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THE IMPROVEMENT OF TEACHERS' KNOWLEDGE AND SKILLS THROUGH MENTORING IN THE DEVELOPMENT OF THEMATIC TEACHING MATERIALS INTEGRATED WITH SCIENCE AND ISLAM AT MADRASAH IBTIDAIYAH (MI)

Baharudin[1]*, Ida Fiteriani[1], Syaiful Anwar[1], Nur Asiyah[1], Dian Andesta Bujuri[2]
[1]Universitas Islam Negeri Raden Intan, Lampung, Indonesia
[2]Universitas Islam Raden Fatah, Palembang, Indonesia
*baharudinpgmi@radenintan.ac.id

Abstrak: Pengembangan bahan ajar tematik terintegrasi Sain-Islam di Madrashah Ibtidaiyah merupakan sebuah strategi dalam memberikan pendidikan holistik dan praktis. Madrasah Ibtidaiyah Sebagai lembaga pendidikan keagamaan seharusan mengadopsi pendekatan pembelajaran khas. Penelitian ini bertujuan untuk meningkatkan keterampilan guru dalam merancang dan mengembangkan bahan ajar tematik terintegrasi Sains-Islam dengan tema ”indahnya kebersamaan”. Metode pendampingan yang digunakan yaitu menggunakan Service Learning (SL) terdiri dari lima tahap yaitu melakukan engagement, reflection, reciprocity dan dissemination. Hasil pendampingan menunjukan keterampilan pemahaman guru ditinjau dari aspek pemahaman integrasi sebelum pendampingan rerata 70%, setelah dilakukan pendampingan meningkat menjadi 80%. Pada aspek memahami metode integrasi 68% sebelum pendampingan, setelah dilakukan pendampingan meningkat menjadi 78%. Selanjutnya terkait dengan pencarian ayat sain dan hadits juga mengalami peningkatan yaitu awalnya 70% menjadi 84%. Begitu juga dengan keterampilan pengembangan bahan ajar secara signifikan mengalami peningkatan yaitu 80% setelah pendampingan. Temuan ini menunjukan bahwa pendampingan yang dilakukan efektif meningkatkan keterampilan guru dalam merancang dan mengembangkan bahan ajar tematik terintegrasi Sains-Islam. Oleh karena itu, penelitian ini merupakan solusi efektif peningkatan mutu pendidikan dalam rangka mempersiapkan peserta didik menjadi individu yang tidak hanya cerdas secara intelektual, tetapi juga kuat secara moral dan spiritual.

Kata Kunci: bahan ajar, integrasi sains-Islam, pembelajaran IPA

Abstract: Developing thematic teaching materials integrated with Science-Islam in Madrasah Ibtidaiyah is essential for providing holistic and relevant education. As a faith-based educational institution, Madrasah Ibtidaiyah is expected to adopt a distinctive learning approach that integrates religious values with scientific knowledge. This study aims to enhance teachers' skills in designing and developing thematic teaching materials integrated with Science-Islam, particularly on the theme "The Beauty of Togetherness. The method used in this study is Service Learning (SL), which consists of five stages: engagement, reflection, reciprocity, and dissemination. The results of the mentoring process showed significant improvements in teacher skills. In the aspect of integration understanding, the average score increased from 70% to 80% after mentoring. Understanding the integration methods also improved, from 68% before mentoring to 78%. The ability to find relevant Quranic verses and hadiths for the learning theme increased from 70% to 84%. Lastly, the teachers' skills in developing teaching materials significantly improved, reaching 80% after the mentoring process. These findings indicate that the mentoring method based on Service Learning effectively enhances teachers' skills in developing thematic teaching materials integrated with Science-Islam. This study provides a concrete solution to improve the quality of education, preparing students to become individuals who are not only intellectually capable but also morally and spiritually strong.

Keywords: teaching materials, science-Islam integration, science learning

Introduction

As a religious-based educational institution, Madrasah Ibtidaiyah has the responsibility to adopt a distinctive learning approach that integrates religious values with modern scientific knowledge. It is not only relevant to the curriculum needs, which focus on the development of both moral and intellectual aspects of students, but also aligns with the vision of comprehensive Islamic education. As stated by Zabidi et al. (2021), integration in teaching and learning activities serves as a strategic solution to enhance students' knowledge while strengthening their understanding of the relationship between science and Islamic values. Therefore, teachers' competence in developing relevant and contextual teaching materials becomes a key factor in ensuring the successful implementation of this approach in Madrasah Ibtidaiyah.

