

Holistic Education Based on Character Education on Mathematics Learning Process at Yogyakarta International Integrated Islamic Junior High School Luqman Al Hakim

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Abstract—This study aims to: 1) know the model of learning mathematics; and 2) to know holistic education based on character education integrated with Mathematics learning of Integrated Islamic Junior High School Luqman Al Hakim Internasional Yogyakarta. Respondents included principals, curriculum heads, math teachers, and students. Data collection methods used are observation, interview, and documentation. The research data was tested by qualitative descriptive method to know the Holistic Education based on Character Education in Learning Process of Mathematics in Class IX International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta.

Learning model used in learning Mathematics learning cooperative learning model, using contextual approach, with learning model Studen Team Achievement Division (STAD), also using Realistic Mathematics Education Indonesia. The learning process by way of groups, train students to develop ideas, ideas, by presenting the results of the discussion. With material related to everyday life based on holistic education based on character education makes students understand the benefits of learning math. The results show that with holistic education based on character education on mathematics learning, students can learn comfortably and comfortably. Students grow up to be responsible people, care about the environment, high learning spirit, good achievement spirit, make this school achieve many achievements one of them National Exam achieve highest rank among private schools. They always together solve problems and together achieve the achievement.

Keywords—Holistic Education, Character Education, Mathematics Learning

I. INTRODUCTION

Education has a very important role in human life. Education must be developed from time to time. With education, human beings thrive in various activities in life. Formal and non formal education is the most important form of personality. According to Law No. 20 of 2003 on the National Education System which states: National Education function to develop the ability and form the character and civilization of a dignified nation in order to educate the nation's life, aims to the development of the potential students to become human beings who believe and fear to God Almighty, have noble character, healthy, knowledgeable, capable, creative, independent, and become citizen of democratic and responsible.

In educating students in schools should not be separated from holistic education based on character education. The educational world tends to focus on academic value, making mathematical intelligence and logic the only intelligence that can be accepted for its success. This kind of education gives birth to students who are intelligent, but weak in their physical and heart. Intellectual intelligence, but trapped in drugs, cheating phenomenon, student brawl is excessive. Akhlaq and behavior of students who have deviated much from the truth. Patterns of association, lifestyle and communication patterns, which are not in line with the cultural values of the nation itself. The emergence of promiscuity, free time, spree and other immoral acts that plagued the youth and youth in general. Besides, there are some dishonest teacher behaviors in giving value, letting students cheat. It should be solved jointly by teachers, the community with holistic education based on character education applied in the lessons or outside of the lesson, in the hope that the children will be born creative, independent, have noble morality According to Law No. 20 of 2003 on the National Education System which states: National Education function to develop the ability and form the character and civilization of a dignified nation in order to educate the nation's life, aims to the development of the potential students to become human beings who believe and fear to God Almighty, have noble character, healthy, knowledgeable, capable, creative, independent, and become citizen of democratic and responsible.

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by teachers, the community with holistic education based on character education applied in the lessons or outside of the lesson, in the hope that the children will be born creative, independent, have noble morality. As stated in Law no. 20 of 2003 on the National Education System in Chapter II Article 3 states that:

Education functioned to develop the ability and form the character and civilization of dignified nation in order to educate the nation's life, aimed at the development of the potential of students to become human beings who believe and piety to God Almighty, morals, healthy, knowledgeable, capable, creative, independent and become democratic and responsible citizens.

Therefore teachers and the wider community must know and understand the contents of the Act, so that the implementation in daily life will run well.

