

Building Religious Characters Through a Biological Perspective

Deden Ibnu Aqil¹

¹(Universitas Indraprasta PGRI, Jakarta, den.aqil@gmail.com)

ABSTRACT: *Character education is the answer to addressing the problems of the nation's life at this time, through this education students will have a better attitude in accordance with the purpose of education which is to form a noble personality. to be a man of faith and devotion to God Almighty, noble, knowledgeable, capable, creative, independent, and a democratic and responsible citizen, as mandated in Law No. 20 of 2003 concerning the National Education System. Biology is a lesson that studies all living things in this world. Biology is also a science that can change one's mindset to be scientific because it uses rational, empirical and universal reasoning. Although universal, biology can also build religious characters that may not be universal. Because biology is also systematically told in the scriptures. Scripture justifies the natural processes that occur. Like the Koran is a divine revelation that can increase the faith and devotion of the faithful. So that biology can be one way to improve religious character other than worship activities, listening to lectures or reading books. The problem is how to see the relationship between biology and religious values and how to build character values through biology. The improvement of religious character through biology is by providing additions to biological material with the holy verses of the Koran which are relevant to the content of the discussion on the biological material. As the discussion on reproductive material is related to the Al-Quran verse Al-Mu'minun verse 14 and the material for the classification of living things is explained in Al-Quran Surat An-nur verse 5.*

Pendidikan karakter menjadi jawaban menyikapi problematika kehidupan bangsa saat ini, melalui pendidikan ini siswa akan memiliki sikap yang lebih baik sesuai dengan tujuan pendidikan yaitu membentuk kepribadian yang berakhlak mulia. menjadi manusia yang beriman dan bertaqwa kepada Tuhan Yang Maha Esa, berakhlak mulia, berilmu, cakap, kreatif, mandiri, dan menjadi warga negara yang demokratis serta bertanggung jawab, seperti yang diamanatkan dalam UU no 20 tahun 2003 tentang Sistem Pendidikan Nasional. Biologi adalah pelajaran yang mempelajari seluruh makhluk yang hidup di alam ini. Biologi juga merupakan ilmu yang dapat merubah pola pikir seseorang menjadi ilmiah karena menggunakan nalar rasional, empirik dan juga bersifat universal. Walaupun bersifat universal, biologi juga dapat membangun karakter religius yang mungkin tidak universal. Karena biologi juga diceritakan secara sistematis di dalam kitab suci. Kitab suci menjadi pembenaran akan proses alami yang terjadi. Seperti Al-Quran merupakan wahyu ilahi yang dapat meningkatkan keimanan dan ketaqwaannya kaum beriman. Sehingga biologi dapat menjadi salah satu cara meningkatkan karakter religius selain dari pada kegiatan ibadah, mendengarkan ceramah atau membaca buku. Permasalahannya adalah

bagaimana melihat hubungan biologi dengan nilai religius dan bagaimana caramembangun nilai karakter melalui biologi. Peningkatan karakter religius melalui biologi adalah dengan memberikan penambahan pada materi biologi dengan ayat-ayat suci Al-Quran yang relevan dengan konten pembahasan materi biologi tersebut. Seperti pembahasan materi reproduksi dikaitkan dengan ayat Al-Quran surat Al-Mu'minin ayat 14 dan materi klasifikasi makhluk hidup ada penjelasannya dalam Al-Quran surat An-nur ayat 5.

Keywords: *Religious Characters and Biological Perspective.*

I. INTRODUCTION

Character education is the answer to addressing the problems of national life today, through this education students will have a better attitude in accordance with the purpose of education that is forming a personality that has a noble character. Religious basic words are religion that comes from foreign languages religion as a form of noun which means religion or belief in the existence of something natural power above humans. While religion originates from the word religious which means the religious nature inherent in a person. Religious as one of the character values described by Suparlan as an attitude and behavior that is obedient in carrying out religious teachings, tolerant of the implementation of worship of other religions, and living in harmony with followers of other religions. This religious character is needed by students in the face of changing times and moral degradation, in this case students are expected to be able to have good and bad measures that are based on religious provisions and provisions.

