



## Implementation of the 2013 Scientific Curriculum Learning Strategy on Islamic Religious Subjects in State Elementary Schools III 101765 Bandar Setia

**Arlina<sup>1\*</sup>, Mutia Annisa<sup>2</sup>, Nur Zannah<sup>3</sup>, Zaidan Hamdani<sup>4</sup>**

<sup>1-4</sup> Universitas Islam Negeri Sumatera Utara, Indonesia

\*Email: [arlina@uinsu.as.id](mailto:arlina@uinsu.as.id)<sup>1\*</sup>, [mutiaannisa953@gmail.com](mailto:mutiaannisa953@gmail.com)<sup>2</sup>, [zannah69@gmail.com](mailto:zannah69@gmail.com)<sup>3</sup>, [zaidangans344@gmail.com](mailto:zaidangans344@gmail.com)<sup>4</sup>

\*Penulis Korespondensi: [arlina@uinsu.as.id](mailto:arlina@uinsu.as.id)

**Abstract.** *This study aims to describe the implementation of scientific learning strategies in the 2013 Curriculum in Islamic Religious Education and its impact on the activeness of third-grade students at SD Negeri 101765 Bandar Setia. This research employed a qualitative approach with a phenomenological design. Data were collected through observation, interviews, and documentation, and analyzed using data reduction, data display, and conclusion drawing techniques. The results indicate that the application of scientific learning steps (5M), namely observing, questioning, collecting information, associating, and communicating, effectively enhances students' activeness in asking questions, participating in discussions, and communicating learning outcomes. The learning process becomes more interactive, enjoyable, and meaningful. However, several challenges remain, including limited instructional time, differences in students' literacy abilities, and less conducive classroom conditions. Therefore, more structured lesson planning and adaptive learning strategies are required to achieve optimal learning outcomes in Islamic Religious Education.*

**Keywords:** 2013 Curriculum; Islamic Religious Education; Scientific Learning; Student Activeness; Qualitative Research.

### 1. INTRODUCTIONS

The 2013 (K–13) curriculum plays a significant part in the country's educational system because it is made to address the difficulties posed by advances in science, technology, and social change. This curriculum places a strong emphasis on balancing the integrated development of students' attitudes, knowledge, and abilities. Learning in grades K–13 is now focused on character development, critical and creative thinking abilities, and 21st century skills rather than just content mastery. As a result, the 2013 Curriculum serves as a crucial basis for achieving the objectives of national education, which prioritize the holistic development of students' potential (Permendikbud No. 103 Tahun 2014; Kementerian Pendidikan dan Kebudayaan, 2013:5).

The Scientific Learning Model, a learning approach that emulates the methods used by scientists to build knowledge through observation, inquiry, information collection or experimentation, associating or processing information, and communication, is the primary pillar of the 2013 Curriculum (Majid, 2014:12). The goal of using this paradigm is to develop students who are not only proficient in the subject matter but also possess high-level thinking abilities (Higher Order Thinking Skills, or HOTS) and science process skills (Rusman, 2015:48).

The 2013 Curriculum has been extensively adopted in a variety of educational settings, including elementary schools. As demonstrated at SD Negeri Sewaka and SDN 017 Desa Tandan Sari, many schools use K-13 as the primary reference for learning planning, authentic evaluation, and student character development (Saputra & Stiawan, 2024:5-6). This broad implementation demonstrates the 2013 educational's comparatively developed and adaptable educational structure. The 2013 Curriculum is still regarded as useful and applicable, even if the national curriculum policy has shifted toward the Independent Curriculum and the Love Curriculum. After the Merdeka and Love curricula were released, the researcher attempted to re-implement the 2013 Curriculum.

The 2013 Curriculum encourages students to actively seek out and develop knowledge rather than placing teachers at the focus of learning. It is anticipated that student-centered learning will boost students' creativity and active participation in developing their knowledge, attitudes, and behaviors. Since learning is essentially an active process where students apply their thinking skills to gain comprehension, student activities are crucial (Dewi, 2019:215-216).