Learning Mathematics is to train students with mindset, logic about the form, order, magnitude and concepts that are related to each other. Mathematics learning is an activity undertaken by teachers with students together, to achieve the goals that have been determined. According to the National Council Teacher of Mathematics [5] the goal in mathematics learning is to form mathematical power, an attitude or mindset after studying mathematics. These include content, problem solving, reasoning and proof, communication and representation. In this case the teacher must be able to instill the values of character education on the students. According to Bishop [1] has identified three types of values that must be developed in the class of mathematics: the value of mathematics, the value of education in general and the value of mathematics education. International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta is located in Kotagede, South of Yogyakarta. Established in 2013 with 4 classes, 2 female students classes, and 2 male students classes. With a slightly different curriculum with other schools, as well as learning process using cooperative learning model, has implemented character-based holistic education. With a cooperative learning model, learning that takes into account the workings of the brain, effective communication in learning mathematics, therefore this model provides a broad opportunity for children to develop all the holistic dimensions they possess as a human being, students understand the benefits of learning mathematics in the real world. Developing international concepts, also emphasizing the mastery of foreign languages English and Arabic. In Integrated Islamic Junior High School Luqman Al Hakim there is a comparative study program to overseas namely to Singapore and Malaysia so that students have a broad insight, a different mindset. Character-based holistic education aims to build an entire human dimension with an approach to a fun and inspiring learning experience for students.

II. RESEARCH METHODS

This research is a qualitative research. This study produced data in the form of descriptive data obtained from the data in the form of writing, words and documents derived from sources or informants being researched and reliable. This research will see the social reality in the field on Holistic Education based on character education. In Mathematics Student Learning at International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta.

Source of data obtained from the field. This data is obtained through interviews with respondents and informants. The informants in this research are Headmaster, Vice Principal of Curriculum, Teacher and Student, and alumni of student at International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta. Secondary data sources are data sources from documents and literature such as strategic plans, books, brochures, journals, and online libraries that have to do with the theme of the problem.

This research instrument uses interview guides, observation guides and documentation guides. The research instrument is based on indicators of the application of holistic education based on character education in the learning process of mathematics. Indicators in the Instrument include: 1) the value of character implanted in International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta consists of honesty, democratic, disciplined, conscientious, hard work, creative, independent, curiosity and responsibility; 2) the process of developing and instilling character in the students. Research instruments containing indicator indicators are then used for data retrieval through observation of the process of learning in the classroom and interview.

Techniques of data collection using interviews, Observation and Documentation. Interviews in this study were conducted to the Principal, Vice Principal Curriculum Sector, Mathematics Teacher and classVIII International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta. Observations made on the process of learning Mathematics, the activities of students outside the classroom. While the documentation of researchers using data collection tools in the form of books, documents, and other relevant sources in order to obtain information about holistic education based on character education.

The researcher records all data objectively and as-is in accordance with observation results and field interviews. Selection process, focusing on simplification, abstraction and transformation of data arising from written records in the field. Data presentation is a set of arranged information given the possibility of drawing conclusions and taking action. Decisionmaking or Verification Drawing conclusions is only part of an activity of a complete configuration. Conclusions were also verified during the study. In drawing this conclusion, based on data reduction and data presentation which is the answer to the problem raised in the study.

III. RESEARCH RESULT

This research was done by observation in class, interview with Head of School, Vice Principal of Curriculum Field, Mathematics Teacher Subject, Grade IX Student, Alumni of International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta. Researchers observe the process of learning Mathematics in the classroom, the attitude of students when learning in the classroom and the attitude of students outside the classroom.

The purpose of the interview with the Principal is to obtain information on character education applied in the School, the learning system undertaken by the teacher, while the interview with the Vice Principal is to get a picture of the Curriculum used and its implementation. Interviews with students get an overview of their opinions in the learning process as well as the rules applied in the school, learning motivation, daily attitude while in the dorm, while interviews with alumni to get the impression of learning in International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta. As a complement and reinforcement of this research the researchers included documentation when the learning process, school environment, school facilities.

Character-based forms of holistic education in International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta.

The development of a character education curriculum is conducted through the Curriculum 2013. The 2013 curriculum develops a learning experience that provides students with a broad opportunity to master the competencies necessary for life in the present and the future. In the curriculum character education is applied in the form of syllabus and Learning Implementation Plan (RPP). In the RPP and Syllabus are written the character values that will be implanted to students.

