Scrutinizing Middle School Teachers' Knowledge and Perception on the Integration of Science and Religion

Elbina Mamla Sa'idah 1, Murhayati Sri 2, Edison 3

- Sekolah Tinggi Agama Islam Hubbulwathan, Duri, Indonesia; elbina1987@gmail.com
- ² Universitas Islam Negeri Sultan Syarif Kasim, Pekanbaru, Indonesia; sri.murhayati@uin-suska.ac.id
- ³ Universitas Islam Negeri Sultan Syarif Kasim, Pekanbaru, Indonesia; 32090411970@students.uin-suska.ac.id

ARTICLE INFO

Keywords:

integration of science and religion; teachers' perception; science and religion.

Article history:

Received 2023-01-06 Revised 2023-02-13 Accepted 2023-05-11

ABSTRACT

Discussion about the integration between science and religion is no longer a new topic, but nowadays, it is being raised again. Many researchers believe that both of them are independent entities, but many researchers also argue that there is potential for combining the two. This study aimed to investigate the knowledge and skills as well as the perception of teachers on how to integrate science and religion. This qualitative study was conducted in Bengkalis Regency. Thirty-one in-service teachers from four different junior high schools were recruited as the participants of this study. The by administering were collected open-ended questionnaires and interviews to the participants. To analyze the data, the researcher used the three stages of qualitative data analysis: data reduction, verification, and display. The findings reported that teachers' competence in the integration of science and religion is quite good and comprehensive because they were able to explain the importance of this integration and how to implement the combination of the two in their own area of teaching subjects, even develop the teaching materials as the implication for the practice in junior high school contexts. However, the findings also indicated the drawbacks of some teachers who found the difficulties in applying the science-religion integration in the subjects due to several reasons. In conclusion, combining science and religion is not an impossible action as long as teachers have a strong belief, wide knowledge, and a harmonious view between the two, also the ability to apply it. Therefore, equipping teachers with knowledge and skills through particular training is really crucial.

This is an open-access article under the <u>CC BY-NC-SA</u> license.



Corresponding Author:

Elbina Mamla Sa'idah

Sekolah Tinggi Agama Islam Hubbulwathan, Duri, Indonesia; elbina1987@gmail.com

1. INTRODUCTION

Discussing the integration of religion and education means that there is an effort to unite both of them, but it does not mean that the identity of the two entities must be maintained and cannot be separated. On the one hand, science is a disciplined method for carefully investigating particular parts of nature. Only concepts that can be understood by the senses (touch, hearing, sight, etc.) are included in the scope, such as natural sciences (Fried & Hademenos, 2006). On the other hand, religion is defined as a system that regulates faith (belief) and worship of God as well as rules related to culture and worldview that will connect humans with the order of life (Maarif, 2017). Meanwhile, in the context of the current research, integration is defined as the same as integrated learning, which is an approach in guiding teaching and learning activities by establishing links between concepts, facts, or principles, either directly or indirectly within or between fields of study (Lawrence et al., 2005). In conclusion, the integration of science and religion is the activity of teaching and learning which involves the two aspects in one learning situation, besides trying to find out the lines between those aspects.

In relation to the integration of science and religion, Haught (1995) stated that the relationship between science and religion was clarified in four big sketches. First is the conflict approach, which believes science and religion cannot be reconciled. Second, the contrast approach states that there is no real contradiction between science and religion because both are considered to respond to very different problems. The third is the contact approach. This approach s an attempt made between science and religion dialogue, interaction, and the possibility of adjustment between both by primarily seeking ways in which science influences religious and theological understanding. Fourth, the confirmation approach is an approach with a much calmer perspective. This perspective highlights the ways of religion, at the deep level, supports, and revives all scientific activities (Haught, 2018). From this information, it can be concluded that there are many points of view on how people see the relationship between these two aspects, which intrigued the following researchers to investigate further about its position.

Previously, the former researchers have focused on examining this issue in many ways, such as a study by Sulaiman (2020). In his study, he mentioned that through serious efforts to consider the universe of the perfection of human life, both physically and spiritually, science is one of the strategic doors to draw people closer to God. Students with a scientific responsibility and attitude, the capacity to use knowledge, and the ability to become *ulul albab* are supposed to be produced through the integration of science and religion created in religious learning (Islamic Education). Furthermore, the study conducted by Zulfarani et al. (2022) also agreed that science is based on human reason, mind and logic, and religion is the one that will balance it through soul and feelings. Religion and science both provide power. Science brings revolution or outward (material) change and religion which brings inner (spiritual) revolution. Second, studying science must be accompanied by religious knowledge. This is due to a common belief that without science, religion will only become a lame science. This means that everything learned only by science potentially has weaknesses in validation. Therefore, an understanding of combining religion and science will be beneficial for developing the human quality of life.