On the other hand, creating more meaningful and applicable learning makes knowledge more relevant and actionable (Fitriyawany et al., 2022; Jamilah et al., 2014; Tahir, 2021; Zarkasih et al., 2019). The integration of Science and Islam in Madrasah Ibtidaiyah (MI) is not merely a method but a strategy to create comprehensive education, preparing students to become individuals who are intellectually and morally intelligent. This aligns with the Islamic values that form the foundation of education at MI, as emphasized by Rusydiyah et al., (2019), who stated that education based on Islamic values aims to shape students' character, excelling both academically and spiritually. Therefore, the integration of Science and Islam is not only pedagogically relevant but also essential in shaping a generation with an Islamic character.

To date, the development of integrated thematic Science and Islam teaching materials in Madrasah Ibtidaiyah throughout Indonesia, particularly in Bandar Lampung, remains an intriguing topic for further research. This is reflected in teachers' understanding of how to convey ideas and design integrated thematic Science and Islam teaching materials (Susilowati, 2017). As demonstrated in research by (Bujuri & Baiti, 2019) who developed integrated Science teaching materials based on a contextual approach in Yogyakarta, and by (Sumining, 2021) regarding thematic teaching materials based on Islamic values in Madrasah Ibtidaiyah, these efforts contribute to the ongoing development of integrated teaching materials (Bujuri et al., 2022; Dwiningsih et al., 2022; Lestariningsih & Suardiman, 2017; Susilowati, 2017). Focusing on the development of integrated teaching materials aims to improve the quality of Science and Islam education at the MI level, support a holistic understanding of students, and meet the demands of the 21st century (Nguyen & Thai, 2023; Suciati et al., 2022; Zubaidah, 2020). Thus, such development research is expected to become more effective in meeting the growing educational needs. This research is highly urgent as it focuses on improving the quality of education in Madrasah Ibtidaiyah (MI) through the development of integrated Science-Islam thematic teaching materials. In the context of the challenges of the 21st century, education is no longer merely about delivering academic knowledge, but also about equipping students with critical thinking, creativity, collaboration, and communication skills, all grounded in moral and spiritual values.

At the beginning of the mentoring activity, there were many interesting stories in the process of knowledge transfer for MI teachers. Many of them initially had a limited understanding of the concept of integration in teaching materials and the teaching and learning

process (KBM). They tended to use the Curriculum 2013 thematic textbook as the primary source of learning because it was provided by the government. However, there were no teaching materials that integrated Islamic concepts, due to the teachers' limited skills and time. As a result, students lacked a comprehensive understanding that the empirical truths of science could be reinforced with evidence found in religious texts, such as verses from the Qur'an and Hadith. This highlights the need for the development of integrated teaching materials, as carried out by (Murditya et al., 2016; Suciati et al., 2022; Susilowati, 2017). By developing integrated materials, MI can provide content that not only meets academic standards but also holds spiritual relevance, thus creating a more meaningful learning experience for students.

So far, the solution implemented by teachers to address these issues has been to design more engaging lessons, such as creating interactive media, utilizing various technologies, and employing active learning strategies, with the hope that students will become more interested in learning (Dini et al., 2020; Pangestuti et al., 2020; Susilowati, 2017) In the service activities, the team offered a solution by developing integrated thematic teaching materials that combine science and Islam, thereby enhancing students' holistic understanding and creating a more impactful learning experience. Through this approach, this research not only supports the national educational goals but also makes a significant contribution to strengthening the identity of Islam-based education. Students who understand the relationship between Science and Islam will grow into intellectually and morally excellent individuals, capable of meeting the challenges of the 21st century, while upholding Islamic values as their foundational principles.

Community-based research is grounded in the argument that mentoring activities are effective in enhancing the knowledge capacity of MI teachers regarding the development of integrated thematic teaching materials for Science and Islam (Baharudin et al., 2021; Hardi & Tasman, 2021; Ridhoi et al., 2023; Taher et al., 2022; Ulia et al., 2019) Service-based research serves as an ideal platform for MI teachers to design teaching materials that support the learning process. This research was conducted with the aim of producing integrated thematic teaching materials for Science and Islam, in the form of an ISBN-certified textbook for MI students in Bandar Lampung. This book will later be used as teaching material in all MINs (Islamic Elementary Schools) in Bandar Lampung. Thus, this initiative is expected to positively impact education, equipping students with holistic knowledge and enriching the learning approaches in MI schools in Bandar Lampung. This research focuses on efforts to enhance teacher knowledge through mentoring in the development of integrated thematic Science-Islam teaching materials at Madrasah Ibtidaiyah (MI). It is crucial to consider the challenges of 21st-century education, which require the younger generation to possess academic skills and critical thinking, creativity, and problem-solving skills grounded in moral and spiritual values.