At present, character education is becoming a 'trending topic' in the world of education. The idea of character education that is being upheld by this government should have a clear direction and purpose. In a clear direction, implementation in the field is easy to implement. Conversely, if it is not clear, then let alone the results of the education process, the implementation alone experiences many obstacles (Kuniawan, 2017:198).

Character education itself was initially only on religious subjects and civic education, especially related to the morals and character of students. However, in fact the planting and formation of characters through these two subjects is not enough. Less than optimal results from character education through these two subjects are considered necessary to involve more subjects, even all subjects, character education is needed through all subjects, one of which is biology / science. Integration of character education values in classroom learning, both material and learning processes that occur, so that these values are expected to be embedded well in students, which in the end will be formed into an expected character.

Characters in Arabic are interpreted as '*khulu, sajiyyah, thab'u*' (character). Sometimes interpreted martyrdom, which means closer to personality (Fitri, 2012:20-21). In a large dictionary Indonesian language explains that character is a character or psychological trait, character, or character that distinguishes one from another: character, character, thus character is a way of thinking and behaving that is characteristic of each individual to live and cooperate, both in the family environment,

society, nation, and country. good character is an individual who can make decisions and is ready to account for every result of the decisions he makes.

Character is a way of thinking and behaving that is characteristic of each individual to live and cooperate, both within the scope of family, society, nation, and country. Individuals who have good character are individuals who can make decisions and are ready to account for every consequence of the decisions that they make. Based on the above understanding it can be concluded that character is a way of thinking and behaving that is characteristic of each individual to live and work together, both within the family, society, nation, and state.

Individuals who have good character are individuals who are able to make a decision and are ready to account for every consequence of the decisions they make. Character education is a national movement to create schools that foster ethics, be responsible and care for young people by modeling and teaching good character through emphasis on universal values that we all believe in. Character education is plus character education, which involves aspects of knowledge (feeling), and action (action).

The birth of character education is an attempt to revive the ideal-spiritual pedagogy that was lost by the wave of positivism pioneered by the French philosopher Auguste Comte. Character is a walk of science and skill. Knowledge without the foundation of a true personality will be misleading and skills without self-awareness will destroy. Characters will form motivation, and at the same time are formed by dignified methods and processes. Character is not just an outward appearance, but implicitly reveals hidden things. Therefore, people define, care, and act based on ethical values, including cognitive, emotional, and behavioral aspects of moral life (Damayanti, 2014;11).

The model of religious education or religion-based education through learning is very important, more specifically for character education. Religious education is the process of transmitting knowledge directed at the growth of religious appreciation that will foster a spiritual condition that contains the belief in the existence of the Almighty God, with all teachings revealed through revelation to his Messenger, and that belief will be a driving force for the practice of religious teachings in behavior and daily actions. One aspect of religious education or religious education is that morality education is very important, even has close regulations with the purpose of education itself. One of the main tasks of education is to make students and / or communities mature, independent, insightful, and noble in accordance with positive and universal moral values.

Religion gives and directs human nature to meet inner needs, leads to happiness and shows truth and also as the foundation for the formation of *ahlak*. Biology is a lesson that studies all creatures that live in this world. Biology is also a science that can change one's mindset to be scientific because it uses rational, empirical and also universal reasoning, that is, everyone recognizes the truth. Although it is universal, biology can also enhance religious character which may not be universal. Because biology is also systematically told in the scriptures. Scripture is justification for natural processes that occur. Like the Koran is a divine revelation that can increase faith and devotion. So that biology can be one way to improve religious character other than worship activities in general. The problem is how to connect biology with religious values and how to improve character values through biology.

II. CHARACTER BUILDING

The Basic Formation of Religious Characters is that Humans basically have two potentials, namely good and bad. In the Qur'an the surah Asy-syam verse 8 is explained by the term *fujur* (wretched / wicked) and *taqwa* (fear of Allah). Humans have two abilities, namely being a believer or a disbeliever in his God. Luck in favor of people always purifies themselves and losses favor the people who pollute themselves. In the Koran, the Al-Shams verse Allah says that "So Allah inspired the soul that is the way of wickedness and piety." That every human being has the potential to be a good or bad servant, to carry out orders or violate his prohibitions, to become a believer or an infidel, a believer or a polytheist. Humans are perfect God's creatures. However, he can be the most despicable servant of animals (Fitri, 2012: 20-21).

