v6i2.2536
- Al Faris, F. 2016. Kurikulum 2013 dalam Perspektif Filsafat Pendidikan Progressivisme. *Jurnal Filsafat*, 25(2), 316-338. https://journal.ugm.ac.id/wisdom/article/view/12687.
- Alhaddad, M.R. 2018. Hakikat Kurikulum Pendidikan Islam. *Raudhah Proud To Be Professionals: Jurnal Tarbiyah Islamiyah*, *3*(1), 57-66. http://ejournal.stit-ru.ac.id/index.php/raudhah/article/download/23/22.
- Ansyar, M. 2017. Kurikulum: Hakikat, Fondasi, Desain, dan Pengembangan. Jakarta: Prenada Media.
- Assingkily, M.S. & Barus, U.S.B. 2019. Pembelajaran Tematik Bagi Anak Usia Dasar: Metodologi dalam Islam. *Nizhamiyah*, 9(2). http://jurnaltarbiyah.uinsu.ac.id/index.php/nizhamiyah/article/view/548.
- Assingkily, M.S., Fauzi, M.R., Hardiyati, M., & Saktiani, S. 2021. Desain Pembelajaran Tematik Integratif Jenjang MI/SD: Dari Konvensional Menuju Kontekstual yang Fungsional. Yogyakarta: Penerbit K-Media.
- Assingkily, M.S. 2021. *Metode Penelitian Pendidikan: Panduan Menulis Artikel Ilmiah dan Tugas Akhir.* Yogyakarta: K-Media.
- Hakim, L. 2017. Analisis Perbedaan Antara Kurikulum KTSP dan Kurikulum 2013. *Jurnal Ilmiah Didaktika: Media Ilmiah Pendidikan dan Pengajaran, 17*(2), 280-292. https://www.jurnal.ar-raniry.ac.id/index.php/didaktika/article/view/1644.
- Halek, D.H. 2019. Kurikulum 2013 dalam Perspektif Filosofi. *Jurnal Georafflesia: Artikel Ilmiah Pendidikan Geografi*, *3*(2), 1-10. https://journals.unihaz.ac.id/index.php/georafflesia/article/view/567.
- Hernawan, A.H. & Andriyani, D. 2011. Hakikat Kurikulum dan Pembelajaran. *Pengembangan Kurikulum dan Pembelajaran EKOP*. http://www.pustaka.ut.ac.id/lib/wp-content/uploads/pdfmk/PBIS4303-M1.pdf.
- Huda, N. 2017. Manajemen Pengembangan Kurikulum. *Al-Tanzim: Jurnal Manajemen Pendidikan Islam, 1*(2), 52-75. http://ejournal.unuja.ac.id/index.php/al-tanzim/article/view/113.
- Istiqomah, L. 2016. Dinamika Perubahan Kurikulum: Kebijakan Perubahan Kurikulum 2013 PAUD. *Golden Age: Jurnal Ilmiah Tumbuh Kembang Anak Usia Dini, 1*(1), 39-52. http://ejournal.uin-suka.ac.id/tarbiyah/goldenage/article/view/1249.
- Joni, T.R. 2000. Memicu Perbaikan Pendidikan Melalui Kurikulum dalam Kerangka Pikir Desentralisasi, dalam *Membuka Masa Depan Anak-anak Kita: Mencari Kurikulum Pendidikan Abad XXI*. Yogyakarta: Penerbit Kanisius.
- Kisbiyanto, K. 2016. Manajemen Pengembangan Kurikulum Sistem KKNI di PGMI. *Quality*, *4*(2), 387-414. http://journal.iainkudus.ac.id/index.php/Quality/article/view/2410.
- Kuntarti, R. 2014. Implikasi Perubahan Kurikulum Pendidikan pada Sistem Pendidikan Taruna Terhadap Pencapaian Kualitas Taruna Guna Mendukung Ketahanan Satuan (Studi di Akademi Militer, Magelang, Jawa Tengah). *Jurnal Ketahanan Nasional*, 20(1), 67-80. https://journal.ugm.ac.id/jkn/article/view/6784.
- Lubis, M. 2015. Kesiapan para Guru Sebagai Pengembang Kurikulum dalam Merespons Perubahan Kurikulum. *IMC 2016 Proceedings, 1*(1). https://jurnal.umj.ac.id/index.php/IMC/article/view/1354.
- Machali, I. 2014. Kebijakan Perubahan Kurikulum 2013 dalam Menyongsong Indonesia Emas Tahun 2045. *Jurnal Pendidikan Islam, 3*(1), 71-94. http://ejournal.uin-suka.ac.id/tarbiyah/JPI/article/view/1158.
- Majid, A. 2014. Pembelajaran Tematik Terpadu. Bandung: PT. Remaja Rosdakarya.
- Muhammedi, M. 2016. Perubahan Kurikulum di Indonesia: Studi Kritis tentang Upaya Menemukan Kurikulum Pendidikan Islam yang Ideal. *Jurnal Raudhah*, *4*(1). http://jurnaltarbiyah.uinsu.ac.id/index.php/raudhah/article/view/61.
- Mujizatullah, M. 2019. Islamic-Based Physics Learning Model in the Subject of Solar System and Life and Life on Earth. *Jurnal Pendidikan Fisika*, 7(1), 19-31. https://36.89.54.123/index.php/jpf/article/view/1736.
- Mulyasa, E. 2013. *Pengembangan dan Implementasi Kurikulum 2013*, cet. III. Bandung: PT. Remaja Rosdakarya.