Method

The mentoring program for MI teachers aimed at improving their knowledge and skills in developing integrated thematic Science and Islam teaching materials employs the Service Learning (SL) approach. Service Learning (SL) is an approach that aims to directly apply

knowledge during the learning process with the goal of providing concrete benefits to the partner and its operations (Oktapriana, et al., 2021; Suwastini et al., 2022; Pandanwangi et al., 2023). The service team consists of three lecturers from the PGMI program at UIN Raden Intan Lampung and three students who have been involved in the planning stage to finalising the development of integrated thematic Science and Islam teaching materials.

The implementation phase of the service activity began with an initial assessment and discussions with MI teachers to understand the issues related to the development of integrated thematic teaching materials for Science and Islam. The service team collaborated with MI teachers by holding direct discussions to address the issues present in the teaching materials they were using. Through this process of assessment and discussion, the service team was able to provide solutions to MI teachers in designing teaching materials that specifically integrate Science and Islam content. The next step in the implementation phase is transferring knowledge from previous research to MI teachers. The service team conducted training for MI teachers on the process of developing integrated thematic teaching materials for Science and Islam. With this approach, it is expected that MI teachers will be able to develop teaching materials that meet their needs and combine aspects of Science and Islamic values in the learning process.

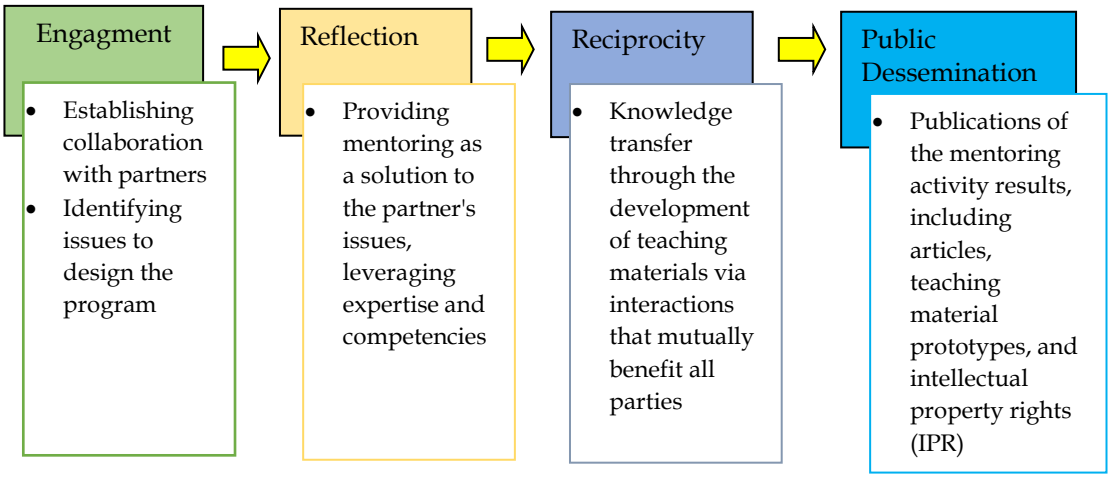


Figure 1. Service Learning Method Flow in MI Teacher Mentoring

This knowledge transfer activity was conducted at MIN 5 Bandar Lampung, which serves as the center for KKMI in the Sukarame sub-district of Bandar Lampung. The process further involved mentoring in the development of thematic teaching materials integrating Science and Islam for MI teachers. In addition to providing direct knowledge to the MI teachers, the community service program also included the provision of guides and examples for the creation of teaching materials. These guides were provided to the MI teachers with the expectation that they would enhance the effectiveness of the knowledge transfer process. The Service Learning method was used in the implementation of this program, as described in the studies by (Suwastini et al., 2022; Suwendi, et al., 2022). Therefore, it is hoped that MI teachers will better understand and implement thematic teaching materials that integrate Science and Islam, improve the quality of teaching, and provide positive benefits for students. The flow of the community service activities can be seen in Figure 1.