The Scientific Learning Model theoretically offers a great deal of optimism for the development of the perfect learning process, particularly in terms of raising student engagement. The first requirement for successful learning is active learning, which calls for students to take the initiative, be proactive, and participate completely in all learning stages (Sardiman, 2014:20). However, the actual situation demonstrates that the scientific method's implementation has not quite gone as planned. According to Lestari's research (2015:67-68), a large number of pupils continue to be passive and disinterested in their studies. This is consistent with research by Sari and Wijaya (2017:112-113) and Hasibuan et al. (2019:89-90), which found that students struggle to communicate learning outcomes and ask questions.

The application of the 2013 Curriculum Scientific Learning Model in Islamic Religion subjects in grade III at SD Negeri 101765 Bandar Setia must be thoroughly examined in order to determine the degree to which the model can promote student participation in the learning process, given the discrepancy between the expectations of curriculum implementation and the actual conditions in schools.

## **2. THEORETICAL STUDY**

### **Curriculum Learning Strategy 2013**

According to Law Number 20, of 2003 about the national education system, the curriculum is a collection of plans and arrangements pertaining to the goals, content, resources, and procedures utilized as guidance for the implementation of learning activities to fulfill

educational goals. (Sisdiana and others, 2019:23). The 2013 curriculum aims to develop coherent behavior, skills, and knowledge in order to make Indonesians helpful, creative, and productive. According to Mulyasa, the 2013 curriculum places a strong emphasis on character development and the capacity to apply different competencies to specific standards so that the outcomes are tangible for students, namely in the form of competency management (Utami, et al., 2025: 27).

The shift from a teacher-centered to a student-centered learning paradigm is one of the policies in the 2013 curriculum (K–13). The 5 M's—observing, questioning, acquiring knowledge, reasoning/associating, and communicating—are learning activities that need teachers to use a scientific (scientific) method in order to achieve this. (Baehaqi & Apandi, 2018:97) The terms "approach" and "scientific" are combined to form the scientific approach. "Scientific" refers to something that may be freely replicated by anybody, anywhere, at any time, in the context of space and time, whereas "approach" is described as a thought or idea employed to accomplish a goal. All knowledge is gathered through the five senses in the scientific approach to learning, which builds upon a scientific method by using logical and empirical procedures.

This approach's main goal is to give students an immersive learning environment so that teachers may serve as educators, motivators, and facilitators. (Rangkuti and others, 2025: 247). The development of 21st century abilities known as the 4Cs—communication, teamwork, critical thinking and problem solving, and creativity and innovation—can be aided by scientific methods. (Baehaqi & Apandi, 2018:97–98). The following Qur'anic and Hadithic postulates pertain to the 2013 curriculum's (K–13) learning strategy: found in verses 17–20 of QS. Al-Ghasyiyah (88).

أَفَلَا يَنْظُرُونَ إِلَى الْإِبِلِ كَيْفَ خُلِقَتْ ۝١٧  
وَالِى السَّمَاءِ كَيْفَ رُفِعَتْ ۝١٨  
وَالِى الْجِبَالِ كَيْفَ نُصِبَتْ ۝١٩  
وَالِى الْأَرْضِ كَيْفَ سُطِحَتْ ۝٢٠

This means: "Don't they pay attention to the camel, how he was created?" (17), "How is the heavens exalted?" (18), "How are the mountains established?" (19), "How about the earth being stretched out?" (20). (Al-Ghasyiyah, QS: 17–20)

This verse encourages people to reflect on God's creation in the universe, including the dispersed earth, mountains, sky, and camels. This is in line with the 2013 Curriculum, which employs observation, inquiry, and reasoning in a scientific manner. In this manner, rather than merely receiving explanations from lecturers, kids gain knowledge directly from nature.

Through this process, students learn geography and science while also developing their faith and thankfulness to God. As a result, the 2013 Curriculum's objective of developing knowledgeable, moral, critical, and devout students is fulfilled.

Additionally, it may be found in a Hadith of the Prophet Muhammad (saw) recounted by Imam Bukhari No. 3559 in Fathul Bari in the Book of Commendable Ethical Behavior in the Chapter on the Attributes of the Prophet (saw).