With two good or bad potentials, humans can determine it. The good nature of human beings is driven by a good heart, a calm soul, common sense, and a healthy person. Bad potential is driven by a sick heart, angry desire, greed, and a dirty mind. Thomas Lickona is known as a psychologist who specializes in character education. According to Lickona, character education is a deliberate effort to help someone so that he can understand, pay attention to, and do core ethical values. In character education, it is clear that we want our children to be able to judge what is right, care deeply about what is right, and then do what they believe is right. People who have character as nature are someone in responding to a moral situation, which is manifested in real action through good behavior, honesty, responsibility, respect for others and other noble characters.

The meaning of character as stated by Thomas Lickona: "A reliable inner disposition to respond to situations in an amorally good way." He further added, "Character has conceived three interrelated parts: moral knowing, moral feeling, and moral behavior". According to Thomas Lickona, noble character (good character) includes knowledge of goodness, then raises commitment (intention) towards goodness, and finally really does good. In other words, character refers to a set of knowledge (cognitives), attitudes (attitudes), and motivations (motivations), as well as behaviors and skills (Lickona, 1991:51).

According to Thomas Lickona, characters are related to moral concepts (moral motivation), moral attitude (moral feeling), and moral behavior (moral behavior). Based on these three components, it can be stated that good character is supported by knowledge of goodness, the desire to do good, and doing good deeds. In this regard, he also stated: "Character education is a deliberate effort to help people understand, care about, and act upon core ethical values" (Character education is an intentional (conscious) effort to help people understand, care about, and implement values core core values). Even in the Character Matters book he mentions: "Character education is deliberate effort to cultivate virtue — that is objectively good human qualities — that are good for the individual person and good for the whole society" (Character education is an intentional effort to realizing virtue, namely good quality of humanity objectively, not only good for individual individuals, but also good for society as a whole) (Lickona, 2012:5).

Biology is one part of natural science that has its own characteristics compared to other natural sciences. Biology is categorized as scientific knowledge because it is Rational and Empirical. Rational means that it can be accepted by reason and empirical means in accordance with the facts. Learning Biology means trying to get to

know living things and their life processes in the environment so that they need approaches and methods that give the characteristics and basis of work in concept development. By studying biology by adding religious characters, it is hoped that it will form an attitude of respect and gratitude for the blessings that have been given by the creator, and can build awareness to maintain the balance of the biosystem created by God Almighty and Science is the mother of current development of knowledge.

The need for character education according to Kusniati(2012:204) that character education can be implemented with the integration of character education in learning, one of which is science / science learning. Integration of character education in the learning process is carried out starting from the planning, implementation, and evaluation of learning. One approach used to instill character education is a contextual approach. Rosyidah (in Khusniati, 2012:204) have said that the contextual approach in question is contextual learning based on the results of John Dewey's research which concludes that students will learn well if what is learned is related to what has been known about the activities or events that occur around them.

Contextual learning is a matter of building relationships to find meaning. In this case it connects biology learning material with religious values sourced from the holy verses of the Koran. According to Jhonson the linkages that lead to meaning are at the core of contextual teaching and learning (Johnson, E.B, 2014:90)

III. RELIGIOUS CHARACTER

Religious characters can be achieved with a variety of activities such as the first; hear lectures / advice when following formal lectures such as Friday prayers or memorials to the prophet's birthday. Second; through worship activities, establishing prayers, reading scriptures, fasting zakat, and carrying out the Hajj. Third; by reading religious books, both about the procedures for worship (fiqh), tasawwuf, or reading stories that contain wisdom. Fourth; studying at school, studying at school is not only learning through religious education or manners, but in this case the author makes an approach by learning religious values through biology. Some religious values along with their character indicators according to Marzuki (2015:101-106).