Results and Discussion

The Knowledge Transfer process in the development of integrated Science and Islam teaching materials through Community-Based Research activities for Madrasah Ibtidaiyah (MI) teachers in Bandar Lampung was carried out according to the pre-established plan. Each step of the mentoring process was carefully designed, following procedures and techniques that had been prepared in alignment with the roadmap (grand map) set by the research team. In this context, planning refers to the strategic plan or working guide that directs all activities in the research and development of integrated Science and Islam teaching materials. Thus, this Knowledge Transfer process was carried out effectively and efficiently, ensuring that the knowledge generated could be well applied by MI teachers in their teaching.

Based on the initial analysis, two main issues were identified that MI (Madrasah Ibtidaiyah) teachers face in developing integrated Science and Islam teaching materials. First, the teachers' understanding of teaching material development is still limited. Second, mentoring and training activities for the development of teaching materials are rarely conducted, and many teachers have never participated in such activities. In response to this situation, the community service team from the Madrasah Ibtidaiyah Teacher Education Program (PGMI) at UIN Raden Intan Lampung, in collaboration with the Madrasah Ibtidaiyah Working Group (KKMI) in Sukarame District, Bandar Lampung, aimed to address these issues by developing engaging teaching materials that meet the needs of MI schools. This initiative aims to improve teachers' understanding and provide the necessary mentoring to enhance the quality of integrated Science and Islam teaching materials in MI.

Before commencing the Knowledge Transfer process, the community service team conducted initial preparations by analyzing the situation at the mentoring site. This analysis was carried out to understand the challenges faced by MI teachers and to identify their needs. The team began this phase by distributing questionnaires to all MI teachers. The questionnaire was designed to gather information on various aspects, including understanding of the integration concept, knowledge of integration methods, mapping of Quranic verses and Hadith, and skills in developing teaching materials. Through this activity, the team successfully gathered important information related to the development of integrated teaching materials for Science and Islam. With this collected data, the service team was able to design more targeted strategies and develop teaching materials that align with the needs of MI teachers. This process became a solid foundation for effective Knowledge Transfer aimed at improving the quality of teaching in MI schools.

After completing the preparation and observation activities, the community service team successfully identified the needs and issues faced by MI teachers in Sukarame District, Bandar Lampung. Subsequently, the team proceeded with conducting a socialization and training event with the theme "Development of Integrated Thematic Science and Islam Teaching Materials for MI Teachers in Bandar Lampung." The socialization and training activity was held in person on August 16, 2023, at MIN 5 Bandar Lampung (Figure 2). This event was divided into two main sessions: training on developing teaching materials and a workshop on mentoring the

development of integrated Science and Islam teaching materials. Before carrying out this activity, the community service team aimed to provide better guidance and understanding to MI teachers in developing teaching materials that combine Science and Islam approaches, thus improving the quality of education in Bandar Lampung.

(a) (b)

Figure 2. (a) The resource person delivering a training session on the development of integrated Science and Islam teaching materials; (b) The participants attending the socialization and training session on the development of the integrated Science and Islam curriculum.

In the first session, there were three speakers from UIN Raden Intan Lampung and UIN Raden Fatah Palembang. They presented material on the curriculum and teaching in Madrasah Ibtidaiyah (MI), as well as on the development of integrated Science and Islam teaching materials for MI teachers. In the second session, the teachers, divided into groups from each MI, were mentored in the preparation of integrated Science and Islam teaching materials. The activities began with the analysis of Competency Standards (SK) and Basic Competencies (KD), formulating learning indicators, and designing teaching books that integrate Science and Islam. From this phase, six themes were collected to serve as the basis for the next stage of developing teaching materials. The goal of this activity was to assist MI teachers in developing teaching materials that integrate scientific knowledge and Islamic values, thereby enhancing the quality of education in Madrasah Ibtidaiyah.

Subsequently, on July 28, 2023, a Focus Group Discussion (FGD) and mentoring session was held with the MI teachers. This activity is depicted in Figure 3. The core of this activity was to provide an opportunity for the teachers to present the problems they encountered during the field research, as well as the challenges they faced in the process of writing integrated thematic teaching materials combining Science and Islamic values. One main issue identified was that, within each group, some individual teachers had not fully understood or mastered the process of designing integrated teaching materials for Science and Islamic teachings. The FGD and mentoring sessions served as a platform for teachers to share experiences, learn from each other, and collaboratively seek solutions to the challenges faced in developing integrated Science and Islam teaching materials, thereby continuously improving the quality of education in Madrasah Ibtidaiyah.