The understanding and awareness of the integration of science and religion must be possessed by all parties in the school, including teachers as the facilitator of teaching (Kelly, 2016). Teachers play an important role in deciding the learning goals, choosing learning modes and models, selecting learning materials, organizing students, and evaluating the learning results (Le Ha, 2014). In relation to the science-religion integration, first of all, teachers must have good faith in God as the basic competence to develop the learning concept (Hartwick, 2015). Hartwick (2015) later mentioned in his study that the conceptions of God were linked to convictions on the truth. Differences in the way classroom resources

were used were linked to the religious views of the teachers. Therefore, the closer the connection between teachers' religious views and their professional life were, the more significant their religious beliefs were. As conclusion, teachers need to have a strong religious belief when they integrate the content of science and religion into their teaching practices.

The importance of the integration between science and religion is implied in the above explanation. To complement the studies, it is necessary to check the situation from the study fields. Therefore, this research was carried out to explore the competence, skills, knowledge, and perceptions of in-service teachers towards the application of the integration concept contextually and practically. In the field of study, it was found that many junior high schools in Bengkalis regency have inserted religious values on science subjects. This implied that the development of science-religion integration had been quite well-known in this area. Based on this background, the researcher summed up a research question, as follows, "How do the junior high school teachers in Bengkalis regency understand and implement the integration of science and religion in their teaching process?" This study has several objectives to carry out. Firstly, the researcher believes that it is crucial to find out the interconnection between science and religion; therefore, the findings are expected to serve as evidence of the new information from the fields. Secondly, Bengkalis regency has many religious potentials to explore. Therefore, examining the teachers' conception and perception of the science-religion integration is the first step to develop it in educational settings.

2. METHODS

The researcher used a qualitative approach to investigate the phenomenon stated in the introduction. This qualitative investigation was based on a case study found in the Bengkalis regency, where many teachers in junior high school level had implemented the concept of science-religion integration practically in the teaching and learning activities at schools. To collect the data, the researcher administered an open-ended questionnaire to 31 teachers working in four different middle schools in the Bengkalis regency. The indicators in the questionnaire were developed based on the stages in the teaching and learning process, starting from setting the objectives and selecting teaching materials and models, until planning the evaluation and assessment (Rashtchi & Khoshnevisan, 2019). Thirty-one in-service teachers from four junior high schools participated in this study consisting of 20 female teachers and 11 male teachers. The questionnaires were arranged in Bahasa Indonesia in order to provide clarity of understanding to the participants.

Moreover, to follow up the questionnaire, the researcher also conducted interviews with some of the teachers as an effort to reach the saturated answer. The interview questions were developed with similar indicators to the questionnaire, namely setting the objectives, selecting teaching materials and models, planning the evaluation and assessment. The interviews were also conducted in Bahasa Indonesia in order to get richer information from the participants. Moreover, the researcher asked permission to display the schools' identities in the research report. Thus, the schools' names and the subjects taught by the teachers can be shown in the following figure.

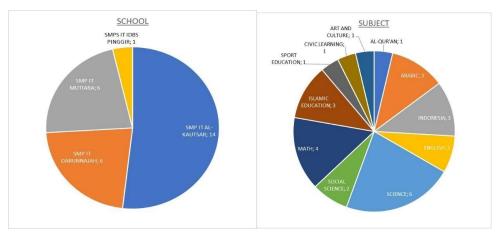


Figure 1. The spread of schools and subjects participating in the study

Besides the different schools, this study also provided a multi-perspective approach because the teachers involved had different backgrounds of subjects, namely Mathematics (14,8%), Science (22,2%), Social Science (7,4%), English (7,4%), Bahasa (11,1%), Islamic Religion (11,1%), Sports Education (3,7%), Arts and Culture (3,7%), Civic education (3,7%), even Qur'an subject (3,7%). By recruiting teachers from different subjects, the researcher hopes that there will be a comprehensive understanding of the research findings. At the end of the stage, the researcher analyzed the data that had been obtained through three stages in qualitative data analysis, namely data reduction, data verification, and data display.

