

## The Urgency of Biology teaching Materials Based on Islamic Values

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### ABSTRACT

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This qualitative research aims to find out how important Biology Teaching Materials are based on Islamic values in senior high schools (SMA / MA). That is in Teladan High School, MAN 3 Medan, and MAN Sibolga. The purpose of this descriptive research is to make a description, description systematically, factually and accurately about the facts, characteristics and relationships between the phenomena investigated. Data collection techniques in qualitative research are by conducting surveys. Integration of the Koran and Hadith in biology learning needs to be done to foster Islamic values in students in order to achieve the objectives.

**Keywords:** Biology; Islamic Values; Teaching materials.

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## INTRODUCTION

Learning is a communication process. Through the communication process, teachers can transfer or offer their knowledge to students with the aim of making this knowledge available to their students. Mass media is used to avoid or reduce communication disruptions. Media functions only as a tool in learning activities, namely as a tool that can provide visual experiences to students to increase learning motivation, explain and simplify complex and abstract concepts to become simpler, more concrete and easier to understand. The application of learning methods in biology learning, such as the use of concept maps and graphic teaching materials, is believed to facilitate conceptual understanding and help students assimilate and remember material more quickly. Because the teacher provides material in an interesting and varied presentation, this learning technique is intended to reduce student boredom and encourage students to learn and pay attention to what they are learning (Harahap, 2018).

Biology learning is related to many concepts that are related to each other. Biology learning is presented as a whole, not just in part because biology has hierarchical relationships. Such material can be assisted with learning strategies using concept maps. In addition, biology is full of pictures to explain structures and processes. Biology without pictures will not provide a good understanding for those

who study it. So far, teachers, including students, have ignored pictures so that biology learning is considered abstract. Information obtained from the experience of hearing and seeing is very meaningful in communication that 75% of the learning experience is obtained through the sense of sight, 13% through the sense of hearing and 12% from other senses (Ibrahim, 1988).

This can be seen from the classification of learning experiences according to Edgar Dale in the form of a cone of experience starting from the most concrete things to things that are considered abstract. This classification of experiences is widely followed by educators in determining what tools should be appropriate for a particular learning experience (Suryaningsih, 2018). One of the cones of experience is visual experience, where this experience is obtained from everything that is realized visually in two-dimensional form, for example illustrations, caricatures, cartoons, posters, portraits, slides and so on. Meaningful learning is a process of linking new information to relevant concepts contained in a person's cognitive structure. Learning with a conceptual approach accompanied by pictures leads students to meaningful learning and makes it easy to understand and helps memory of the subject being studied (Lufri, 2007).

In this case, researchers develop teaching materials that can be used as guidelines for teachers in creating teaching materials. Teaching materials are developed that include learning objectives, logical and systematic presentation of material and sentences that are easy to understand and understood by students and teachers (Hartono, et al., 2021). It is hoped that the results of this research can be utilized and applied by biology teachers in implementing the learning process at school, making it easier for students to understand biological concepts in the material studied and input for school principals to encourage teachers to write teaching materials. Religion really emphasizes the axiological dimension of science. Based on this opinion, religion and biological sciences are actually closely related. Henceforth, it is the teacher's job to ensure that the scientific integration paradigm can be implemented in the teaching and learning process (Suswina, 2016).

Education that provides Islamic values in biology learning will provide great benefits in the development of students, including education in spiritual values and increasing insight into Islamic knowledge in science learning. This will also provide an opportunity for teachers and students to be able to link knowledge of other subjects with biology lessons, so that the learning process is more meaningful. Therefore, it is necessary to study the development of biology lesson plans based on the integration of Islamic knowledge in the curriculum.

## RESEARCH METHOD

The time and place of this research was carried out during hours when students were not studying, so as not to disturb study time. The research location is a SMA/MA school. Namely at Teladan High School, MAN 3 Medan, and MAN Sibolga. The research method used by researchers in this research is a qualitative approach with descriptive methods. The research method used is a qualitative method. Methodology is the process, principles and procedures we use to approach problems and find answers (Mulyana, 2008).