حَدَّثَنَا عَبْدَانُ عَنْ أَبِي حَمْزَةَ عَنْ الْأَعْمَشِ عَنْ أَبِي وَائِلٍ عَنْ مَسْرُوقٍ عَنْ عَبْدِ اللَّهِ بْنِ عَمْرٍو رَضِيَ اللَّهُ عَنْهُمَا قَالَ لَمْ يَكُنْ النَّبِيُّ صَلَّى اللَّهُ عَلَيْهِ وَسَلَّمَ فَاحِشًا وَلَا مُتَفَحِّشًا وَكَانَ يَقُولُ إِنَّ مِنْ خِيَارِكُمْ أَحْسَنَكُمْ أَخْلَاقًا

*"The Prophet (peace and blessings of Allaah be upon him) never spoke dirty or did anything wicked, and he said, 'Indeed, the best of you is the one of the best in morals.'" is how 'Abdan from Abu Hamzah from Al A'masy from Abu Wa'il from Masruq told the story. (Al-Asqalani, 2000:129–130)*

This hadith is used in conjunction with the K–13 curriculum to help students develop virtues including accountability, discipline, honesty, and civility. This supports the claim that the 2013 curriculum is also referred to as a character-based curriculum. This hadith also emphasizes that students' ability to become "the best" by upholding high moral standards in their daily lives is just as important as their intellectual achievement. The following are a few learning goals using a scientific approach:

- 1) To raise pupils' intellectual capacity, particularly their critical thinking abilities.
- 2) Establishing learning environments where kids believe that education is essential.
- 3) High learning results are attained

The following are some advantages of studying the 2013 curriculum:

- 1) For pupils
  - a. A greater desire to learn.
  - b. Students' thought processes are more sophisticated.
  - c. Teach pupils to appreciate one another and find solutions to societal issues.
  - d. In addition to knowledge, students acquire competences in four areas: spirituality, society, knowledge, and skills.
  - e. The classroom environment becomes cozy and enjoyable.
- 2) For educators
  - a. Teachers can use a variety of resources to simultaneously explain a single concept.
  - b. Learning reduces the amount of time needed to provide pupils comprehension.

- c. Teachers gain a deeper understanding of students' skills from multiple perspectives simultaneously, including spiritual, social, knowledge, and skill elements (Bahtiar, 2019:179-181).

### **Steps of the 2013 Curriculum Learning Strategy**

The following learning steps—observing, questioning, gathering information/data (exploring/researching) → associating → communicating—reflect the scientist's flow in learning that uses K13. The Regulation of the Minister of Education and Culture of the Republic of Indonesia Number 65 of 2015 about Standards for the Process of Elementary and Secondary Education outlines each of these processes. The Minister of Education and Culture's No. 81 A of 2013 outlines the following procedures for science-based learning: (Padmadewi et al., 2017:19–20; Ritonga, A. A., 2017:82)

#### **1) Observing**

Learning activities: Students read, listen, listen, see (without or with tools).  
Competencies developed: Practicing seriousness, thoroughness, and seeking information (Padmadewi, et al., 2017:19-20, Ritonga, A, A, 2017:82, Kurniasih & Sani, 2016: 36-37, Lestari, 2018: 45).

#### **2) Ask**

Learning activities: Students ask questions about information that is not understood from what is observed or questions to get additional information about what is observed (ranging from factual questions to hypothetical questions).  
Competencies developed: Develop creativity, curiosity, and the ability to formulate questions to form the critical minds necessary for intelligent living and lifelong learning (Padmadewi, et al., 2017:19-20, Ritonga, A, A, 2017:82, Sari & Wijaya, 2017: 112-113, Nuraini, 2020: 78).

#### **3) Gathering information/experiments**

Kegiatan belajar: Siswa melakukan eksperimen membaca sumber lain selain buku teks mengamati objek/kejadian/ aktivitas. wawancara dengan narasumber.  
Kompetensi yang dikembangkan: Mengembangkan sikap teliti, jujur, sopan, menghargai pendapat orang lain, kemampuan berkomunikasi, menerapkan kemampuan mengumpulkan informasi melalui 7 (tujuh) langkah pembelajaran, kegiatan belajar kompetensi yang dikembangkan berbagai cara yang dipelajari, mengembangkan kebiasaan belajar, dan belajar sepanjang hayat (Padmadewi, dkk, 2017:19-20, Ritonga, A, A, 2017:82, Fitriani & Arifin, 2020: 134-135, Wahyuni, 2019: 59).