3. FINDINGS

To describe the results of the investigations, the researcher divides the findings into four main themes, namely teachers' awareness on the importance of science-religion integration, the implementation of science-religion integration, teachers' drawbacks in integrating science and religion, and implications for teaching and learning in junior high school. Teachers' understanding is usually followed by actions. Here is the following description of their point of views regarding the concept, content, and readiness to the science-religion based teaching implementation.

3.1. Teachers' Awareness of the Importance of Science-Religion Integration

Teachers, as the facilitator in the learning process, must understand their teaching beliefs since it will determine any decisions that they make in every stage of the teaching process (Buehl & Beck, 2015; Valcke, 2010). In the contribution to the integration of science and religion, teachers must also be aware of the nature of state that will help them to set the objectives of teaching (Ertmer et al., 2015). The data obtained from the questionnaires and interviews reported that junior high school teachers in Bengkalis Regency have been aware of the importance of combining religion to science due to several reasons. Among the reasons that they revealed, improving morality comes up as the first crucial issue in the discussion. Moreover, building students' faith in religion also becomes another important aspect that can form the students as grateful individuals because everything in this world is under the control of a single superpower, Allah SWT, the Almighty God.

Table 1. Teachers' statements indicating their teaching awareness of science-religion integration

T1	: It is important to improve the morals of students and to instill in them
	a love of religion, the Qur'an and hadith.
T6	: It is very important, even considered mandatory. For example, when
	studying about the continent of Asia and other continents we can
	relate it to Surah Al-Hujurat verse 13. The goal is that students know
	and even understand and realize everything on earth and the
	activities that occur are the intervention of Allah SWT the creator
	and we must be grateful for the gifts that have been enjoyed.
T16	: It is important, because the truth of religion is proven and in line with
	science, so knowing the harmony between the two can make students
	more grateful and increase faith.
T24	: Yes, very important, because the two have a harmonious relationship.
	The integration of science and religion will open our minds that the
	life we live cannot be separated from the application of science and
	rules based on religion in order to have guidelines in the
	application. Teaching science which always has dynamic
	developments will help in making progress and impact on life from
	various aspects. Not only that, science will reveal that the creation of
	the world with all the components that we feel today will take us in
	awe of His power. Through this, values related to spirituality, such
	as gratitude, religion, and so on will be embedded in students, so
	that they become the foundation in determining social attitudes that
	will have a strong influence on the formation of students' character.

Teachers must understand and have strong religious values, because they will bring those religious ideas and transfer them to their students (Graves et al., 2010). The integration of values in education is considered as an aid to students to realize and experience values and place them appropriately integral to their whole life. Values in education are not only a program specifically taught through a number of subjects, but also covers the whole educational process. In this case, the students not only gained values and moral education from religious teachers during the teaching and learning process, but they can also get those values anytime and anywhere. Therefore, values must be an integral part of students' life and applied by all teachers in all subjects.

The aforementioned data showed that teachers are aware of instilling the values of religion in order to make the students believe in God and love their religion. This finding is relevant to the statement of Asma (2021) in her study, mentioning that it is important to embed religious values in the scientific content because it will influence the formation of positive characters in students. Therefore, she suggested several teaching methods that will benefit the students' improvement. One of them is through demonstration technique which has scientifically been proven to enhance students' religious competence (Asma, 2021; Lubis et al., 2010). This finding is also relevant with the Indonesian government regulation stated in Law no. 20 of 2003 concerning the National Education System, that national education functions to develop capabilities and shape dignified character and civilization of the nation in the context of educating life nation, aims to develop the potential of students to become good human beings believe and fear God Almighty, have noble character, healthy, knowledgeable, capable, creative, independent and become a democratic and responsible citizen (Jannah & Fahlevi,

2019; Komara, 2017). In conclusion, the science-religion integration has many values that will give positive contributions to the students' character building.

3.2. The Implementation of Science-Religion Integration

As a practical action, the teachers in Bengkalis regency have been trying to apply the concept of science-religion integration in their teaching practices. For example, a Mathematics teacher in the research setting used a hadith to introduce her students to the topic of fractions. The concept of David fasting was the method she utilized because David fasting is carried out every other day (Siregar et al., 2020). This method is implemented because she believes that students will get content from learning Mathematics and moral values that they can implement in their daily lives. This is proven in the evidence gained from the questionnaire data, as exemplified in the following table.

