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Integration of Science and Religion in Value Education

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ABSTRACT

The study aims to describe a value education model in teaching the integration of science and religion and to find out the values generated in the learning process of the integration of science and religion. Education is a major factor in shaping the human personality through the learning process that takes place in schools and in society. These educational goals can be done by providing scientific and religious materials to create the potential of students. Indeed, religious values will guide science and technology that are increasingly developing in the world. Therefore, the integration of science and religion in schools is very important to be taught, so that both of sciences and religions balance each other. This qualitative-naturalistic research used interview, observation, and documentation as the data collection techniques. The results of this study show that (1) the integrative model will facilitate and make learning more meaningful and efficient, so that the teaching and learning process will produce integrated knowledge; (2) through the integration of science and religion, the learning process is more directed which can sharpen the mind; (3) the learning material combining science and religion is the main instrument for realizing learning objectives; (4) the learning strategy integrating science and religion has a good effect on student and teacher interactions during the learning process; (5) the values developed in the integration of science and religion are the value of belief in Allah, being religious, and intelligent.

INTRODUCTION

Human personality is one of the aspects that is formed through education. Definitely, through education, humans are able to develop themselves both in the school environment and in the community to become individuals who have noble morals. This is in line with the objectives of the establishment of the Republic of Indonesia as stated in the preamble to the 1945 Constitution, namely to educate the nation's life. In Law no. 20 of 2003 which discusses national education system in Chapter II Article 3, it is stated that national education aims to optimize all the potential of students so that they become human beings who believe in Allah; have noble, knowledgeable, creative, healthy, independent character or morals; and become democratic and responsible citizens.

In the educational goals, it is clearly stated that aspects of divinity and character are purposes in the educational process. This statement holds a message that education is not only intended to form students who are superior in cognitive, but also to make students who are religious and have good character. Consequently, the two aspects should be integrated in order to achieve the desired educational goals. In particular, students who have high cognitive aspects can be maximized by providing science material and other materials that can develop their cognitive intelligence. Developing learners' potential can be complemented by instilling character and divine values. Thus, implementing this integrative learning will create a generation that is intelligent, religious, and has good character.

Developing students' potential through the educational process can be conducted by providing material on science and religion. Religious values will serve as a guide or foundation for science and technology which continues to develop in the world. (Hartono, 2010) said that building human beings through superior morals or characters and competencies like the latest scientists and technologists require a comprehensive and sustainable integrated education process. In an increasingly modern and sophisticated era, people are required to have certain skills and will leave other areas of expertise that are less relevant to the field being studied. The value of religion as a foundation in learning is obligatory to be applied, so that the curriculum that is applied in learning will be studied thoroughly. Kurnia (2014) states that the concepts of science and religion in the western or the Islamic world have their own characteristics, especially in terms of objectives, scope, definition, classification, or interpretation.

To equalize these differences, science and religion need to be integrated in order to produce good values and be understood by students. In educational institutions, the integration of Islamic and scientific values can be implemented through an "integrated curriculum" that combines scientific disciplines on strategies or learning material designs in order to get better learning outcomes, so that students are able to link one subject to another (Wahyuni, 2020). Therefore, integrated learning in schools is very important to be implemented in order to integrate science and religion so that they complement one another. According to Sunhaji (2016), through integrated learning, students are expected to gain meaningful and authentic knowledge, not just theory, but students can get knowledge in accordance with the reality in society. In other words, the community will understand the integration model of science and religion that is applied in educational institutions or schools.

Rubiyanto et al. (2010) suggest that teaching science and religion must certainly be implemented with an integrative model, with the purpose of that students will get a broad understanding of material in learning science and skills. From this implementation, students will have a better understanding of the theoretical concepts they are learning and can relate one theory to another. This kind of learning model is much more effective in increasing students' understanding and experience comparing to conventional monolithic approaches. In addition, the integration of science and religion in value education will produce character and moral personality of students. Character values will be embedded in the souls of students; therefore, these values are important for the students in the future. Frankel in (Kartadinata, 2015) states that values are good behavior, and standards of behavior in truth, justice and efficiency that exist in the human soul in which it must be instilled and maintained.