4) Associating/processing information

Learning activities: Students process the information that has been collected, both limited from the results of collection/experiment activities and the results of observing activities and information gathering activities. The processing of information collected from the nature of increasing breadth and depth to the processing of information that is in the nature of looking for solutions from various sources that have different opinions to contradictory ones. Competencies developed: Develop honesty, conscientiousness, discipline, obedience to the rules, hard work, ability. apply procedures, and the ability to think inductively and deductively in concluding (Padmadewi, et al., 2017:19-20, Ritonga, A, A, 2017:82, Hasibuan, et al., 2019: 89-90, Pratiwi, 2018: 101).

5) Communicate

Learning activities: Students submit observations, conclusions based on the results of analysis orally, in writing, or other media. Competencies developed: Develop honesty, conscientiousness, tolerance, systematic thinking skills, express opinions briefly and clearly, and develop good and correct language skills (Padmadewi, et al., 2017:19-20, Ritonga, A, A, 2017:82, Dewi, 2019: 215-216, Lestari, 2018: 48).

The advantages of the 2013 Curriculum are: Emphasizing More Character Education (Pratiwi, et al. 2021:17-18), Enabling Students to be More Active, Innovative and Creative (Pratiwi, et al. 2021:17-18, Damri, 2021:91, Hidayat, et al. 2022:11), More Responsive to Existing Social Phenomena (Pratiwi, et al. 2021:17-18, Hidayat, et al. 2022:11), Assessment Process Carried out from all Aspects, be it Affective, Cognitive and Psychomotor (Pratiwi, et al. 2021:17-18, Susilo, A, et al 2022:160, Hidayat, et al. 2022:11), Institutions Receive Assistance from the Center (Pratiwi, et al. 2021:17-18), Encouraging Teachers to Be More Creative as Learning Facilitators (Pratiwi, et al. 2021:17-18, Susilo, A, et al. 2022:160), Providing More Efficient Learning Facilities (Pratiwi, et al. 2021:17-18, Hidayat, et al. 2022:11).

And in addition to its advantages, the 2013 Curriculum also has shortcomings, namely the following: Teachers Are Not Involved in the Making of the 2013 Curriculum, Many Schools Still Apply Conventional KBM, Many Teachers Do Not Have Mental Readiness Teachers Misunderstand Many Misunderstandings So They Lack Explanations (Pratiwi, et al 2021:17-18, Hidayat, et al 2022:11), In Preparing Teacher Lesson Plans Less Creative (Pratiwi, et al 2021:17-18, Hidayat, et al 2022:11), Materials That Must Be Mastered by Too Many

Students (Pratiwi, et al 2021:17-18, Hidayat, et al 2022:11), Less Independent Schools in Responding to the Existing Curriculum (Pratiwi, et al 2021:17-18).

### 3. RESEARCH METHODS

In the implementation of this study, the approach used by the researcher is a qualitative method with a phenomenological type for students at SD Negeri 101765 Bandar Setia which will be carried out on December 4, 2025. The data in this study is the result of observations, document interviews. The data collection techniques from this study are observation, interviews, and documentation (Harahap, 2020:56). As for the data analysis technique, the researcher uses the technique of Miles and Huberman (2014) in the form of data reduction, data presentation, conclusion drawing or data verification. The validity of the data in this researcher's writing is carried out by lingering in observation, prolonged in research and triangulation which includes source triangulation, triangulation techniques and triangulation of different times in collecting data to ensure consistency (Choiri & Sidiq, 2019: 90-95).