This qualitative research aims to find out how important it is for Biology Teaching Materials to be based on Islamic values in senior secondary schools (SMA/MA). The aim of this descriptive research is to create a systematic, factual and accurate description, picture of the facts, characteristics and relationships between the

phenomena being investigated. The data collection technique in qualitative research is by conducting a survey, namely the researcher distributes a Google form link which is submitted to the rest/female students to fill in 2 questions where the questions are: 1) In your opinion, is it important for Biology Teaching Materials to be based on Islamic values? And 2) What are the impacts if Biology Teaching Materials are not based on Islamic values?

## RESULT AND DISCUSSION

Islamic-based biology teaching resources are needed because they enable students to understand scientific ideas in the context of their religious beliefs. Biology curricula can offer a comprehensive perspective of science and link scientific ideas to students' religious beliefs by incorporating Islamic principles. Students are able to connect scientific knowledge with the moral and ethical teachings of their religion, thereby increasing their understanding of biology. Therefore, teaching resources for biology subjects that are based on Islamic values can help foster harmony between students' religious beliefs and science.

After conducting a survey via Google Form, the researchers obtained a total of 75 respondents, namely from 3 different agencies. Namely from SMA Teladan, MAN 3 Medan, and MAN Sibolga.

### **The selected respondents came from the Exemplary High School Institution**

This respondent responded and said that biology teaching materials based on Islamic values are very important. Respondents also said that the application of Islamic-based biology teaching materials could have a positive impact on biology learning, such as:

1. Increase students' understanding of Allah's creation and His greatness in creating living creatures
2. Providing an Islamic nuance to the teaching materials used, so that it can strengthen students' Islamic identity
3. Encouraging students to be more creative in learning, because the teaching materials presented are more interesting and in line with Islamic values
4. Improving the quality of biology learning by integrating Islamic values into biological concepts.

Not only that, respondents also expressed the opinion that biology provides understanding and knowledge about the diversity of living creatures in nature, as well as how these living creatures interact with each other. Biology is important for everyday life because it allows humans to better understand the structure and function of organs in the body. The impact of Islamic-based biology can understand natural elements using Islamic law.

### **The selected respondents came from the MAN 3 Medan Agency**

This respondent gave the same response as the previous respondent. This respondent said that it is very important that Biology teaching materials are based on Islamic values. This respondent also expressed the opinion that it is very important for biology teaching materials to be based on Islamic values because the most correct source is the Al-Qur'an so that teaching materials originating from the Al-Qur'an are guaranteed to be true. And if biology teaching materials are not based on Islamic values, it will result in the younger generation not knowing the true origins that all

processes that occur in this world, especially in the field of biology, are all based on the Koran and hadith and students' lack of knowledge of Islamic values from biology.

### **The selected respondents came from the MAN Sibolga Agency**

This respondent also gave the same response as the 2 previous respondents. The impact of applying Islamic-based biology teaching materials is that it can help students develop a deeper understanding of nature and its creator. This can be achieved by integrating Islamic teachings into the study of biology, such as by using verses from the Koran and hadith which discuss the human body, the wonders of creation, and the importance of preserving the environment.

Learning is a deliberate, directed and aimed effort so that other people can gain meaningful experiences. Biology as a science has its own characteristics compared to other sciences. Biology is a science that studies living creatures and their lives from various aspects of problems and levels of organization. Biology is part of science, so what applies to the field of science also applies to the field of biology. Biology is a branch of science related to natural science that studies living organisms and their surrounding environment. Islamic values are essentially a set of principles of life, teachings about how humans should live (Arsyad, 2003). Life in this world, one principle and another principle are mutually beneficial, are intertwined into one inseparable whole. Immediately Basically, Islam is one system, one package, one package of values that are interconnected to form what are called Islamic theories (Hartono, et al., 2024).