Several previous studies have discussed related to value education (Keast & Marangio, 2015; Rahayu, 2015; Chowdhury, 2016; Kania et al., 2017; Adedayo, 2018; Basha & Ramana, 2018; Suyatno et al., 2019; Sahin, 2019; Sabri & Arifiyanti, 2018). However, there are still limited discussion to the concern of integrative learning science and religion in the context of elementary school where value should be learnt from the early childhood and teaching science should not only provide about facts, laws and theories, but also instill the value on it (Adedayo, 2018).

Based on the aforementioned consideration, the researchers are highly interested to conduct this research. The focuses of this research are the implementation of integrating science and religion in value education and the developed value in the integrative learning of science and religion. Furthermore, this research is expected to give an important contribution to increase the values contained in science and religion.

Science

Science has been explained by some experts. According to Poedjiadi, cited in Sunhaji (2016), the term science comes from the English word 'science'. In Latin 'science' means '*scienta*' which means learning and seeing (knowing). Knowledge itself is the result of seeing activity. Epistemologically, knowledge in humans is divided into two. First, knowledge is the result of alarm. Second, science is knowledge that is systematic, structured, and organized. Science is a system that is useful for providing an understanding of the universe by observation and controlled trials or experiments.

Science has an end goal, namely theory. Specifically, description or explanation of scientific phenomena is a theory. Theory is a set of concepts that are related to one another. This relationship provides a systematic viewpoint on a particular phenomenon, thereby providing a description, explanation, and prediction of the phenomenon. These theories explain knowledge that can be researched and produce new theories that can be combined with new theories. Science will continue to develop with the times. Science is a knowledge that includes scientific activities that have developed from time to time because the scientific activity can be studied and will gain the new theories, models and strategies.

Kerlinger, cited in Alim (2014) argues that science can be understood dynamically and statically. Dynamically, science is a scientific process in finding knowledge that comes from natural phenomena. Science is always dynamic because the theory that is found can change according to the latest findings which are more valid. While statically, science is a collection of theories, models, laws, postulates, concepts, and applications of various natural phenomena, both micro and macro, after which they are developed based on the findings that apply the scientific method.

According to Hafidhuddin, cited in Alim (2014), neutrality can be seen from two things in science. First, the tendency to develop theories as a result of the development of empirical, logical knowledge and human perception. Second, there are partialities including metaphysical elements in the discussion of science with several characteristics. Thus, there are several dimensions in the process of Islamizing science. First, the study of scientific theories as a manifestation of the critical attitude of Muslim scientists. Second, to provide variety in the study of science through metaphysical aspects that are in accordance with Islamic values. Third, provide direction for the implementation of science in technology which guarantees the continuity of respect for the values of science.

Religion

In the literature, we will find theories about the word religion, therefore there are many kinds of theories about the word religion. Several experts have discussed about religion. Ali (2013) states that the word religion originates from Sanskrit which is closely related to Buddhism and Hinduism. The root word religion, namely '*gam*' that begins with '*a*' and ends with '*a*' thus becomes '*agama*' (religion). The root often gets the beginning with '*I*' and ending with the same, so it becomes '*igama*', often gets the prefix '*u*' thus becomes '*ugama*'. The word religion originates from Sanskrit, belongs to the Indonesian-German clump, and it is similar with Dutch and English clump. "*Ga*", we find in Dutch, '*gan*' (gone) in English, and 'go' in English has the same meaning as gam which means to go. However, the meaning will change after getting the prefix and ending a, which means becoming a way.

In Islam, the sources of truth that are recognized by all believers are the Qur'an and Hadith. The Qur'an include the information regarding real or unreal things; and past, present, and future events. Kuntowijoyo (1993) put the Qur'an as a paradigm of knowledge. Therefore, science will put the Qur'an as the source of the highest truth. In fact, the reality which is the objective truth is still under the Qur'an. It is certainly a true way when the ones believe and view Qur'an as a paradigm of knowledge, not only the information that is the most complete, but the nature of its truth is certain (unchanging).

