

Profile of Strengthening Character Education in Biology Learning of First Grade (10th Class) Senior High School in MAN 1 MEDAN

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Abstract

Character Strengthening Education (PPK) is an educational movement in schools to strengthen the character of students through harmonization of the heart (ethics), feelings (aesthetics), thoughts (literacy), and sports (kinesthetic) supported by community involvement and cooperation between schools, families, and communities. This study aims to determine the profile of character education strengthening in biology learning for class X at MAN 1 Medan. The method used in this study is a qualitative method with a descriptive research type using observation guide sheets, interviews and documentation in data collection. While data analysis techniques include data reduction, data presentation, and drawing conclusions. This research was conducted at MAN 1 Medan. The research was submitted to describe and analyze events, phenomena, learning activities, attitudes and perceptions. The results of the study show: (1) There are 10 profiles of strengthening character education in MAN 1 Medan, namely: Civilized (ta'addub), Exemplary (qudwah), Citizenship and nationality (muwatanah), Taking the middle path (tawassut), Balanced (tawazun), Straight and firm (i'tidāl), Equality (musawah), Deliberation (syūrah), Tolerance (tasāmuḥ), Dynamic and innovative (tathawwur wa ibtikār). (2) The application of character education in biology learning in class X has implemented character education, namely: religious values, independent, friendly/communicative, responsible, tolerant, caring for health, caring for society, and caring for the environment, and caring for the environment. (3) Difficulty implementing character education in biology learning. Teachers do not experience difficulties because biology learning is identical to everyday life in the learning process so that it is easy to instill character values in students.

Keywords: Biology education, Profile, Strengthening Character Education



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INTRODUCTION

Biology education is a scientific discipline that aims to cultivate positive traits, promote a scientific mindset, unlock the natural potential of the natural world, and equip individuals with practical information applicable to everyday life (Siregar et al., 2022). It is concerned with the implementation of ideas and not just theoretical concepts. It is vital that students apply the knowledge gained from studying biology through their attitudes and actions (Supranoto & Heri 2015). Character qualities emphasized in biology education include religious beliefs, autonomy, interpersonal skills, accountability, tolerance, health care, social responsibility, and environmental management. To emphasize the application of character education in biology learning, students should have love for God and his creation, responsibility, honesty, respect and politeness, compassion, care, cooperation, self-confidence, creativity, hard work, humility and tolerance and peace (Mislia et al., 2016).

Biology studies, as a component of national education, have an important role in shaping student character (Lepiyanto & Agil, 2011). Therefore, it is very important to understand the character values included in the biology learning process. Effective biology education can foster desirable characteristics in students, including accuracy, self-control, integrity, determination, analytical reasoning, responsibility, and collaborative skills (Setyaningrum & Husamah, 2020).

The character of the Indonesian nation is increasingly deteriorating, low ethics and morals, fights often occur between students in the world of education, this situation means that the learning process does not influence student behavior. This occurs because the learning process only teaches concept education as writing theories and education does not yet teach deeper character education. broad among students.

Based on the law of the Republic of Indonesia concerning the national education system which focuses on character development in article 3 of the 2003 Constitution, national education is intended to foster the skills and values needed to build a dignified nation. The main goal is to develop individuals who believe and dedicate themselves to God, have a virtuous character, are physically healthy, knowledgeable, creative, independent, and grow into democratic and responsible citizens.

The inability of schools to meet national learning goals, uncontrolled suspicion during national examinations, conflict, harassment, promiscuity, disciplinary problems, and several other forms of dishonest behavior among students are clear indications of significant character defects within the institution. This condition creates a crisis in their moral principles and personal understanding. The ongoing character problem in Indonesia has risen to national concern, emphasizing the importance of character education in the field of education (Yahya, 2018). Claims that biology is a subject that can effectively convey the principles of character education. Biology provides individuals with a path to ultimate truth that comes from God, but scientific truth is inherently changeable. For example, lack of motivation from educators, difficulty concentrating when studying, boredom due to lack of stimulation, and skipping classes during certain learning subjects.