(a) (b)

Figure 3. (a) The service team providing mentoring to the participants from the group at MIN 1 Bandar Lampung; (b) The service team providing mentoring to the participants from the group at MIN 5.

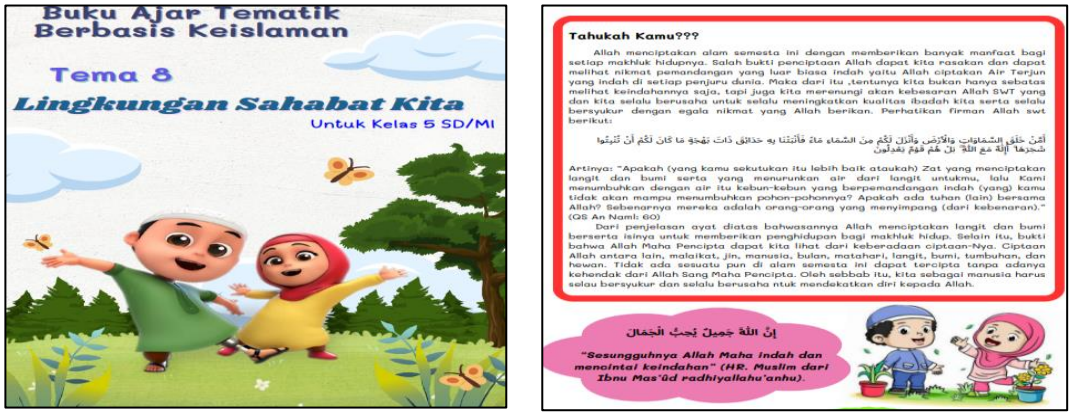
Next, the service team proceeded with the monitoring phase. Out of the six themes produced by each group from their respective schools, only four themes met the criteria to proceed to the next stage. This monitoring aimed to ensure that the process of writing and designing the teaching materials was proceeding as planned. The monitoring was conducted to ensure the classroom teachers' progress in creating teaching materials was well-tracked. At this stage, the team experienced success as all six teacher groups, working collaboratively, completed writing the four themes, which were ready to be developed into prototypes of integrated Science and Islam teaching materials (Figure 4).

(a) (b)

Figure 4. (a) The team conducting discussions and monitoring with the participants; (b) The team discussing the refinement of the teaching materials.

The service team evaluated by assessing the works of each group based on their respective Madrasah Ibtidaiyah (MI). From this evaluation, four themes were deemed suitable for development into prototypes of integrated thematic teaching materials for MI teachers. The selected theme for this teaching material is "The Environment is Our Friend." This teaching material will later be used as a supplementary resource alongside the official government

textbooks for MI schools in Bandar Lampung, as shown in Figure 5. The textbook has undergone a review, editing, and layout design process. The integrated Science and Islam thematic teaching materials were edited by the service team and received feedback from lecturers at UIN Raden Intan Lampung. After the editing process was completed, the manuscript was formatted (layout) and printed to be used as a study resource for MI teachers.



(a) (b)

Figure 5. (a) Cover of integrated teaching materials based on the selected theme; (b) Integration structure of teaching materials on the theme "The Environment is Our Friend."

A significant transformation emerged following the implementation of this community service program. When classroom teachers received training in the research and preparation of integrated Science and Islam teaching materials, they became more enthusiastic about developing such materials, particularly in Bandar Lampung. This change extended beyond their enthusiasm to include a deeper understanding of the teaching materials. The outcomes of these changes can be seen in Figure 6.