### 4. RESULTS AND DISCUSSION

Based on the data analysis conducted by the researcher, it shows that the implementation of the learning process carried out in grade III of SD Negeri 101765 Bandar Setia is as follows:

First, the researcher begins the learning process by saying greetings, because saying greetings before starting to learn reflects a polite and respectful attitude, and is a hope that learning activities run smoothly and full of blessings. Greetings can also help build a comfortable classroom atmosphere and mentally prepare students to focus on receiving lessons. Second, the researcher introduces himself to the students and conveys the researcher's purpose in the class. Third, the researcher asked how they were doing and invited students to pray together, namely: "*robbi zidni 'ilman warzuqni fahman waamalan sholiha*". Fourth, the researcher conducts attendance of students to see who is present in class. Fifth, the researcher asked about the material that had been studied previously and related it to the material that the researcher would bring on that day, namely about Ramadan Fasting. In this learning process, the researcher used the K13 learning strategy which is often known as 5 M learning.

Based on data analysis, the researcher first gave directions to open the Religious Subject Package book right in the discussion of Ramadan fasting, then the researcher asked students to read and observe the material about Ramadan fasting regarding the definition, harmony,

mandatory requirements, legal requirements, and *observing* sunnahs. This can be seen in the following image:



**Figure 1.** Learning Implementation 1.

Second, the researcher provides the widest possible space for students to make and ask questions related to material that they do not understand about Ramadan fasting, in addition to provoking the activity of students to provide simple triggering questions related to students' daily lives during Ramadan fasting, such as how the experience of fasting at home or the challenges they face while fasting. (*Questioning/questioning*). Then the researcher answered questions asked by students about Ramadan fasting material that they did not understand. Third, the researcher divided students into several groups and then directed them to actively seek information through reading package books and group discussions by giving different tasks to each group to discuss the material in the package book such as the intention of fasting and breaking the fast, things that break the fast, and practices in Ramadan fasting (*exploring/exploring*). Fourth, the researcher asks students to write down what they have read in the package book based on the group assignments that the researcher has shared, then in each group the researcher directs to memorize what the students have read and write (*associating*). Fifth, the researcher provides an opportunity for each group to present the results of the discussion and the material that they have memorized in front of the class. Researchers and other students gave their appreciation to students who dared to present the results of their discussions (*communicating*). This can be seen in the following image:



**Figure 2.** Learning Implementation 2.

Before ending the learning, the researcher held a short interview to evaluate their understanding by asking the students if they understood the material that the researcher taught, then the students answered "I understand". After that, the researcher provides motivation so that students can apply their understanding in daily life, then the researcher closes the learning by inviting students to say "*Alhamdulillahirabbil'alamin*" and then the researcher says greetings as a marker of the end of learning activities on that day.

The results of the data analysis show that after the implementation of the 2013 Curriculum, it can make:

- 1) Students become active and enthusiastic to ask questions. This is in accordance with the opinion (Rusman, 2015: 234) which states that learning with a scientific approach encourages students to develop curiosity through observing and asking questions. With the opportunity to ask questions, students not only become more active, but also directly involved in the learning process. This can be seen in the following image:



**Figure 3.** Learning Implementation 3.

- 2) Students become more courageous and confident for presentations in front of the class. This is in line with the opinion (Hosnan, 2014: 39) which states that communication activities in learning aim to train students to convey the results of understanding and ideas orally. Through presentation activities, students are trained to be confident and dare to express their opinions in front of their peers. This can be seen in the following image:



**Figure 4.** Learning Implementation 4.

- 3) Students feel happy and happy when the researcher gives quizzes as a form of evaluation of material understanding, such as questions about the meaning of fasting, the intention of fasting, the prayer to break the fast, and the harmony of fasting. This is in line with the opinion (Hidayah & Anwar, 2021: 54) which explains that the provision of interactive quizzes can create a pleasant learning atmosphere and increase students' emotional engagement. This feeling of pleasure encourages students to be more enthusiastic in answering questions, especially when accompanied by giving appreciation at the end of learning. This can be seen in the following image:



**Figure 5.** Learning Implementation 5.

Based on the data analysis by the researcher, even though the implementation of the 2013 Curriculum shows a positive impact on student activity, there are still some shortcomings in its implementation, such as the effectiveness of learning time that is not optimal because the stages of the scientific approach take a long time. In addition, there are still two students who are not able to read and write fluently so they have difficulties in participating in learning activities. Classroom conditions are also sometimes difficult to condition, which has an impact on disturbing the concentration of other students. The significant difference in academic ability between students causes uneven learning participation, where some students still depend on the direction of researchers. And the focus of student learning that is easily distracted by other things also affects the smooth learning process in the classroom.