Table 2. Examples of science-religion-based teaching implementation

T1	: In Math, for example, regarding fractions, it can be strengthened by
	the hadith of the Prophet Muhammad SAW, "Indeed, the fasting most
	loved by Allah is the fast of David. The prayer that is loved by Allah
	is the prayer of Prophet David As. He used to sleep half the night and
	wake up in a third of the night, then they slept again in the last quarter
	of the night. Prophet David used to fast one day and the next day he
	didn't fast" (H.R Bukhari no 1079).
T16	: The trick is to prove the hadith in terms of scientific knowledge . For
	example: in the hadith, Rasulullah said about the rules of eating, he
	recommended that 1/3 of the stomach be filled with food, 1/3 filled
	with drinks, and leave 1/3 for air. This can be studied in terms of health
	and medical science about the reason why a person's gastric capacity
	must be divided in such a way, namely to prevent damage to other
	organs when aging occurs. This fact was revealed in 2006 by an
	expert, while the Messenger of Allah said this thousands of years ago.
T3	: My efforts in connecting English subjects with the knowledge of the
	Qur'an are by: (1) doing code-mixing and code-switching between
	English expressions with appropriate Islamic expressions, (2)
	linking the topics taught with appropriate Islamic teachings by
	quoting relevant verses of the Qur'an and/or hadith and/or by
	explaining Islamic teachings that are relevant to the topic, (3) using
	Islamic names for people, places or events in making examples of
	sentences or conversation scripts, and (4) giving assignments to
	students to write or look for certain types of texts related to Islamic
	values that are in accordance with the topics being taught.
T24	: In Science subjects, especially biology , usually, this is more
	emphasized on the formation of the character of students, such as
	habits and the application of Islamic etiquette. If learning is related
	to the organ system of the body, then the meaning of the rules in
	religion will be associated with its biological impact . For example, the
	rules for eating and drinking have a biological influence, sleeping

after dawn and Asr will affect physical and mental health, eating is not allowed while talking because there are valves that will confuse the pathway so that it will cause choking, and so on.

From Table 2, we can see that junior high school teachers in the Bengkalis regency have been very active and creative in providing activities that can facilitate the presence of religion in the subjects they teach. This finding proves that the possibility of the combination of science and religion makes more sense (Rediehs, 2022). From the opinion mentioned in the statements above, it can be concluded that science learning is a student activity about science that includes facts, processes, and products, and theories about natural events. What is expected to be achieved apart from concept development, as well as developing aspects of students' process skills and scientific attitude, so that curiosity grows about the natural surroundings (Legare & Visala, 2011). Further hope of this nature can be maintained and preserved, because of the natural surroundings because this is one of God's creations. In short, it can be concluded that the teachers' proposed methods were applicable to make the integration possible.

3.3. Teachers' Drawbacks in Integrating Science and Religion

Aside from the positive responses given by the teachers in Bengkalis regency, some information regarding teachers' difficulties were apparently present in the data of the interviews. Some teachers found it hard to search the appropriate literature from Qur'an and Hadith to be inserted in their subject matters. This might happen because of the limited knowledge of the teachers about the contents of religious messages in the Qur'an (Yunita, 2016). Another reason was the inexistence of discussion forums among teachers such as Teachers' Associations, so they have no partners to discuss with. Table 3 below informs about several reasons that become the major factors why those teachers are unable to apply religious values into their subjects.

Table 3. Difficulties in Integrating Science and Religion

T28	: I sometimes find it difficult to look for the right arguments both sourced from the
	Qur'an and Hadith to be integrated into general science such as mathematics.
T29	: There is no Teachers' Associations per subject (MGMP) for fellow teachers who teach
	in Integrated Islamic Schools.
T30	: The difficulty lies when adjusting the theme to student learning conditions.
T31	: I think I have a lack of understanding of process evaluation using student assessment
	rubrics.

The fact that says inability of teachers to integrate science and religion needs to be followed up because it will hinder the primary objectives of merging the two (Surahman, 2020). Therefore, school policies must support teachers by providing some training or workshops that concern the improvement of teachers' understanding and skills in this area (Hamzah, 2016). These solutions are necessary because by doing so, teachers will get additional inputs as the basic competence to apply in their teaching practices. The relevant training to solve these teachers' problems is in relation to the contents of Qur'an and hadith, and correlating the teaching themes with the verses in Qur'an or hadith. Moreover, the training was also given to introduce them to strategies in teaching the integration, from setting the objectives to planning the assessment. This effort was expected to increase their capability, and therefore, they were able to combine science and religion.