Teachers have an important role in education because they serve as models for students, paying great attention to all types of behavior. In addition to conveying educational content effectively, teachers must also have the intelligence to convey social values and standards, enabling students to behave appropriately in their environment (Mulya, 2020). Based on this information, it is clear that students must be given character education. Simply put, the integration of character education requires teacher involvement in the biology learning process.

The implementation of Character Education at MAN 1 Medan is based on the author's conversation with the school principal, and is part of the Profile Project to Strengthen Pancasila Rahmatan lil'Alamin. MAN 1 MEDAN school has a total of 10 students, each with a specific name and characteristics. Students are given the names Civility (ta'addub), Exemplary (qudwah), Citizenship and Nationality (muwatanah), Taking the middle path (tawassut), Balanced (tawāzun), Straight and firm (i'tidāl), Equality (musāwah), Deliberation (syūra), Tolerance (tasāmuh), and Dynamic and innovative (tathawwur wa ibtikâr). Based on the curriculum used at MAN 1 Medan school, using the independent curriculum, if it is integrated with the Profile Project for Strengthening Pancasila Rahmatan lil'Alamin Students at MAN 1 Medan, it is applied in learning, namely various intracurricular and extracurricular activities where the content will be more optimal so that students have enough time to stay active. focus on essential material, character development and student competency.

Observations regarding the profile of strengthening character education in biology learning for class For example, in teaching and learning activities such as teaching and learning activities where there are students playing around while learning is taking place, there are also those telling stories and chatting with friends next to them. And there are also students who make physical contact, such as hitting their friends, even though they are joking. From the explanation above, it is a fact that many students as educated people at school do not yet display good moral qualities and character. In this case, schools have a big responsibility and role in helping or preventing this.

METHOD

This research was conducted at MAN 1 Medan, which is located on Jl. William Iskandar No.7 B, Sidorejo, kec. Medan Tembung, Medan City, North Sumatra. The research methodology used is descriptive qualitative research (Walidin et al., 2015), using data collection approaches such as observation, interviews and documentation. The researchers chose this place for their study because it is a Madrasah Aliyah school that places a strong emphasis on religious instruction and character development, which is integrated into students' daily activities.

Qualitative research is a method of inquiry that is based on postpositivism or interpretive philosophy. It is used to investigate the characteristics of natural phenomena, with the researcher serving as the main tool. Data collection techniques involve triangulation, which combines observation, interviews, and documentation.

The data produced is mostly qualitative in nature. Data analysis was carried out through an inductive and qualitative approach. The aim of qualitative research is to understand meaning, appreciate uniqueness, construct phenomena, and generate hypotheses (Sugiyono, 2022).

Sample or Participant

This research was conducted at MAN 1 Medan on class X students, namely class X¹ with 10 students and X² with 10 students. The 20 participants in the study is because it allows a focus on the individual rather than the collective, resulting in a smaller sample size and minimizing the time investment required for data collection

Instrument

The research instrument used is an instrument that has passed the theoretical validation stage with 1 expert lecturers to validate the interview instrument that will be conducted on school principals, biology teachers and class X students.

Data collection

To obtain data from the field in the research, the author used 3 methods, namely direct field observation to see conditions in the field, then interviews were conducted with the school principal, biology teacher and 10th grade students using interview sheets, and finally documentation in the form of a school profile, vision, and mission, as well as class.

Procedure

Profile of Strengthening Character Education in Biology Learning for Class, social care and environmental care, so the results of initial observations show that these 8 aspects are applied to students. Then conduct interviews with the school principal and biology subject teachers using an interview sheet. Then an interview sheet was given to class Next, an analysis stage was carried out from the results of observations, interviews and documentation to see the profile of strengthening character education in biology learning for first grade (10th or called X Class) at MAN 1 Medan.