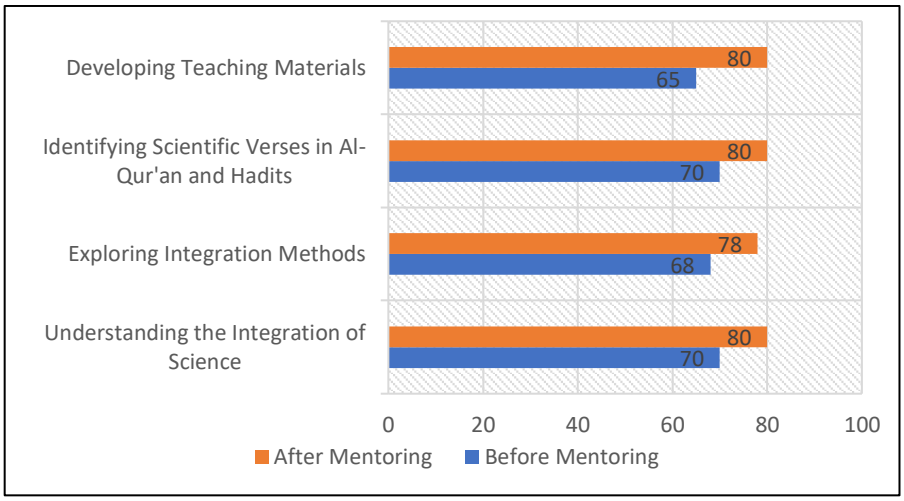


Figure 6. Teacher knowledge before and after the mentoring process.

Based on the graph above, it shows that the teachers' knowledge in developing integrated Science, Islam, and technology teaching materials is very good. It is reflected in their abilities across several key aspects, such as understanding the concept of integration, understanding

integration methods, finding scientific verses in the Qur'an, and having a deep understanding of developing integrated teaching materials. The success of this program also opens up potential for sustainability and further development, where this mentoring program can continue to be held periodically to ensure that teachers remain updated with the latest knowledge in the field of Science and Islam integration. With a more in-depth approach, in the future, such activities could be expanded to include other relevant topics in education, such as the use of technology in learning.

Ridhoi et al. (2023) stated that mentoring activities have been highly effective in imparting knowledge to teachers. Ronal Ridhoi et al. emphasized that through community service activities, teachers were able to design integrated teaching materials. Thus, the community service activities have successfully incorporated knowledge from various fields, including Science and Islam, into teaching materials. Future mentoring activities should consider extending the duration of training to allow teachers to delve deeper into the material presented, as well as providing more resources and tools for developing teaching materials. Additionally, building collaborative networks among teachers is essential so that the experiences and knowledge gained can be shared and applied more broadly.

The mentoring program has had a significant positive impact on the quality of teaching in Madrasah Ibtidaiyah (MI). Teachers have enhanced their knowledge and skills in designing teaching materials that integrate Science and Islamic values. This ability not only strengthens their understanding of the concepts and methods of integration but also encourages their mastery of using Quranic verses as a foundation for scientific-based teaching. As a result, learning in MI has become more meaningful, relevant, and applicable for students.

The success of this program demonstrates that mentoring activities have great potential to improve the quality of education continuously. With longer training durations and adequate support resources, teachers can delve deeper into the material and develop more innovative and contextual teaching materials. Furthermore, building collaborative networks among teachers is key to spreading this knowledge and best practices to a broader educational community. In the long term, this program contributes to creating a more inclusive and adaptive educational ecosystem, producing a generation of students who are not only intellectually capable but also have a strong moral foundation in line with Islamic values.

Conclusion

After conducting community service research on the development of integrated thematic teaching materials for Science and Islam based on "knowledge transfer," it can be concluded that the objectives of this service project have been successfully achieved. The improvement in the understanding of MI teachers regarding the development of teaching materials that integrate Science and Islam is evidence of the success of this approach. The "knowledge transfer" activities proved effective in deepening their understanding. This indicates that the service-learning approach implemented in this project was successful in enhancing the knowledge and skills of teachers in developing integrated Science and Islam teaching materials.

Furthermore, the "knowledge transfer" activities also proved to be an effective means for improving teachers' understanding of the development of integrated thematic Science and Islam teaching materials.

The community service-based mentoring program with the "knowledge transfer" initiative has contributed to educational institutions regarding the development of integrated Science and Islam teaching materials. Through this mentoring activity, there is also potential to improve the overall quality of education. Therefore, follow-up actions are necessary, such as conducting continued mentoring and similar programs related to teaching material development in schools. It needs to be done so that the improvement of MI teachers' competencies can be applied across all educational institutions. Ongoing efforts like these will help create a better quality educational environment and support future positive development for students. Thus, it is essential to continue further research on teaching material development within academic settings.