The curriculum of the LHI Integrated School of Islam (SIT LHI) developed by Yayasan Pioneer Pendidikan Indonesia (YPPI) is formulated to prepare the Islamic generation with strong character, master the basic principles of science and international perspective through integral holistic education. This school applies to classroom learning, in extracurricular as well as in school and outside school. Learning model used in mathematics learning at International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta.

Mathematics learning at International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta using Contextual approach, ie learning that is associated with daily life. Sujadi in Fadilah [2] said that learning with a contextual approach with various models and methods, can be used as a tool to build the character of the nation. But not every learning using a contextual approach, in addition to using the approach of realistic mathematics education Indonesia (PMRI) students are given the task to solve math problems in its own

way. Meanwhile Prabowo and Sidi in Syarifah Fadilah [2] said that the approach of realistic mathematics learning (PMRI) can understand the character of students.

In the school also often use the model of cooperative learning type Student Teams Achievement Division (STAD). STAD type cooperative learning is a cooperative learning in which students learn by using small groups whose members are heterogeneous and use worksheets. STAD type learning is more emphasis on group learning activities, where students are actively engaged in discussions, cooperation, mutual assistance, and all members of the group have the same roles and responsibilities. From this group learning model makes students learn to respect each other's opinions, understand each other's characters, learn to hold emotions, train opinions, ideas, learn to understand, learn to keep each other feeling, get used to give each other useful things.

Mathematics learning process Character-based holistic education at International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta

Implementation Character-based holistic education in the learning process of mathematics has approaches that can stimulate students to be active in learning. In the SIT LHI curriculum is designed with the following characteristics: Developing learning with holistic education philosophy. The holistic aspect in question is to look at the child as a person who has multiple intelligences, and uses different learning styles. The child is given a task according to his or her own integrated learning, adapting to the workings of the human brain. The education developed no longer separates the education and the life of the students themselves. Educational vision not only focuses on intellectual development, but also the physical and human spirit. In the students' activities in school include learning that motivates students to enjoy learning, in terms of physical activity with a sport that is also fostered in the hope of healthy children so that the spirit of learning and spirit to develop themselves, from the spiritual side of the daily routine activities there are prayers together, reading alquran, tahajud prayer, social well-developed. Holistic education is an effort to build students in a whole and balanced in all aspects of himself as a human, both physical and spiritual aspects, which includes aspects of physical, intellectual, emotional, spiritual.

Teachers develop contextual teaching learning, making students discover the meaning between abstract ideas and their practical application in real-world contexts. Teachers should be trained first before applying the learning model in the school. The purpose of this training is to motivate and form teachers to become teachers who can motivate students, teachers who have emotional ties with students.

In a holistic education based on character education, a teacher has a great role to his students in developing his education. As a teacher at International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta in accordance with the curriculum the teacher views the child as a

person who has multiple intelligences, and uses different learning styles. As a teacher must be able to be a friendly and loving teacher who can motivate children and can sincerely love her children sincerely. Teachers should be able to establish communication with students and parents harmonious students. Therefore, the dedication, consistency and high commitment of the teachers are needed.

The integrated learning process at Integrated Islamic School (SIT) is implemented in 7M phase. These seven phases were developed with a theme that corresponds to the level of student competence. The details of the 7M process are described in the following table:

In the phase of admiring the students given the task of reading the article, paying attention to the natural surroundings and denagn amazed the creation of Allah SWT, then analyzed associated with mathematics. In the phase of living, the connection between God's creation with the condition of self. In the Phase of Research, by observing the surrounding environment to conduct research of teachers with students. The Phase Merataisasi, involving and guiding students to establish knowledge by making something concrete and real about their new understanding by extending knowledge. Phase Collaborate, engage and guide students in utilizing cooperative learning strategies (cooperation) through the learning process. The phase of actualizing, guiding students to reflect on the meaning of what they have learned to apply it in real life and integrate it into their lifestyles (self-transformation). Giving Phase, involving and guiding students to identify ways to use what they have learned by applying it to other people's interests

The principles of learning curriculum SIT LHI with good environmental care, then the potential students will grow and develop. These principles include:

The principle of uniqueness, ie every student has its uniqueness, learning style, talent and experience in life. In cooperative and contextual learning in a way grouped according to ability.