Data Analysis

Research data was obtained in a qualitative descriptive manner, using data collection approaches such as observation, interviews and documentation. The researcher chose this place for his research because the Madrasah Aliyah school places a strong emphasis on religious instruction and character development, which is integrated into students' daily activities. Data analysis was carried out using a qualitative descriptive approach.

RESULT AND DISCUSSION

Specific findings

The findings of this research will be presented, namely through analysis of research data obtained from interviews and direct observations carried out at the

research location, using interviews and observations. Regarding the explanation about knowing the values of character education in biology learning at MAN 1 Medan which was conveyed by the biology subject teacher in a researcher interview with Mrs. Khairina, S.Pd: In the independent curriculum there is character education which contains teaching modules which are prepared and then implemented in learning process, the education contained in the first learning process is religious values, independent attitude, friendly/communicative, responsibility, tolerance, health care, social care and environmental care. This research identified several key aspects of character education at MAN 1 Medan, including: religious values, independence, friendship/communicativeness, responsibility, tolerance, health care, social care and environmental care.

Character Education Strengthening Profile

The principal, represented by the Deputy Principal, explained the profile of strengthening the character of education at the MAN 1 Medan school during a researcher interview with Mr. Herry Afandi, S.Si, M.Pd. According to Afandi, the independent study curriculum includes P5 & P2RA (Strengthening Project Pancasila Student Profile & Rohmatan Lil'Alamin Student Profile). The Ministry of Religion determines the main themes, which will be further developed by the education unit based on the regional context and characteristics of P5 & P2RA students. These themes are selected from the values of religious moderation and include: (1) Civilization, (2) Exemplary Behavior, (3) Citizenship and nationality, (4) Pursuing a balanced approach, (5) Maintaining balance, (6) Holding fast and firm, (7) Promoting equality, (8) Encouraging deliberation, (9) Encouraging tolerance, and (10) Adopting dynamism and innovation.

Implementation of Character Education

Regarding the implementation of character education at MAN 1 Medan in class X, there are 2 section, namely in the intracurricular and extracurricular,

Intracurricular

In each student's learning before entering learning, each teacher has to instill his character, so the independent curriculum's target is not the learning content but mostly how to educate his character, so each teacher when he enters learning does not immediately enter the learning content. conveyed, but there is a lot of advice on character education.

Extracurricular

Extracurricular activities are not included in the instructor's responsibilities. Extracurricular activities aim to offer students the opportunity to cultivate and demonstrate their abilities and interests according to their individual requirements and the resources available at school. Extracurricular activities are supervised by advisors, educators, and instructors who have the necessary skills and expertise specific to each activity.

Table 1. Types of Extracurricular Activities

No.	Type of extracurricular	Profile of Pancasila and Rahmatan Lil 'Alamin Students
1	Sewing (Fashion Making)	Have faith and devotion to God Almighty Balance (tawāzun) Dynamic and innovative (tathawwur wa ibtikâr)
2	Sarhil Qur'an	Have faith and devotion to God Almighty Balance (tawāzun) Dynamic and innovative (tathawwur wa ibtikâr)
3	Fahmil Qur'an	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
4	Tahfiz Qur'an	Have faith and devotion to God Almighty Dynamic and innovative (tathawwur wa ibtikâr)
5	Recitations of the Qur'an	Have faith and devotion to God Almighty Creative Dynamic Innovative (tathawwur wa ibtikâr)
6	Yellow Book Study	Have faith and devotion to God Almighty Innovative (tathawwur wa ibtikâr)
7	Fardu Kifayah	Have faith and devotion to God Almighty Creative Mutual Cooperation Exemplary (qudwah)
8	Nasyid & Shalawat	Have faith and devotion to God Almighty Dynamic and innovative (tathawwur wa ibtikâr) Exemplary (qudwah)
9	Da'wah Cadre Course (DCC)	Have faith and devotion to God Almighty Creative Exemplary (qudwah)
10	German Club	Have faith and devotion to God Almighty Creative Deliberation (shūra)
11	Arabic Club	Have faith and devotion to God Almighty Creative Deliberation (shūra) Dynamic and innovative (tathawwur wa ibtikâr)
12	English Club	Have faith and devotion to God Almighty Creative Deliberation (shūra) Dynamic and innovative (tathawwur wa ibtikâr)