As a paradigm, Al-Qur'an or Hadith must be the main source in developing knowledge. Kuntowijoyo (1993) said that the normative premises of the Qur'an can be formulated into empirical and rational theories. The similar process has also been carried out by scientists from the West who inherited the ethical and philosophical premises of Western civilization at the past time. The Qur'an and Hadith have provided a lot of important information which can be developed into a way of thinking. Accordingly, Kuntowioyo (1993) called it as the Al-Qur'an paradigm or the Islamic paradigm.

The scientific views of the Qur'an according to *al-Biruni*, are a false claim that have been taken from sources outside of Islam. On the other hand, the holy books of Indian society do mention knowledge of the shape and arrangement of the universe which actually contradicts the truths known to their astrologers; however, driven by the need to uphold tradition, they pretend to believe the doctrines in their book even though it is believed to be wrong. Many sources say that doing scientific research is a good deed, even some Muslims say it is an obligation. However, it appears that the debate regarding the Qur'an and science has become a more dominant point than focusing on these general views. For this reason, efforts to ascertain the Qur'an's position on science are pointless. A more productive effort that can be undertaken is to know the views of Muslim thinkers, with their various varieties of authority. The main source in which the al-Qur'an paradigm towards science is articulated is one of the schools of *tafsir* (interpretation).

Actually, Islam does not recognize the dichotomy of religious knowledge (knowledge of Naqli) and non-religious knowledge (knowledge of Aqli). The perception that creates this dichotomy prevents Muslims from advancing in science and technology, and there has been a contradiction in the relationship between religion and science. Basically, science and religion are compatible. Religion asks each of its followers to continue learning because science can be proven through religion; therefore, there is an integrated relationship between science and religion that does not need to be debated (Suciati et al., 2022).

Integrative Learning

Nowadays, paradigm of education has changed. Education which was initially more dominant in "teaching" has shifted to the concept of "learning". According to Mayer, cited in Sunhaji (2016), learning is an activity carried out by teachers with the aim of advancing learning activities for students, including teachers/lecturers, strategies, methods, learning media and learning materials. In addition, Gagne (1998) suggested that teaching is to create a condition for students to learn in which as an effort to change students' behavior. This change can occur because of the interaction between students and their environment. Furthermore, Gagne explained that the occurrence of changes in behavior depends on two factors, namely internal factors and external factors. Physical

and spiritual conditions are internal factors that affect student learning. While environmental factors are external factors that affect student learning conditions.

According to Sunhaji (2016), integrative learning is an approach of learning that deliberately connects several aspects between integrated subjects. Through this model, students acquire knowledge and skills as a whole, thus the learning is meaningful for students. In order to increase experience and understanding of values, this model is much more effective than using conventional approaches which are monolithic. Integration can link one subject to another, thereby building a unity of knowledge which can represent a part-whole relationship.

This integration exists because of the dichotomy between religion (Islam) and science. The model of unity between Islam and science tends to be a model of connection with the areas of integrative interdependence, integrative complementarity, and qualitative integration (Mufid, 2014). If this integration process is carried out carefully, the process of internalizing Islamic values among students becomes easier because they are aware of the process (Purwati, 2018).

Based on the explanation above, it can be concluded that the integration of science and religion is an attempt to unify theories based on empirical data and religious concepts from the scriptures. Important issues of science can be understood from the perspective of scriptures or certain verses which are divine messages understood in the perspective of science. This perspective is expected to provide new understanding and knowledge about life that religion and science cannot be separated because science and religion are symbols of human existence in life, even though the relationship between religion and science is complex because it depends on at least three factors: the period of time concerned, religion interests, and individuals. Each of them will be discussed in turn, as well as increasing interest in studying religion scientifically (Cragun, 2018) and this can be realized through education that is dynamic and able to encourage individuals to become better individuals, some scholars strongly recommend the Integrated Education System (Lubis, 2015) includes the integration between science and religion.

Thus, the internalization of religion and science in learning materials is a way of organizing knowledge and actual problems in science and religion that occur in the school environment. Practically, the actual problems that exist in science and religion are compiled as part of the core curriculum which is the implementation of learning material in educational institutions. Verses or hadiths and scientific theories that have a suitability can be the learning material in the classroom. With this integration, it is hoped that knowledge and understanding that are more meaningful will develop rapidly.