1. Obeying God: (a) sincerely carrying out God's commands, such as: prayer, fasting, or other forms of worship, (b) abandoning Allah's prohibitions, such as: committing shirk, stealing, adultery, drinking, and prohibitions - other prohibitions.
2. Gratitude: (a) always thanking God by praising Him, (b) always thanking anyone who has given or helped him, (c) using everything he has with full benefit.
3. Sincerity: (a) do acts sincerely without strings attached, (b) help anyone who is worthy of help, (c) give something without expecting anything in return, (d) carry out actions only hoping for the pleasure of Allah.
4. Patience: (a) carry out the commands of God with full submission, accept all of God's destiny with courage, (c) face the test (difficulty) gracefully, (d) always avoid being angry with anyone.
5. Judgment: surrender all affairs to God, (b) always hope that God gives the best decision, (c) is ready to accept whatever God will decide.

6. Qanaah: (a) accept all the provisions of Allah willingly and as is, (b) feel enough with what is owned, (c) accept all decisions willingly and patiently and not despair
7. Confidence: (a) dare to do something because they feel capable, do not hesitate to do something that is believed to be able to do, (c) does not always depend on the help of others.
8. Rational: (a) doing something based on logical thinking, (b) always thinking argumentatively, (c) not just talking, (d) not thinking weird.
9. Critical: (a) not trusting others, (b) not easily accepting the opinions of others, (c) analyzing the problems faced
10. Creative: (a) skilled at doing things, (b) finding practical ways of getting things done, (c) not always depending on the ways and works of others.

The character indicator above is a religious indicator that can be developed through character education in schools. By studying biology students will be added to an understanding of the relationship of biological material or biological concepts with explanations in the Koran. Students will be more confident about what they learn is not just exact sciences that are relatively true, but become a complete understanding of the relationship of religion to science, especially biology.

The character model has been written clearly in the Koran as Allah has sent down to the Prophet Muhammad. Besides that, the Islamic character has been seen in the example of the behavior of the Prophet Muhammad. Embedded behavior is all forms of commendable morals to be given to students. Such character building is very much needed in the education of this generation (Wardoyo, 2015: 91-103). On the other hand, Thomas Lickona explained that people with character are a person's nature in responding to situations morally, manifested in real action through good behavior, honesty, responsibility, respect for others, and other noble characters. From the formation of character instilled through education, our nation is expected to be able to create a generation that is a noble, noble, and moral (Lickona, 2012:84)

The following is how Islam instills Character values according to Mudlofir (2015: 230-363) through the verses of the Qur'an, namely:

- 1) Use of Discovery-Inquiry Strategies (al-Kasyfuwa al-Wujdan)
- 2) Planting Character Values with Questions (Question-Answer)
- 3) Planting Character Values Through Re-punishment and Punishment
- 4) Character Planting with the Principles of Synergy / Integration (learning to know, learning to do, learning to be, and learning to live together).
- 5) Planting Character Values with Exemplary (Modeling, Uswah)

Planting Character Values with Exemplary (Modeling, *Uswah*). In As-Saffat's verse 102-108 Allah tells us that Prophet Ibrahim had carried out his command to slaughter his son (Prophet Ismail, this describes the learning process for mankind. In these verses Allah states that this event is truly a test / test that real, and this trial will also apply to people who came later, Ibrahim has successfully faced this test because he has been able to defeat his egoism by releasing something that is very loved, Ismail.

In this event there has been the planting of Ibrahim's personal character. In carrying out the duties and commands of God that are worthy of being imitated and become the example of his son From Ismail's side, loyal characters were obedient and tenacious in

their hard and painful tasks. These characters are not taught but are immediately practiced and felt. This story also awakens to humanity that the nobility and height of humanity in the eyes of God must be passed through sacrifice. This is a form of contextual learning (contextual teaching and learning) by practicing what is done directly by educators and students.

Surat An-nur verse 45 Allah Almighty explains that the biodiversity in this world is his creation. He created animals from water, where the source of life is from water, there are those who walk with their stomachs such as snakes, worms, snails, leeches and so on, some walk on legs like penguins, ostriches, kangaroos, ducks, chickens, canaries and etc. and there are those who walk on four legs such as horses, cows, rabbits, dragons, crocodiles and many other animals. In this context religious character education that can be taken is empirical truth through learning biodiversity in biology can make students realize with confidence that learning is related to what is read in the scriptures so that strengthen the faith and devotion to the almighty God Almighty God.