## **5. CONCLUSIONS AND SUGGESTIONS**

Based on the results of research and discussion on the Implementation of the 2013 Curriculum Scientific Learning Strategy in the subject of Islamic Religious Education in grade III of SD Negeri 101765 Bandar Setia, it can be concluded that the implementation of the scientific approach through the 5M steps (observing, questioning, collecting information, associating, and communicating) is able to increase the activeness and involvement of students in the learning process. Students show higher enthusiasm, courage in asking questions and expressing opinions, and confidence when presenting the results of the discussion in front of the class. In addition, the learning atmosphere becomes more fun and meaningful, especially when combined with group discussion activities and quizzes as a form of evaluation.

However, the application of the scientific approach in the 2013 Curriculum still faces a number of obstacles, such as limited time allocation, differences in students' literacy and academic abilities, and classroom conditions that are not fully conducive. Therefore, it is necessary to have a more structured learning plan, the implementation of adaptive learning strategies, and an increase in the role of teachers in facilitating and guiding students according to their learning characteristics and needs so that the learning goals of Islamic Religious Education can be achieved optimally and sustainably.

## REFERENCE

- Al-Asqalani, A. I. A. I. H. (2000). *Fath al-bari syarh al-Bukhari* (Juz 5). Dar al-Kutub al-Ilmiah.
- Apandi, I., & Baehaqi, M. A. (2018). *Strategi pembelajaran aktif abad 21 dan HOTS*. Samudra Biru.
- Arlina, Rangkuti, M. H., Sitorus, I. P. S., & Jauzah, N. A. (2025). Implementasi strategi pembelajaran saintifik K-13 pada mata pelajaran pendidikan agama Islam di Madrasah Ibtidaiyah Nurul Hidayah Medan. *Jurnal Pendidikan, Sosial & Humaniora*, 3(1), 248. <https://doi.org/10.61104/jq.v3i1.789>
- Bahtiar, R. S. (2019). Persepsi pelaksanaan Kurikulum 2013 sekolah dasar. *Jurnal Ilmiah Pendidikan Dasar*, 4(2), 179–181.
- Choiri, M. M., & Sidiq, U. (2019). *Metode penelitian kualitatif di bidang pendidikan*. CV Nata Karya.
- Damri. (2021). *Pengembangan kurikulum dan pembelajaran*. Rajagrafindo Persada.
- Departemen Pendidikan dan Kebudayaan. (2013). *Peraturan Menteri Pendidikan dan Kebudayaan Nomor 81A Tahun 2013 tentang implementasi Kurikulum 2013*. Kementerian Pendidikan dan Kebudayaan.
- Dewi, R. (2019). Pembelajaran berpusat pada siswa dalam Kurikulum 2013. *Jurnal Pendidikan Dasar*, 10(2), 210–220.
- Dewi, S. (2019). Pendekatan saintifik dalam peningkatan keaktifan siswa pada pembelajaran agama Islam. *Journal of Islamic Education*, 2(2), 215–216. <https://doi.org/10.22373/jie.v2i2.4181>
- Fitriani, A., & Arifin, Z. (2020). Implementasi pendekatan saintifik terhadap keaktifan belajar siswa. *Jurnal Ilmiah Pendidikan*, 5(2), 130–138.
- Harahap, N. (2020). *Penelitian kualitatif*. Wal Ashri Publishing.
- Hasibuan, R., Siregar, E., & Nasution, S. (2019). Analisis keaktifan siswa melalui pendekatan saintifik pada Kurikulum 2013. *Jurnal Pendidikan dan Pembelajaran*, 8(1), 85–94.
- Hidayah, N., & Anwar, K. (2021). Pengaruh pemberian kuis terhadap motivasi dan keaktifan belajar siswa. *Jurnal Pendidikan dan Pembelajaran*, 28(1), 50–57.
- Hidayat, R., et al. (2022). Strategi guru pendidikan agama Islam dalam menerapkan pembelajaran pendekatan saintifik pada Kurikulum 2013. *Jurnal Ilmiah Keagamaan, Pendidikan dan Dakwah*, 18(2), 10–11.
- Hosnan, M. (2014). *Pendekatan saintifik dan kontekstual dalam pembelajaran abad 21*. Ghalia Indonesia.
- Kementerian Pendidikan dan Kebudayaan. (2013). *Materi pelatihan implementasi Kurikulum 2013*. Badan Pengembangan SDM Pendidikan dan Kebudayaan.
- Kurniasih, I., & Sani, B. (2016). Implementasi pendekatan saintifik dalam Kurikulum 2013. *Jurnal Edukasi*, 14(1), 32–40.
- Lestari, A. D. (2015). Pendekatan saintifik dalam pembelajaran sistematik untuk meningkatkan keterampilan bertanya siswa. *Widyagogik*, 3(1), 67–68.
- Lestari, A. D. (2016). Keaktifan siswa sebagai indikator keberhasilan pembelajaran di SMP. *Widyagogik*, 2(1), 12–20.