Value and Moral

Value is part of a person's human potential in the spiritual world that has no form, and cannot be touched, but it has a very strong influence and has a role in every person's actions or appearance. However, Nurdin et al., cited in Ningsih (2004) argues that values are a set of beliefs or feelings that are believed to be identity that gives special characteristics to feelings, behaviors, attachments, and thought patterns.

According to Fraenkel (1977) value is a standard of behavior, truth, justice, beauty, and efficiency that are involved in humans and should be carried out and maintained. Moral, which is called '*mores*' in Latin, has the meaning of custom. In the Dictionary of Education, moral is “a term used to delimit those characters, traits, items, judgments or

acts which can appropriately be designated as right, wrong, good, bad". In brief, moral is a term used in determining the boundaries of character, opinion or action, the character of the will can be said to be right, wrong, good, or bad.

Durkheim, cited in Dingley (2008) said that "morality, in all its forms, is never met with except in society. It never varies except in relation to social conditions. The duties of the individual towards his self are in reality, duties towards society." Morality cannot exist except in society in its various forms. Morality will not change unless it is related to social conditions. In other words, morality is not embedded in individuals, but morality originates in society or a phenomenon that exists in society. Moral Society has power over individuals, this means obligations, for example those who say it is the voice of society, then society which emphasizes and determines all the rules in their environment. So, morality is a social act or social phenomenon which consists of a collection of social rules and activities.

Values are beliefs that make people act on the basis of their choices. Allport, cited in Hood (2014) states that values can occur in the psychological area in general, belief is placed as a psychological area that has a higher position than other areas such as motivation, desire, bad attitudes, etc. These fields are the result of a series of psychological processes which then direct the individual to do the actions in accordance with the value of his choice.

Value education is formulated from two terms, namely education and values. These two terms are combined becoming value education. Law number 20 of 2003 concerning the national education system provides a definition that education is a conscious, planned effort in realizing the learning process and learning atmosphere so that students can actively develop their potential in order to have spiritual strength, personality, self-control, noble morals, intelligence, and necessary skills for either himself, society or the country. Hersh (1980) argued that value education is a way of thinking about the process of value/moral development. A value/moral is formed from the point of view of value/moral development by involving a set of strategies or principles. Nationally, the value education model focuses on educators' efforts in encouraging students to make value/moral decisions based on real understanding. Bertens (1994) said that morals are values and norms that guide individuals or groups in regulating their behavior. Meanwhile, the values and knowledge education model emphasizes that every science has the ability to produce values or that every knowledge contains implied values. These values can be developed from science through discussions such as in Kohlberg's moral dilemma. These values can be defined as cognitive beliefs that are built from the foundation of science.

From the various descriptions above and various writings on the integration of science and religion, this research has a novelty and distinction on the object side of integration where the focus of the research seeks to look at the integration of science and religion at the basic education level, especially in science subjects, which is not widely researched.

RESEARCH METHOD

General Background

This study aims to describe the implementation of value education model in integrative learning of science and religion and the developed value in this integrative learning at Al Irsyad Elementary School Purwokerto. To achieve the objectives, a qualitative-naturalistic approach was employed in which the research is descriptive, uses the actual

setting or situation, prioritizes process over results, tends to analyze inductively and meaning as major concern (Bogdan & Robert, 1982). This qualitative research is based on direct data, and the researchers act as the main instrument for obtaining data about the value education model in integrative learning of science and religion based on a reasonable and direct situation that is found in the field.

The setting and the subject of the research was selected through purposive sampling. This is in accordance with Nasution (1988), that in naturalistic research the samples are only sources that can provide information in relation to the purpose of the study. Samples can be things, events, people, and situations that are observed. The research was conducted at Al Irsyad Elementary School because this elementary school has both predominance in general science and religious programs. Especially, this is an Integrated Islamic Elementary School that emphasizes general science and religious knowledge where the learning process is integrating both of them. Thus, the school is related the study and had provided the numerous data for this research.

Participants

The respondents of this research included the school principal and two teachers of Al Irsyad Elementary School Purwokerto as the primary subjects. While the supporting subjects were the administrative staff and the students. These respondents were for giving sufficient information related to the research in the interview session.