3.4. Implications for Teaching and Learning in Junior High School

The integration between science and religion is based on the idea of Oneness (*tawhid*). Meanwhile, science itself, the study of nature, has been considered to be related to the oneness or *tawhid*, as well as other branches of science (Iqbal, 2007). Nature is not an entity, but is an integral part of Islam's holistic view of God, humanity, and the world. In the view of Islam, science and nature are continuous with religion and God. Therefore, the researcher tried to interpret the research findings and found out that there are some lessons that can be taken from the data, especially the suggestions they provide for further science-religion based teaching practices in junior high school contexts.

Table 4. The lessons learned from teachers' perspectives of science-religion integration

T3	: One of the learning media that I do is through songs, for example in
	song lyric material, in this material I teach students songs with Islamic
	nuances.
T4	: Evaluation of learning is guided by indicators and learning
	objectives. Learning evaluation is divided into 3 kinds of evaluation
	in early activities, initial activities of spiritual attitude (reading
	greetings, prayer) readiness to learn etc., evaluation on core activities,
	which depends on the learning method used (social attitude and
	knowledge), and evaluation on closing activities, consisting of an
	evaluation of core activities and evaluation of knowledge. Various
	forms of learning evaluation can be in the form of multiple choice,
	crosswords, matchmaking, short sentences, true and false, etc.
T7	: Using practice methods. Examples of prayer, the discussion about
	prayer cannot only use theory but must be accompanied by practice.
T13	: Use the media of Islamic science books , with posters, and with the
	Qur'an and hadith. In my opinion, this scientific problem is more
	effective in discussions and presentations.

When integrating religious values into scientific content of teaching, there are some factors that are important to take into consideration. First, the teaching materials; teachers are required to provide the contents that can help students connect the scientific content and the religious values, by presenting Islamic nuances in every teaching material (Hidayati, 2016). Second, the teaching media; providing Islamic books and literature will be another effective way to instill the values of religion to students by providing interesting media that contain Islamic moral messages such as the use of technology (Engkizar et al., 2018). Third, the selection of various teaching methods is also another important aspect that will influence the success of science-religion integration. For example, practice-based methods such as presentations and discussions that invite students to fully engage in the learning process will impact on their activeness in the class (Forzani, 2014). As a result, the students will gain more knowledge than those who are taught using theoretical-based teaching methods. As a conclusion, there are three important factors that are helpful as the implications of the findings, namely teaching materials that have Islamic nuances, inspiring teaching methods, and interactive teaching media.

5. CONCLUSION

This study tries to find out the answer of the understandings and skills of junior high school teachers in Bengkalis regency in implementing the science-religion integration. The findings depicted that the teachers in this area have had comprehensive knowledge about the science-religion integration as well as experienced practices in applying the concepts that they believed. Even so, there were also some teachers who had difficulties in understanding the concept of integration because of their limited knowledge and skills. Therefore, some training is necessary to carry out in order to upgrade the teachers' competence in science-religion integration. This study has some drawbacks that are potential to be filled in by future researchers. For example, the number of participants needs to be added so that the depiction of the condition in Bengkalis regency can be drawn more comprehensively. Moreover, future researchers can use different insights of analysis to interpret the obtained data, such as using the theory of conversational analysis.

Acknowledgments: The researcher would like to say her sincere gratitude to all parties involved, especially junior high school teachers in Bengkalis regency who have participated in this study, for their willingness to contribute in the data collection processes.