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References

Baharudin, Ida iteriani, I., Kriani, R., & Hunaifi, A. A. (2021). Penguatan Benteng Spiritual Pekon Marga Mulya: Pendampigan Anggota Remaja Islam Masjid (Risma) Sebagai Pengajar TPA Dimasa Pandemi Covid-19. *Dedikasi Nusantara: Jurnal Pengabdian Masyarakat Pendidikan Dasar*, *1*(2), 54-64. https://doi.org/10.29407/dedikasi.v1i2.16888

Bujuri, D. A., Ananda, N., Saputra, A. D., & Handayani, T. (2022). Pengembangan Bahan Ajar Tematik Berbasis Model Pembelajaran Contextual Teaching and Learning Di Madrasah Ibtidaiyah Swasta. *SITTAH: Journal of Primary Education*, *3*(2), 117–132. https://doi.org/10.30762/sittah.v3i2.495

Bujuri , D. A., & BAITI, M. (2019). Pengembangan Bahan Ajar Ipa Integratif Berbasis Pendekatan Kontekstual. *Terampil : Jurnal Pendidikan Dan Pembelajaran Dasar*, *5*(2), 184–197. http://dx.doi.org/10.24042/terampil.v5i2.3173

Dini, F., Nesri, P., Kristanto, Y. D., & Sanata, U. (2020). Pengembangan Modul Ajar Berbantuan Teknologi untuk Mengembangkan Kecakapan Abad 21 Siswa Pendidikan Matematika , Universitas Sanata Dharma Yogyakarta , Indonesia E-mail : Abstrak PENDAHULUAN Abad 21 memberikan banyak peluang bagi dunia pendidikan untuk be. *Aksioma*, *9*(3), 480–492.

Dwiningsih, K., Poedjiastoeti, S., Lutfi, A., Sukarmin, S., Hidayah, R., & Nisa, A. (2022). Interactive e-modules training and workshop as teaching materials the era of Society 5.0. *Abdimas: Jurnal Pengabdian Masyarakat Universitas Merdeka Malang*, *7*(2), 295–308. https://doi.org/10.26905/abdimas.v7i2.6615

Fitriyawany, F., Lailatussaadah, L., & Meutiawati, I. (2022). Integrating Islamic Values into Science Learning in Indonesian Islamic Higher Education: Expectation and Implementation. *Tadris: Jurnal Keguruan Dan Ilmu Tarbiyah*, *7*(1), 119–132.