Instrument and Procedures

To obtain the valid data of this qualitative research, various data collection techniques were used to triangulate one another. Firstly, observation was used to obtain the direct phenomenon about value education model in integrative learning of science and religion. Particularly, the observations were conducted three times to perceive the teaching and learning process in integrative learning of science and religion and to reveal the values embedded in the students from their behavior at school. A field notes and observation checklist were used in the observation. Then, the interview was used to directly ask respondents in depth and in detail about the data on the value education model in integrative learning of science and religion carried out by school principal, teachers, administrative staff and students. The recorder and notes were used to help the researches in doing the interviews. Besides, the documentation was used for collecting the data from the related documents such as lesson plan and syllabus that were used by the teacher in teaching integrative learning of science and religion. The teacher's role can be seen from the status, knowledge, experience, personality, motivation, readiness and performance of teaching. Student behavior can be seen from their ideals, attitudes, and patterns of thought. The role of the school environment can be seen from the role of the school principal, supervisor teachers, employees, supporting infrastructure, school rules and availability of funds.

To ensure the validity and reliability of the data obtained, it is also done through triangulation of techniques and sources. Technical triangulation is done by using several data mining techniques for the same source. The source triangulation is by asking or digging the same data to several sources so that valid and reliable data is obtained. This is used to see how science learning is integrated with religion.

Data Analysis

The collected data were then analyzed qualitatively using the model of Miles and Huberman (Sugiyono, 2014) including reducing data, displaying data and drawing conclusion. Reducing data means summarizing, choosing the main things, focusing on important things, looking for themes and patterns and removing unnecessary ones (Sugiyono, 2014). The purpose of the researcher to reduce the data is to select the important things related to the value education model in integrative learning of science and religion and remove things that are not needed. The data that the researcher has obtained are then classified according to the source of the acquisition and sorted according to their type.

After the data was complete, the researchers presented the data. In qualitative research, data presentation can be done in the form of brief descriptions, charts, relationships between categories, flowcharts, etc. (Sugiyono, 2014). By displaying the data, it will be easier for researchers to understand what happened, plan the next work based on what has been understood. The researcher presented data that had been reduced in the form of narrative text related to the value education model in the integrative learning of science and religion at Al Irsyad Elementary School.

The third step in data analysis is drawing conclusions and verification. The initial conclusions are still provisional, and will change if no strong evidence is found to support them at the next data collection stage (Sugiyono, 2014). This process of obtaining evidence is called data verification. If the initial conclusions are supported by strong evidence or consistent with the conditions found when the researcher returns to the field, the conclusions obtained are credible conclusions. In this study, the researchers drew conclusions to answer the formulation of the problem after it is proven by evidence related to the value education model in the integrative learning of science and religion at Al Irsyad Elementary School.

RESULTS AND DISCUSSION

Value Education Model in Integrative Learning of Science and Religion

Learning is not only a teaching process carried out by educators but has a broader meaning, which is to provide a pleasant atmosphere and make the material easy for students to remember. Therefore, it is necessary to provide learning that is quickly understood by students. One of the strategies is through delivering the value education model in learning the integration of science and religion.

The results of the study show that integrative learning of science and religion in value education is implemented by Al Irsyad Elementary School Purwokerto. The principal believes that this method is the most effective model in thematic learning, so that students understand the material more quickly. This interactive model is also supposed more meaningful and more efficient than others so that the teacher can provide the teaching and learning process that makes students feel easier in learning and understanding the materials. Besides, the material is well received and the learning evaluation runs successfully. Similarly, Basha & Ramana (2018) suggest that teachers should evaluate value education continuously through observing students' behaviors. Teaching the integration of science and religion is to connect a subject with religious material in which it is to increase understanding by connecting the problems faced by students. As a result, there will be a unity of knowledge.

In implementing integrated learning, teachers link one subject to other subjects such as science and religion. Consequently, integrative learning for students will provide

comprehensive skills and knowledge, besides learning becomes more meaningful, especially for students. In this case, this means that students indirectly understand and learn the concepts they are learning, namely through direct and real experiences and connecting them with other integrated subjects. To increase the experience and understanding of students, this model has a higher level of effectiveness when compared to other monolithic learning (Rubiyanto et al., 2010).