No.	Type of extracurricular	Profile of Pancasila and Rahmatan Lil 'Alamin Students
		Have faith and devotion to God Almighty Love for the Motherland Be civilized (ta'addub), Citizenship and nationality (muwāṭanah)
13	Paskibra	Have faith and devotion to God Almighty Creative Mutual Cooperation Tolerance (tasamuh) Equality (musāwah)
14	Scout	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
15	Football	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
16	Futsal	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
17	Table tennis	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
18	Basketball	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
19	Badminton	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
20	Karate	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
21	Teater	Have faith and devotion to God Almighty Creative Mutual Cooperation Dynamic and innovative (tathawwur wa ibtikâr)
22	Safarina Band	Have faith and devotion to God Almighty Creative Mutual Cooperation Dynamic and innovative (tathawwur wa ibtikâr)
23	Dance Arts	Have faith and devotion to God Almighty Creative Mutual Cooperation Dynamic and innovative (tathawwur wa ibtikâr)
24	Pik – R Annahlu	Have faith and devotion to God Almighty Creative Care for Others Mutual Cooperation Dynamic and innovative (tathawwur wa ibtikâr)
25	Student Health	Have faith and devotion to God Almighty

No.	Type of extracurricular Unit	Profile of Pancasila and Rahmatan Lil 'Alamin Students
		Creative Care for Others Mutual Cooperation Dynamic and innovative (tathawwur wa ibtikâr)
26	Photography	Have faith and devotion to God Almighty Creative Mutual Cooperation Dynamic and innovative (tathawwur wa ibtikâr)
27	Marching Band	Have faith and devotion to God Almighty Creative Dynamic and innovative (tathawwur wa ibtikâr)
28	Sispala	Have faith and devotion to God Almighty Creative Care for Others Mutual Cooperation
29	Journalist	Have faith and devotion to God Almighty Creative Literacy
30	PMR	Have faith and devotion to God Almighty Dynamic and innovative (tathawwur wa ibtikâr)
31	Digital Guide	Have faith and devotion to God Almighty Creative Critical Reasoning Dynamic and innovative (tathawwur wa ibtikâr)
32	Robotic	Have faith and devotion to God Almighty Mutual Cooperation Balance (tawâzun) Dynamic and innovative (tathawwur wa ibtikâr)

Student Response

The researchers directly obtained information from the field by analyzing class X students' responses to the eight values of character education in biology learning through interviews and observations.

1. Religious values: As a religious practice, students demonstrate punctuality by arriving on time and greeting teachers respectfully. Before starting the session, they engage in reciting short surahs and offering prayers as a means of spiritual preparation for their studies. The biology curriculum combines the teachings of the Koran, followed by the congregation's midday prayers at the MAN 1 Medan mosque, and a commitment to demonstrating respectful behavior and offering enjoyment to teachers.
2. Independent attitude: Complete assignments without any form of deception, independently complete UKBM (United Learning Activity Units), answer