IV. BIOLOGY AND RELIGIOUS CHARACTER

Biology is a lesson in high school that learns all things related to living things both from the smallest creatures such as viruses and bacteria to the largest creatures such as rhinos and elephants. Biology lessons contain material related to the existence of this universe that runs consistently. Consistent means walking in accordance with natural law or sunnatullah. Biology is a lesson that learns about the phenomenon of the entire universe with all kinds of symptoms that occur in it. The symptoms that occur are observed consistently so as to give birth to a variety of facts in the form of research that is empirically undeniable as long as there are no more scientific discoveries. Scientific facts are truths that are used as a measure to justify activities that require scientific facts such as creatures life needs food, so when breeding bacteria it needs nutrients according to the bacteria that are bred.

Based on Sultoni's research (2016: 90) Implementation of the development of religious attitudes in biology learning is carried out by conveying greetings and prayers at the beginning of learning, connecting learning material with Islamic teachings, delivering greetings and praying for kafaratulmajlis at the end of learning, and reprimanding students who are considered to violate Islamic rules and obstacles in the development of religious attitudes in the form of unavailability of examples or guidelines for evaluating religious attitude competencies.

The development of religious attitudes is based on the results of the above research that in the learning activities the teacher must take steps to imitate Islamic nuances such as saying hello when entering the classroom and leading prayer when starting learning then learning is done by connecting subject matter with Islamic teachings. The relationship of biological subject matter with Islamic teachings requires a place in learning so that the purpose of learning by inserting the value of religious character can be achieved specifically in the environment of Islamic education.

The source of reference for religious character education in Islamic education is the Qur'an and hadith. This is in line with the mission of the Prophet Muhammad delivered Islamic teachings, namely perfecting the morality of the people. He said: "I was sent to perfect human morals." (Narrated by Ahmad and Baihaqi). Based on this

hadith, basically the Shari'a was brought by the Prophet. boils down to the formation of noble character (AkhlaqAl-karimah).

When the teacher conveys to students the relevance of scientific findings in biology learning with Islamic teachings, or vice versa, the relevance of Islamic teachings to scientific findings will make students more convinced of the truth of Islamic teachings, and their faith increases. Because students' beliefs are strengthened by science with scientific standards (rational and empirical) so that it will be reflected in the form of student behavior in scientific and religious attitudes. The signs of God's power are of the nature and kauniayah, are of a naturethe Kauliah is the word of God contained in the Koran and is kauniyah derived from signs that can be seen from his creation on this earth or through biology / science.

The following are some biological material that are relevant to the verses of the Koran :

No.	Biological material	Name of the letter / verse of the Koran
1.	Diversity & classification of living things	<p>An-nurverse45: And God has created all kinds of animals from water, so some of them walk between their bellies and some walk on two legs, while some (others) walk on four legs. Allah created what He wanted, in fact Allah is All-Powerful over all things</p> <p>Thaahaverse53: Who has made for you the earth as an expanse that has made for you on the earth a road, and lowered it from the sky of rain, then we grow it with rain water with different kinds of vegetation</p>
2.	The origin of life / human creation / cell reproduction	<p>An-nurverse45: And God has created all kinds of animals from water, so some of them walk on between his stomach and some walking on two legs, while some (others) walking on four legs. God created what He wanted, in fact Allah is All-Powerful over all things</p> <p>Insanverse2: Surely We have created mankind from a drop of semen which is mixed together by what We wanttest it (with orders and prohibitions), because of that We make him hear and see.</p> <p>Al-Mukmin verse 67-68 which means: He who created you from the land Then from a drop of semen, afterwards from a lump of blood, Then you are born as a child, then (you are left to live) so that you may come to the age(adult), Then (let you live again) until old, some of you are forgivenbefore that. (We do this) so that you come to the appointed death and that you understand it.</p>
3.	Creation of living things and plants	SuratAz-Zumar verse 21 means: Do you

		not pay attention, that Allah hath brought water from the heavens, Then set it as the sources of water on the earth Then He grew it with water and planted various colors, then became dry then you see it yellowish, then made it crumbling in rattles. Verily in that there is indeed a lesson for those who have reason.
4.	Food derived from plants	Yassin verse verses 34-35 which means: And we made him gardens of dates and wine and we sent him some springs, so that they could eat of the fruit, and from what their hands worked. So why are they not grateful?