According to various data collection techniques, the findings show that the implementation of value education model in the integrative learning of science and religion at Al Irsyad Elementary School is conducted through various mechanisms. Firstly, the integrative learning of science and religion is carried out intensively so that this learning is truly directed and requiring sharpness of mind. The principal stated that learning is a system that must be well conditioned because this system will organize and involve teachers and students; moreover, the teacher is a bridge to produce learning in accordance with school expectations. 'Process, output, input are subjects that will be involved in the learning process. If the learning process is good, and the teacher and students interact and need each other so that the output is good and is accepted by the school user community,' said by the school principal. In order to achieve optimal output, then in the learning process is really designed well, that is through integrative learning. The teachers said that the integration model had produced good religious and religious values for the students. This finding is in line with Achigbe et al. (2019) who suggest that presenting moral, values, ethics and character education in teaching science encouraged students to have various moral and ethics, to take responsibility and to build good character.

Secondly, the learning material at Al Irsyad Elementary School that is the main instrument for realizing learning objectives integrates science and religion. The principal assumed that the teacher is the main performer in the school, so the professional teacher should prepare the materials that supports the students' learning, especially integrating science and religion. The teacher I confirmed that the integrated materials were adding religious principles into the subjects of science in one learning theme. For example, the findings of science were related to the verses of Qur'an so that the findings produced good values especially that were related to the daily lives of students. Consequently, the values had appeared in learning the integration of science and religion and formed the character of students. In the same way, Sahin (2019) stated that value is the basic elements that create individual's personality; particularly, value education aims to advance individuals to have good character and to guarantee their social and psychological welfare in every aspect. Akbas (2007) also said that values are the things which will give the best and most beneficial for the society. The teacher II added that the students would more understand the materials when the religion was integrated into science which were related to their daily life and nature. The principal then also assumed in the integrative learning of science and religion process, the students usually related religious values to other subjects so that the values would create students to think concrete and real.

Finally, the strategy implemented by the teacher in the integrative learning of science and religion encourage students and teachers for interacting one another to achieve the learning objectives set by the school, so that every learning activity becomes alive. The learning strategy that is used in the integrative learning of science and religion is thematic learning. The principal suggested that the teachers should not only as the facilitator at school, but also should be parents because the elementary students need

more attention to learn well. The teachers explained that the learning process was not only conducted in the class, but also outside the class such as at the laboratory, library, and nature where provided the media for students to learn the integrated subjects. These strategies are believed effective in the integrative learning of science and religion, which help students to learn values. Likewise, as stated by Achigbe et al. (2019) that teacher should use various teaching approaches to foster students' motivation and engagement and to raise values related to individual and social issues.

The Developed Values in the Integrative Learning of Science and Religion

The development of this educational model is a component of the learning aspect, especially it is as a component of the development of value education in order to produce values related to integrated thematic learning. The results show that the integrative learning of science and religion produced the values of faith in Allah both at home and at school for students. In developing value education, it is inseparable from the material, media, and strategies that will be applied in the classroom, because the material taught is the most important part, especially in internalizing the values expected by the school. The principal believed that the developed values that were integrated at school would be useful for students in the society. This finding is similar with Lakshmi & Paul (2018) that providing values for students in the educational institutions is essential for students that will be used and reflected in their behavior and attitudes of daily life. Especially, the principal said, '*integrating science and religion also will increase student critical thinking, for example, they try to analyze science through finding out the related verses'*. This finding is in line with Kania et al. (2017) who state that education in Islam is different with western that is not value free and contains physical and metaphysical reality in which the values are from revelation which are absolute. Thus, they suggest that Muslim should not accept the value education without adequate criticism, particularly in the concept of truth and knowledge. In this present study, it is indicated that the values developed are various in each grade according to the theme that was taught. The following is the integrative learning of science and religion and its developed values in every grade at Al Irsyad Elementary School.