- instructor questions, actively participate in question sessions initiated by the teacher, and without relying on peers or other people for help.
3. Friendly/communicative attitude: facilitates collaboration in group discussions, actively participates in group presentations by asking and answering questions, engages in discussions to find collective solutions, promotes positive interpersonal connections with peers, responds to teacher questions.
 4. Responsible attitude: Complete assigned tasks quickly and collect them in a timely manner, keep the space and tools clean after use, demonstrate reliability in completing tasks.
 5. Tolerance: Demonstrate respect for the points of view of peers and teachers, refrain from any form of discrimination based on skin color, and demonstrate a desire to form friendships with others regardless of their background. Additionally, it involves not abandoning friends in times of sudden illness and refraining from judging friends who have different beliefs.
 6. Health care attitude: Remove waste at appropriate reception and manage waste effectively. eat a nutritious breakfast before attending school. Engage in biology studies to gain knowledge about the different types of bacteria, microbes, and diseases that have the potential to damage our bodies. Adopt an appropriate lifestyle and consistently prioritize hygiene when carrying out biological activities. Eat healthy foods and avoid eating unhealthy foods.
 7. Social caring attitude: includes various actions such as helping peers who are struggling to understand the material, engaging in group activities, seeking explanations from teachers when facing difficulties, helping friends in distress, visiting sick friends, and immediately seeking medical help for friends who experience sudden illness.
 8. Health care attitude: do not throw away waste/trash carelessly and minimize the use of plastic. Avoid damaging vegetation and ensure proper hydration of plants within school facilities. Work together to maintain the cleanliness of the mosque and separate organic and non-organic waste.

Obstacles/Difficulties

The principal, represented by the Deputy Principal, explained the obstacles to implementing character education at the MAN 1 Medan school during an interview with Mr. Herry Afandi, S.Si, M.Pd. According to him, the problem is internal and external. Internally, some students are still disturbed by playing games during study because the level of supervision and attention from home teachers and subject teachers is not enough. Externally, the lack of parental guidance and attention results in a lack of knowledge to protect children from engaging in promiscuous behavior.

Additionally, there is a detailed explanation of the challenges faced by integrating character education into the classroom. Challenges faced by biology teachers in integrating character education into their teaching include discrepancies between planned and actual learning outcomes, which can arise due to variations in student conditions. In addition, there are difficulties in implementing character education effectively in the context of biology education. Teachers do not face any

challenges because the biology learning process closely reflects real life, making it easy to convey moral principles to students.

As explained by [Widiyanto \(2013\)](#), the eight character qualities consist of: (1) Religious qualities: a mental state and behavior that is respectful in practicing the teachings of one's own religion, while also being tolerant and respectful towards other religions. (2) Independent: Having a mindset and behavior that does not easily depend on other people. (3) Social: activities that encourage enjoyment in conversing, interacting and collaborating with other people. (4) Responsibility refers to a person's disposition and behavior in fulfilling his obligations and obligations towards himself, society, the environment (including nature, society and community), the nation, and Almighty Allah. (5) Tolerance refers to the act of showing respect for variations in religion, race, ethnicity, ideas, attitudes, and actions of others who are not similar to themselves. (6) Health care: voluntary efforts dedicated to improving health. 7) Social care refers to attitudes and behavior that consistently aim to provide assistance to individuals and communities in need. (8) Environmental management: attitudes and actions that consistently aim to prevent damage to the surrounding environment and actively work to repair losses that have occurred. Support to [Marzuki \(2013\)](#) states that character education consists of three main components: understanding the concept of goodness, developing compassion for goodness and being actively involved in virtuous actions. Character education not only provides knowledge of moral principles, but also fosters godly behavior, enabling students to understand, experience, and actively pursue goodness. Character education has the same goals as moral education or moral education.

CONCLUSION

The research concluded that the profile for strengthening educational character at MAN 1 Medan is based on the Strengthening the Pancasila Education Profile Project & the Rahmatan Lil'alamin Student Project (P5&P2RA) which includes ten ten, namely: Faith and devotion to God Almighty, Global diversity, Working together, Reasoning critical, civilized (ta'addud), independent, deliberative (sawir), tolerant (Tasāmuh), exemplary (Qudwah), dynamic-innovative (Tahawwur wa ibtikâr). The application of character education at MAN 1 Medan, especially in classes X-1 and , independence, friendly/communicative, responsibility, tolerance, health care, social care, environmental care have been implemented quite well by students, however, several sub-values require further improvement and support from teachers and schools. The challenges faced by biology teachers mainly stem from the mismatch between the planned and actual learning processes.

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