- Lestari, S. (2018). Peran pendekatan saintifik dalam meningkatkan keaktifan belajar. *Jurnal Pendidikan Indonesia*, 7(1), 42–50.
- Majid, A. (2014). *Implementasi Kurikulum 2013: Kajian teoretis dan praktis*. Remaja Rosdakarya.
- Miles, M. B., & Huberman, A. M. (2014). *Analisis data kualitatif: Buku sumber tentang metode-metode baru* (T. R. Rohidi, Trans.). UI Press.
- Nuraini, L. (2020). Tahap menanya dalam pembelajaran saintifik. *Jurnal Inovasi Pendidikan*, 6(1), 75–82. <https://doi.org/10.51672/jbpi.v1i2.4>
- Padmadewi, N. N., et al. (2017). *Pengantar micro teaching*. Kharisma Putra Utama Offset.
- Peraturan Menteri Pendidikan dan Kebudayaan Republik Indonesia Nomor 103 Tahun 2014 tentang pembelajaran pada pendidikan dasar dan pendidikan menengah.
- Pratiwi, D. A. (2018). Kemampuan mengasosiasikan pada pembelajaran saintifik. *Jurnal Pendidikan Sekolah Dasar*, 3(2), 98–105. <https://doi.org/10.26740/jrpd.v2n1.p105-111>
- Ritonga, A. A. (2017). Pendekatan saintifik pembelajaran pendidikan agama pada sekolah dasar Islam terpadu. *Jurnal Pendidikan Guru Sekolah Dasar*, 2(2), 82. <https://doi.org/10.30821/miqot.v4i1.339>
- Rusman. (2015a). *Model-model pembelajaran: Mengembangkan profesionalisme guru*. Rajawali Pers.
- Rusman. (2015b). *Pembelajaran tematik terpadu: Teori, praktik, dan penilaian*. Rajawali Pers.
- Saputra, A. A., & Stiawan, A. (2024). Kajian review Kurikulum K13 dan Kurikulum Merdeka dalam implikasinya terhadap pembelajaran di masa mendatang. *Social Science Educational Research*, 5(1), 5–6. <https://doi.org/10.26740/sosearch.v5n1.p1-17>
- Sardiman, A. M. (2014). *Interaksi dan motivasi belajar mengajar*. Rajawali Pers.
- Sari, D. P., & Wijaya, A. (2017). Hambatan guru dan siswa dalam implementasi pendekatan saintifik. *Jurnal Pendidikan Indonesia*, 6(2), 108–116. <https://doi.org/10.35316/jpii.v2i1.66>
- Sisdiana, E., et al. (2019). *Evaluasi pelaksanaan pembelajaran Kurikulum 2013*. Pusat Penelitian Kebijakan Pendidikan dan Kebudayaan, Badan Penelitian dan Pengembangan, Kementerian Pendidikan dan Kebudayaan.
- Susilo, A., et al. (2022). *Strategi pembelajaran di era teknologi informasi dan komunikasi*. Dotplus Publisher.
- Utami, R. D., et al. (2025). *Inovasi pendidikan*. CV Gita Lenter.
- Wahyuni, S. (2019). Eksperimen sebagai bagian pendekatan saintifik. *Jurnal Pendidikan IPA*, 4(1), 55–62.