The Koran, as the holy book of Islam, apart from studying questions about religion, also examines science, including biology. There are many verses in the Koran that explain biological phenomena which can be used as references for studying biology learning materials or subjects. Apart from the Koran, Hadith is also a source of the Islamic religion which also discusses a lot about biology (Asnawir, 2022). The Koran and Hadith can be studied and related to the subject matter in the biology learning process to derive Islamic values so that students can have greater faith and devotion to God Almighty, and have noble character as expected from national education goals. Integrating the Al-Qur'an and Hadith into biology education aims to develop students and Islamic values in developing aspects of biological science (Abdullah, 2004). The aim of this integration is to provide students with a thorough understanding of something, a discussion that can ultimately give birth to good values and noble morals in students in their lives and to increase their faith and belief in the power of Allah SWT.

Islamic values in studying biology strengthen the affective, psychomotor and cognitive domains. If it is applied studying biology at school, it provides good comprehensive academic results in all areas of student learning. Providing a different color from what has happened so far in the cognitive field so dominant or even the only one that develops learning in schools. The importance of integrating Islamic values originating from the Al-Quran Hadith into a normative frame of reference when studying natural sciences (biology) (Hartono, et al., 2023). In formulating educational goals, Ali and Lulukdalam Musspiroh (2014) stated that the goal is to instill Islamic values, namely: a) developing a deeper spiritual understanding and developing an understanding of Islam in the context of life, especially those related to kauniah (nature) verses. b) Equip students with various natural knowledge. c) develop students and the ability to evaluate and strengthen the relative superiority of Islamic

knowledge over all other knowledge. d) Improve emotional states through imaginative experiences so that creative skills can develop and help to know the standards of right and wrong in Islam. e) Helping children grow to learn to think logically and direct their reasoning to hypotheses and rely on the necessary concepts from natural knowledge (Jelen, 2014).

Biology is a vehicle for improving knowledge, skills, attitudes and values as well as being responsible to the environment, society, nation, state, who believe in and are devoted to God Almighty. Biology is also related to how to find out and understand about oneself, the universe and life systematically (BNSP, 2006). So in essence the study of religious and biological material has a very close relationship and if integrated it will produce meaningful learning. Biology studies facts, procedures and phenomena related to living creatures and their lives which are God's creation. By studying biology, it is hoped that students will increasingly glorify the greatness of God. Biology learning reveals scientific facts, can be done using various methods. One method that can be used is scientific investigation or research activities (Nurasni, et al., 2015). The Koran and Hadith have provided a complete and perfect system that covers all aspects of human life, including scientific activities or scientific investigations. Scientific activities are an integral part of the entire Islamic system where each part makes a contribution to the others. The Koran, as the word of Allah, was not revealed for practical purposes (Jamaludin, 2019). In its capacity as *hudal linnas*, the Koran provides stimulant information regarding natural phenomena in quite large portions, namely around seven hundred and fifty verses. These verses in the Koran can be studied through studying biology in order to discover scientific facts.

## CONCLUSIONS

Research that seeks to find and organize them systematically sourced from an informant source which initially begins with taking a number of questionnaires, which dig up more in-depth information related to the urgency of teaching materials in Islamic values, this is based on objective observations regarding a symptom or phenomenon (phenomenon) which is usually This happens in the social environment of the school which describes a real situation without changing either adding to or subtracting from something that should exist in the field. Then it is concluded from several existing statements. The respondent also said that the application of Islamic-based biology teaching materials can have a positive impact on biology learning, such as : Increasing students' understanding of Allah's creation and His greatness in creating living things, Providing an Islamic nuance to the teaching materials used, so that they can strengthen students' Islamic identity, Encouraging students to be more creative in learning, because the teaching materials presented are more interesting and in line with Islamic values, and Increasing quality of biology learning by integrating Islamic values into biological concepts. Integrating the Koran and Hadith in the biology learning process, students can gain knowledge about biological concepts and at the same time develop Islamic values so that students increasingly become human beings who are faithful and devout and have noble character as expected in educational goals. national.

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