In the learning process that was taught by *Ustadzah* (female teacher) with the material "Myself" at the first grade, students were invited to introduce themselves to friends through two-way interactions. From this activity, teacher can foster values through words to students such as honest, disciplined, confident, caring, responsibility, and polite words. The teacher confirmed that these words have relation to thematic learning in integrated subjects with religion, namely inviting friends to do congregational prayer, praying before eating and reminding friends to pray. From this theme, the values of belief in Allah are generated, so that the values of honesty, discipline, care, and responsibility become values that exist in the integrative learning of science and religion. The teacher also stated that the theme "Myself" makes students interact with new friends, so students will recognize their new friends. In this activity, the teacher guided and encouraged students to have fluent and two-way communicative values. Students taught by *ustadzah* who uses integrated material with honest, polite, responsibility, disciplined, and confident have good personalities when interacting in the family, community, or school environment.

The second material is providing the theme "Environment" which is taught in the second grade. In this lesson, *ustadzah* teaches religion and instills honest behavior according to religious themes. Honest words are utterances that are true according to

reality. Honest is a praiseworthy quality that will bring someone to heaven, as in the hadith below.

> "*Let you do honesty, indeed honesty brings goodness and goodness leads to heaven*", (Hadith of Sahih Bukhari & Muslim).

The teacher believed that the honest attitude instilled in the second grade students makes them trusted by others, gets reward from Allah, feels safe and at ease. Similarly, Kania et al. (2017) stated that honest is one of fundamental characters exemplified by Prophet Muhammad PBUH that must be possessed by the students because this values will be prized by both Muslim and non-Muslims. It is not only the value of honesty that is introduced but also the values of religion such as praying together. After praying, the teacher reinforced that prayer is one of the activities that must be done by Muslims to get the pleasure and reward of Allah SWT.

Furthermore, the learning material carried out in the third grade studies about 'The Growth and Development of Living Things'. The value that subsists is learning to be responsible for humans, animals, and plants. In the learning process, the students actively identify the characteristics of living things, care for the environment, including protecting and caring for plants to keep them sustainable. This is related to religious material, namely *thaharah* (purification), generally using water in purification and caring for plants requires to water the plants. The need of water for living things is very important, in which water is the main need. Believing in the existence of Allah who is rich in caring for plants, even though plants still need human help to water the plants, especially in dry session. For Muslims, water is also used for cleansing from impurity and dirt, Muslims are obliged to perform ablution with water so that prayers and other acts of worship can be carried out perfectly. Allah SWT said:

"*And We Bring down from the sky holy water*", (Surah Al-Furqon: 48).

The verse instructs humans to use water as well as possible, because it is used for daily needs, for purification, for plants and animals as living things in the world that also need water. The teacher confirmed that by knowing the verses of environment, the students are hoped to protect more to their nature. This finding is related to the statement that there are 750 verses related to science in the Qur'an, so that as a religion, Islam is a source of knowledge in which Islam and science should not be separable (Wahyuni, 2020).

The fourth grade material discusses about 'The Plants and Animals around my House'. Practically, this material taught children to protect the environment. Protecting the environment is the duty of humans on earth, so that the plants around the house will be fertile. Plants are living things that produce oxygen (O2), with plants humans can breathe and the lungs will feel fresh. From this material the teacher explains to students by observing the environment directly, so that the values of caring for the environment and the environment (animals and plants) created by Allah will be instilled in students. This finding is as proposed by Adedayo (2018) that moral values should include in science teaching to upgrade the level of morality in the further society.

The integrative learning of science and religion in grade five is about 'The Organs of Living Things. As the scientific theory that the living things breathe using oxygen and also humans who breathe fresh air. This theory is related religious value in Asmaul Husna (Names of Allah), Al-Muhyi that means The Giver of Life. God gave life to the earth. The earth, which was originally dry and barren, became fertile and was overgrown with trees. Allah SWT said in Surah Al Fussilat: 39 which means:

> "*And part of His signs (greatness) you see that the earth is dry and barren, but We send rain on it, surely it is moving and suburb. Verily (Allah) gives life to the dead; in fact, He has power over all things.*"

If we believe in the nature of *Al-Muhyi*, we must continue to survive humans. We are a big sin if we lose the right to life of our fellow human beings. Whoever improves to the life of a human being has made human life entirely. From the values obtained in the fifth grade material, the students get values where humans must be able to protect their environment, that is, humans must protect the environment for human life. The teacher said that by integrating the science and religion, the students learnt both science and religion which were discussed with the context of the students' life. The teacher should make science learning more relevant to students lives, for example by discussing the content of the world beyond the classroom.