http://dx.doi.org/10.24042/tadris.v7i1.10802
Hardi, I., & Tasman, F. (2021). Pengembangan Lembar Kerja Peserta Didik Berbasis Problem Based Learning Pada Pokok Bahasan Matriks Kelas Xi Sma / Ma. *Jurnal Edukasi Dan Penelitian Matematika*, *10*(2), 70–73.
Jamilah, J., Ahmad Najib, A., Dzulkhairi, M. R., Ariff, H. O., & Nasri Ismail, N. M. (2014). Integration of Islamic input in medical curriculum - Universiti Sains Islam Malaysia (USIM) experience. *International Medical Journal Malaysia*, *13*(2), 73–77. https://doi.org/10.31436/imjm.v13i2.483
Lestariningsih, N., & Suardiman, S. P. (2017). Pengembangan Bahan Ajar Tematik-Integratif Berbasis Kearifan Lokal Untuk Meningkatkan Karakter Peduli Dan Tanggung Jawab. *Jurnal Pendidikan Karakter*, *8*(1). https://doi.org/10.21831/jpk.v7i1.15503
Murditya, M. B., Corebima, A. D., & Lestari, U. (2016). Pengembangan Multi-Purposes Textbook (Mtb) Bertema Biologi Sel Dan Molekuler Bersintak Reading Questioning and Answering (Rqa). *Seminar Nasional Biologi*, 353–359.
Nguyen, G. T. C., & Thai, D. T. (2023). Integrated teaching in primary schools: A systematic review of current practices, barriers, and future developments. *International Journal of Evaluation and Research in Education*, *12*(4), 2053–2062. https://doi.org/10.11591/ijere.v12i4.26087
Oktapriana, C., Nurdiniah, D., Bhuana, K. W., & Novianti, N. (2021). Pendampingan perhitungan harga jual melalui metode service learning bagi kedai kopi di Kota Bekasi. *LOGISTA-Jurnal Ilmiah Pengabdian Kepada Masyarakat*, *5*(2), 265-274.
Pandanwangi, A., Sukapura Dewi, B., Juli Rianingrum, C., & Wilastrina, A. (2023). Pelatihan Membuat Batik Diatas Kayu Dengan Menggunakan Metode Service Learning Di Sma Kebangsaan-Tanggerang Selatan. *Jurnal Abdimas Ilmiah Citra Bakti*, *4*(1), 1–16. https://doi.org/10.38048/jailcb.v4i1.1411
Pangestuti, T. M., Kamil, M., & Sardin, S. (2020). Model Pelatihan Andragogi Berbasis Media Virtual Reality Dalam Peningkatan Kesiapsiagaan Bencana. *Indonesian Journal Of Adult and Community Education*, *2*(1), 38-43. https://doi.org/10.17509/ijace.v2i1.28289
Ridhoi, R., Ayundasari, L., Khairunnisaa, A., & Hadi, A. F. (2023). Pembuatan bahan ajar sejarah tematik bagi guru MGMP sejarah tingkat SMA/MA. *Jurnal Inovasi Hasil Pengabdian Masyarakat (JIPEMAS)*, *6*(1), 37–48. https://doi.org/10.33474/jipemas.v6i1.19388
Rusydiyah, E. F., Rakhmawati, R., Purwati, E., Hafiyusholeh, M., & Asyhar, A. H. (2019). Multimedia application development with islamic critical reflection through 3-2-1 technique for novice teacher internship program. *Advances in Science, Technology and Engineering Systems*, *4*(3), 100–105. https://doi.org/10.25046/aj040314
Suwendi, A. Basir, & J. W. (2022). *Pengabdian, Metodologi Masyarakat*. Kementerian Agama RI.
Suciati, R., Gofur, A., Susilo, H., & Lestari, U. (2022). Development of Textbook Integrated of Metacognition, Critical Thinking, Islamic Values, and Character. *Pegem Egitim ve Ogretim Dergisi*, *12*(4), 20–28. https://doi.org/10.47750/pegegog.12.04.03
Sumining, S. (2021). Pengembangan Bahan Ajar Tematik Berbasis Nilai-Nilai Keislaman Kelas VI Madrasah Ibtidaiyah. *EDUCARE: Journal of Primary Education*, *2*(1), 1–24. https://doi.org/10.35719/educare.v2i1.30
Susilowati, S. (2017). Pengembangan Bahan Ajar IPA Terintegrasi Nilai Islam untuk Meningkatkan Sikap dan Prestasi Belajar IPA Siswa. *Jurnal Inovasi Pendidikan IPA*, *3*(1), 78. https://doi.org/10.21831/jipi.v3i1.13677
Suwastini, N. M. S., Agung, A. A. G., & Sujana, I. W. (2022). LKPD sebagai media pembelajaran interaktif berbasis pendekatan saintifik dalam muatan IPA sekolah dasar. *Jurnal Penelitian dan Pengembangan Pendidikan*, *6*(2), 311-320.
Taher, A., Taher, A., Gondhowiardjo, S. A., & Bachtiar, A. (2022). Comprehensive Efforts to Accelerate Non-Communicable Disease Services in the Era of COVID-19 in Indonesia's Suburban Area. *ASEAN Journal of Community Engagement*, *6*(1), 152–168. https://doi.org/10.7454/ajce.v6i1.1167
Tahir, M. T. (2021). Integrasi agama dalam pembelajaran sains di Madrasah. *Jurnal Al Muta'aliyah: Pendidikan Guru Madrasah Ibtidaiyah*, *1*(01), 19–36. https://doi.org/10.51700/jie.v7i01.151
Ulia, N., Ismiyanti, Y., & Setiana, L. N. (2019). Meningkatkan Literasi Melalui Bahan Ajar Tematik Saintifik Berbasis Kearifan Lokal. *JIPEMAS: Jurnal Inovasi Hasil Pengabdian Masyarakat*, *2*(2), 150. https://doi.org/10.33474/jipemas.v2i2.3402

Zabidi, F. N. M., Abd Rahman, N., & Halim, L. (2021). Integration of islamic values for environmental conservation: An analysis of school textbooks. *Religions*, *12*(7), 1–18. https://doi.org/10.3390/rel12070509

Zarkasih, Yusuf, K. M., Hasanuddin, & Susilawati. (2019). Integration of Naqli and Aqli Knowledge in Islamic Science. *Jurnal Kependidikan Islam*, *5*(2), 123–134. https://ejournal.uin-suska.ac.id/index.php/potensia/article/view/7800/5557

Zubaidah, S. (2020). *Keterampilan abad ke-21: Keterampilan yang diajarkan melalui pembelajaran.* In Seminar Nasional Pendidikan *(Vol. 2, No. 2, pp. 1-17).*