Character values in relation to God Almighty (Religion) Regarding this value, one's thoughts, words, and actions are always based on divine values and / or religious teachings.

The impact of studying Biology by adding verses from the Koran is:

1. Build awareness of the truth that natural law does not conflict with the guidance of religion, namely the Koran
2. Awaken the truth of the Koran as a manifestation of the creator
3. Strengthen the belief in the greatness of God based on the existence, beauty and regularity of the results of His creation

Providing understanding of biological concepts related to living things, various natural phenomena, principles and biological laws and their relevance to Islamic teachings.

V. CONCLUSION

Learning activities can improve character education, Biology can build religious character with an approach to making biological material correlations with verses from the Koran. Islamic-based schools can apply the growth of their students' character in learning and through school activities among the characters to be achieved are religious characters that can be built through biology or science.

VI. REFERENCES

- [1] Agus Zeanul Fitri. Value and Ethics Based Character Education in Schools (Jogjakarta: Ar-Ruzz Media, 2012) 20-21
- [2] Afiful Ikhwan and Dian Iskandar Jaelani, Introduction to the Islamic Education Concepts (an Integral Paradigm Building Efforts), Malaysia: Proceedings International Seminar on Islamic Law, Economic, Education and Science, Fakulti Tamadun Islam, UTM Malaysia, 2014, 136-147.
- [3] Damayanti, Deni. Guide to Implementation of Character Education in Schools (Yogyakarta: Araska, 2014) 11-12
- [4] Fauzil Adhim. Positive Parenting: Islamic Ways to Develop Positive Character in Your Child, (Bandung: Mizan, 2006)

- [5] Johnson, E.B, *Contextual Teaching Learning: Making Teaching and Learning Activities Meaningful and Meaningful* (Bandung: Kaifa Publisher, 2014)
- [6] Marzuki. *Islamic Character Education* (Jakarta; Amzah, 2015) 101-106.
- [7] Mudlofir, A. *Character Education: Concepts and Actualization in the Islamic Education System*. *Nadwa Journal of Islamic Education*. Vol. 7, Number 2, October 2013. 230-363.
- [8] Khusniati, M. *Character Education Through Ipa Learning*. *Indonesian Science Education Journal*. Volume 1 (2) (2012) 204-210.
- [9] Kurniawan, S. *Character Education in Islam Al-Ghazali's Thought about Child Character Education Based on the morality of al-Karimah*. *Tadrib Journal*, Vol. 3, No. 2, December 2017, 198-214.
- [10] Wardoyo, S.M. *Character education: building the identity of the nation towards the religious generation of 2045 gold*. *Journal of Tadris* Volume 10 Number 1 June 2015, 91-103,
- [11] Sultoni, Ahmad. *Implementation of 2013 Curriculum in Biological Studies in Developing Religious Attitudes of Students in Aliyah Madrasahs*. *Journal of Islamic Education* Volume 4 Number 1 May 2016 ISSN (p) 2089-1946 & ISSN (e) 2527-4511, 90 - 91.
- [12] Interpretation, Ahmad. *Islamic Teaching Methodology* (Bandung: Teenager Rosdakarya, 2004)
- [13] Thomas Lickona, *Educating for Character: How Our School Can Teach Respect and Responsibility* (New York, Toronto, London, Sydney, Aucland: Bantam books, 1991)
- [14] Thomas Lickona, *Character Matters: Character Issues, happened*. Juma Wamaungu & Jean Antunes Warden Rudolf Zien and Editor Uyu Wahyuddin and Suryani (Jakarta: BumiAksara, 2012)
- [15] Thomas Lickona, *Educating for Character: Educating to Form Characters, happens*. JumaWaduWamaungu and Editor Uyu Wahyuddin and Suryani (Jakarta: Bumi Aksara, 2012)
- [16] Zubaidi, *Character Education Design* (Jakarta: Prenada Media, 2011)