The sixth grade material discusses 'The Diversity of Living Things in my Environment', namely the thousands of types of animals both on land and in the sea, especially those in Indonesia. These living things include living natural resources that can be utilized to meet human needs. In addition, living things also characterize the identity of the Indonesian nation. We as citizens of Indonesia are obliged to care for and love both plants, animals and the environment wherever we are. Caring for our environment is a manifestation of our gratitude for the blessings of God Almighty who gives gifts to the environment with everything in it for human welfare. Caring behavior for the environment is also a reflection of the human attitude as a way and a role model for the environment wherever he lives. This concern is accordance with Anwar & Elfiah (2019*), 'studying all of its creation in the universe is a religious teaching'*. In specifically, from the knowledge in the universe, the students can learn the creator of God which is called the verses of *Kauniyah* and the knowledge from the Qur'an is called the verses of *Tanziliyah* in which both of them support and explain each other. The teacher believes that learning the integration of science and religion produces values contained in the Qur'an and students recognize and understand that nature and everything in it is God's creation. Teacher said to the students that humans must protect and preserve it. When there are no more plants, there will be a starvation, which will bring life to an end. Therefore, as humans, we must care about the environment by protecting and caring for plants so that our food sources are maintained. These materials teach humans to protect living things. In the teaching and learning process, teachers need to integrate science material with religion. Teachers should explain to students that humans need living things in the world, and the one who created them is Allah. Therefore, the students will understand the material explained by the teacher to them and everything in this world is a creature created by Allah. Indeed, Allah says:

> "*It is He Who sends the wind, then the wind moves the clouds and Allah spreads it in the sky according to His will, and makes it clump, then you see rainwater coming out of its cracks; then, when the rain falls on His servants whom He wills, they suddenly become happy.*" (Q.S Ar-Rum)

Allah sends rain for humans to give benefit for all that is on this earth. The values that appear in this learning are caring for the environment. Its integration with religion is that in human life in protecting the environment according to what Allah commands, so that human life in the world cannot be separated from God. In brief, the integrative learning of science and religion generates various values for students. In other words, science and religion are the two subject that are inter-related and complete each other; particularly, science is based on empirical methodology, while religion is based on

revelation (Yusof et al., 2016). In the same way, Patry et al. (2007) suggested Values and Knowledge Education (VaKE) should be considered in which the learning process is connecting between knowledge and values. Keasta & Marangio (2015) also said that science is value laden and that the teacher brings their own values to their teaching in classrooms.

Finally, this research has implications for the development of science learning that is integrated with religion where the reality and truth of religious teachings can be proven through science. In addition, this research is also recommended as well as a contribution of thought for education at all levels of educational institutions, especially basic education institutions who are looking for learning models to integrate science and religion.

CONCLUSIONS

Value education in the integrative learning of science and religion which is carried out through an interactive model will facilitate the learning process as well as be closer and more efficient, through: 1) integration of science and religion in the learning process; 2) the integrated material which is the main instrument for realizing learning objectives; 3) the strategy implemented by the teacher will bring students and teachers who succeed in achieving the learning goals set by the school. The values that develop in the integrative learning of science and religion through class one to sixth grade materials produce various values; namely, faith in God, an attitude of honesty , the benefits of honesty, get reward from God, feel safe and at ease. Particularly, believing in the existence of Allah and Allah is rich. Plants and humans are creations of Allah. We as humans are obliged to protect and care for the environment which is a form of gratitude for the blessings of God Almighty who has bestowed the environment. In brief, learning the integration of science and religion produces values contained in the Qur'an. The integration of science and religion in science learning from the results of this study can provide a new nuance for the development of natural education that is associated with religious teachings. The results of this study also provide opportunities in the future for researchers who have similar fields to develop the integration of science and religion not only at the basic education level, but also at the secondary education level and even universities which are still largely untouched.

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