- 3122 Development of MI/SD IPA Curriculum (Analysis of 2013 Curriculum Policy Formulating Patterns) Safran DOI: https://doi.org/10.31004/basicedu.v6i2.2536
- Nafi'ah, S.A. 2019. Model Pengembangan Kurikulum Hilda Taba pada Kurikulum 2013 di SD/MI. *As-Sibyan*, 2(1), 21-38. https://www.ejournal.stainupwr.ac.id/index.php/As_Sibyan/article/view/109.
- Nidawati, N. 2021 Hakikat Kurikulum Pendidikan Islam. *Jurnal Mudarrisuna: Media Kajian Pendidikan Agama Islam, 11*(1), 22-42. https://www.jurnal.ar-raniry.ac.id/index.php/mudarrisuna/article/view/8427.
- Rafiqah, R. 2015. Pengaruh Bahan Ajar Multimedia Interaktif IPA Terpadu Mengintegrasikan Nilai Karakter pada Materi SBSPZA Terhadap Kompetensi Siswa Kelas VIII SMPN 1 Padang. *Disertasi*, Universitas Negeri Padang. http://repository.unp.ac.id/8021/1/6_A_RAFIQAH_1101382_1301_2015.pdf.
- Rahayu, Y.M. 2017. Pengaruh Perubahan Kurikulum 2013 Terhadap Perkembangan Peserta Didik. *LOGIKA: Jurnal Ilmiah Lemlit Unswagati Cirebon, 18*(3), 22-42. http://jurnal.ugj.ac.id/index.php/logika/article/viewFile/216/139.
- Ritonga, M. 2018. Politik dan Dinamika Kebijakan Perubahan Kurikulum Pendidikan di Indonesia Hingga Masa Reformasi. *Bina Gogik: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar*, 5(2). https://ejournal.stkipbbm.ac.id/index.php/pgsd/article/view/212.
- Rofiah, N.H. 2014. Pengembangan Lembar Kerja Peserta Didik (LKPD) Berbasis KIT untuk Meningkatan Keterampilan Proses Dasar IPA di MI/SD. *Al-Bidayah: Jurnal Pendidikan Dasar Islam*, *6*(2). http://jurnal.albidayah.id/index.php/home/article/view/145.
- Samad, S.A.A. 2021. Diskursus Hakikat Kurikulum Pendidikan Islam. *Al-Ikhtibar: Jurnal Ilmu Pendidikan*, 8(2), 97-108. https://www.journal.iainlangsa.ac.id/index.php/ikhtibar/article/view/3226.
- Setiawan, A.R. 2020. Pembelajaran Tematik Berorientasi Literasi Saintifik. *Jurnal Basicedu*, 4(1). https://jbasic.org/index.php/basicedu/article/view/298.
- Shawmi, A.N. 2015. Pendidikan Kecakapan Hidup (Life Skill) dalam Pembelajaran Sains di MI/SD. *TERAMPIL: Jurnal Pendidikan dan Pembelajaran Dasar*, 2(2), 240-252. http://www.ejournal.radenintan.ac.id/index.php/terampil/article/view/1295.
- Sidik, F. 2020. Hakikat Kurikulum dan Materi dalam Pendidikan Islam. *Jurnal Pendidikan Islam Al-Ilmi*, *3*(2). http://lonsuit.unismuhluwuk.ac.id/index.php/ilmi/article/download/547/438.
- Sinti, N. 2021. Pengembangan Modul Pembelajaran IPA Terintegrasi Islam dan Sains Dilengkapi Peta Konsep Kelas VII di Sekolah Menengah Pertama Islam Terpadu. *Disertasi*, Universitas Negeri Padang. http://repository.unp.ac.id/id/eprint/33146.
- Siregar, P.S., Marta, E., Efendi, R., Hasrijal, H., Sari, N.T. 2022. Implementasi Pembelajaran Tematik dalam Pencapaian Standar Proses Kurikulum 2013 di Sekolah Dasar. *Jurnal Basicedu*, *6*(1). https://jbasic.org/index.php/basicedu/article/view/1858.
- Slameto, S. 2015. Rasional dan Elemen Perubahan Kurikulum 2013. *Scholaria: Jurnal Pendidikan dan Kebudayaan*, *5*(1), 1-9. https://ejournal.uksw.edu/scholaria/article/view/2.
- Sudarisman, S. 2015. Memahami Hakikat dan Karakteristik Pembelajaran Biologi dalam Upaya Menjawab Tantangan Abad 21 serta Optimalisasi Implementasi Kurikulum 2013. *Florea: Jurnal Biologi dan Pembelajarannya*, 2(1). http://e-journal.unipma.ac.id/index.php/JF/article/view/403.
- Suhardi, M., Mulyono, S., Syakhrani, H., Aslan, A., & Putra, P. 2020. Perubahan Kurikulum Lembaga Pendidikan Islam di Sambas pada Masa Kesultanan Sambas. *Ta'dibuna: Jurnal Pendidikan Islam*, *9*(1). https://idr.uin-antasari.ac.id/id/eprint/15434.
- Wirianto, D. 2014. Perspektif Historis Transformasi Kurikulum di Indonesia. *Islamic Studies Journal*, 2(1). https://www.academia.edu/download/52942478/7_Dicky_Wirianto_Perspektif_Historis_Transformasi_Kurikulum_di_Indonesia.pdf.
- Zaini, H. 2015. Karakteristik Kurikulum 2013 dan Kurikulum Tingkat Satuan Pendidikan (KTSP). *El-Idare: Jurnal Manajemen Pendidikan Islam*, *I*(1), 15-31. http://jurnal.radenfatah.ac.id/index.php/El-idare/article/view/288.