REFERENCES

- Asma, A. (2021). Penerapan Metode Demonstrasi Untuk Meningkatkan Hasil Belajar Pendidikan Agama Islam Pada Siswa Kelas X Di SMK Negeri 2 Paguyaman. *Aksara: Jurnal Ilmu Pendidikan Nonformal*, 7(3), 1135-1142.
- Buehl, M. M., & Beck, J. S. (2015). The relationship between teachers' beliefs and teachers' practices. *International handbook of research on teachers' beliefs*, 1.
- Engkizar, E., Muliati, I., Rahman, R., & Alfurqan, A. (2018). The Importance of Integrating ICT into Islamic Study Teaching and Learning Process. *Khalifa: Journal of Islamic Education*, 1(2), 148-168.
- Ertmer, P. A., Ottenbreit-Leftwich, A. T., & Tondeur, J. (2015). Teachers' beliefs and uses of technology to support 21st-century teaching and learning. *International handbook of research on teacher beliefs*, 403.
- Forzani, F. M. (2014). Understanding "core practices" and "practice-based" teacher education: Learning from the past. *Journal of teacher education*, 65(4), 357-368.
- Fried, G. H. & Hademenos. (2006). Biologi Edisi kedua. Jakarta: Erlangga.
- Graves, E. P., Hynes, J. W., & Hughes, T. A. (2010). Teacher Perception of the Role of Religion in East Texas Public Schools. *National Forum of Educational Administration & Supervision Journal*, 27(4).
- Hamzah, F. (2016). Studi pengembangan modul pembelajaran ipa berbasis integrasi islam–sains pada pokok bahasan sistem reproduksi kelas ix madrasah tsanawiyah. *Adabiyah: Jurnal Pendidikan Islam, 1*(1), 41-54.
- Hartwick, J. M. (2015). Public school teachers' beliefs in and conceptions of God: What teachers believe, and why it matters. *Religion & Education*, 42(2), 122-146.
- Haught, J. F. (1995). Science and religion: From conflict to conversation. Paulist Press.
- Haught, J. F. (2018). Deeper than Darwin: The prospect for religion in the age of evolution. Routledge.
- Hidayati, T. (2016). English language teaching in Islamic education in Indonesia; challenges and opportunities. *Englisia: Journal of Language, Education, and Humanities*, 3(2), 65-82.
- Indonesia, S. (2003). Law no. 20 of 2003, concerning the National Education System.
- Iqbal, M. (2007). Science and Islam. Westport, CT: Greenwood Press.
- Jannah, F., & Fahlevi, R. (2018, December). Strengthening The Pancasila Character Values in Forming

- the Character of Pancasilais Generation. In 1st International Conference on Creativity, Innovation and Technology in Education (IC-CITE 2018) (pp. 77-80). Atlantis Press.
- Kelly, C. (2016). Teacher as facilitator of learning. *Teaching and Learning at Business Schools: Transforming Business Education*, 2, 3-16.
- Komara, E. (2017). Curriculum and civic education teaching in Indonesia. EDUCARE, 10(1).
- Lawrence, T. A., Burton, L. D., & Nwosu, C. C. (2005). Refocusing on the Learning in "Integration of Faith and Learning. *Journal of Research on Christian Education*, 14(1), 17-50.
- Legare, C. H., & Visala, A. (2011). Between religion and science: Integrating psychological and philosophical accounts of explanatory coexistence. *Human Development*, 54(3), 169-184.
- Le Ha, P. (2014). The politics of naming: Critiquing "learner-centred" and "teacher as facilitator" in English language and humanities classrooms. *Asia-Pacific Journal of Teacher Education*, 42(4), 392-405.
- Lubis, M. A., Yunus, M. M., Ishak, N. M., Muhamad, T. A., & Diao, M. (2010). The effectiveness of strategies and techniques in teaching and learning Islamic education. *WSEAS Transactions on Information Science and Applications*, 6, 218-224.
- Maarif, S. (2017). Meninjau Ulang Definisi Agama, Agama Dunia, dan Agama Leluhur. *Kebebasan, Toleransi Dan Terorisme: Riset Dan Kebijakan Agama Di Indonesia*, 13-48.
- Rashtchi, M., & Khoshnevisan, B. (2019). The developmental stages of teachers: A critical analysis. *Advances in global education and research*, 3, 2-8.
- Rediehs, L. (2022). The Quaker Experiential Integration of Science and Religion. *Theology and Science*, 20(2), 138-155.
- Siregar, D. (2020). Analisis Puasa Romadon Dengan Puasa Sunnah (Nasikh wa al-Mansukh). *Al FAWATIH: Jurnal Kajian Al Quran dan Hadis*, 1(2), 93-107.
- Sulaiman, M. (2020). Integrasi Agama Islam dan Ilmu Sains dalam Pembelajaran. *Jurnal Studi Islam: Pancawahana*, 15(1), 96-110.
- Surahman, S. (2020). Model Pembelajaran Saintaq Pendidikan Agama Islam Sebagai Bentuk Integrasi Sains dan Agama dalam Menghadapi Tantangan Abad Ke 21 (Integrasi Metodologi/Proses Pembelajaran Aqidah). *Akademika: Jurnal Keagamaan dan Pendidikan*, 16(2), 158-177.
- Valcke, M., Sang, G., Rots, I., & Hermans, R. (2010). Taking prospective teachers' beliefs into account in teacher education. In *International encyclopedia of education* (pp. 622-628). Elsevier.
- Yunita, Y. (2016). Kompetensi Guru Taman Pendidikan Al-Quran (TPA) Terhadap Kemampuan Santri. *Jurnal Dewantara*, 1(01), 77-88.