The holistic principle (tawhid), the principle that covers and involves the potential of children as a whole, both from the spiritual, moral, intellectual, physical, emotional, and social aspects. All of these things are integrated in every activity in School as well as at home.

Principles of integration (monotheism). Integration between curriculum, knowledge, trust, value with attitude, application, and service to others. In addition to cognitive abilities, students are also developed akhlaq and social.

Holistic education based on character education in Mathematics learning, in accordance with holistic-based curriculum at International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta is based on the assumption that everyone can find the identity, meaning and purpose in life through relationship with society, nature, and for human values such as affection and peace. In the learning process always begins and ends with prayers, teachers use

cooperative learning model, students learn in groups with the purpose of students accustomed to cooperation, have tolerance, mutual respect for each other's opinions. Train students to be able to come up with problem solving ideas, because each child has a different way of learning with his / her friend, every child has the uniqueness to develop his potential. So from this learning process students learn groups with selected students heterogeneously, but can also be grouped homogeneously, in the hope that students dare to issue ideas, creative, confident, eager in the search for knowledge, tolerance, and so forth. This is in line with Azhar's opinion that education aims to improve the ability to control emotions. Anwar in Muhammin () that "holistic education has several indicators of God's love and all of His creation, responsibility, discipline, independence, honesty, wisdom, respect and courtesy, help, mutual help, confidence, gratitude, hard work, leadership, justice, humility, tolerance, peace and unity. " Character-based holistic education focuses on the establishment of all aspects of the human dimension so that it can be a characteristic human being.

According Salafudin [7] Character education through mathematics learning, effective enough both to improve learning achievement and to instill the values of student characters. Holistic education concerns students' potential in intellectual, emotional, physical, spiritual aspects. Some of the things that must be developed in holistic learning strategy, among others: 1) using a transformative learning approach; 2) flexible learning procedures; 3) problem solving through interdisciplinary sciences; 4) meaningful learning; 5) learning involves individual communities residing.

In this case in accordance with the basic values of character education nation there are 9 character values, Nine Pillar Character is:

1. Love of God and His Creation. In this case is expected to make students aware as makhluk Allah SWT, aware of the duties and obligations to be done every day, able to carry out his command and able also to keep all his prohibitions;
2. Responsibility, Discipline, and Independence. Students are aware of their responsibilities, discipline-trained to the rules of the school. As educators can set an example and instill discipline on the students, so that students realize when students should go to school, learn, when to do the tasks assigned by the teacher and the duty of the tutor teacher.
3. Honesty / Trust and Diplomacy. Honesty is seen when school exams, no students cheat, no one says lies or speaks incorrectly. not to justify any means, dare to take risks with what he has done
4. Respect and Compassion. Students to teachers and parents talk not to hurt others.
5. Generous, Likes to Help, and Cooperation / Cooperation. This cooperation has been trained every day, especially when learning takes place.

6. Self-Confidence, Creative, and Hard Worker. Due to learning using contextual approach and using PMRI approach so that students are trained to be creative in solving problems. With the tasks assigned students in the classroom or outside the classroom, students are trained hard work, smart work and sincere work.
7. Leadership and Justice. Students are trained for presentation, lecture seven minutes, perform adzan, therefore students become trained in leadership spirit.
8. Good and Low-hearted. Inter mutual friends care, able to establish a harmonious communication.
9. Tolerance, Peace, and Unity. Inter friends no one quarrel until the fight, never happened brawl, between students communicate well, mutual respect, intercultural interdisciplinary of different regions can understand each other's traits and habits.
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Character-based holistic education focuses on the establishment of all aspects of the human dimension so that it can be a characteristic human being. The results of research Melly Latifah and Nety Hernawati (2009) states that the Character and multiple intelligence of children is strongly influenced by the application of holistic education. Controlled by the variables of school, age, and sex of the child, as well as family variables, children attending schools that apply holistic education will have higher character and higher intelligence scores.

The impact of holistic education based on character education on learning mathematics to students, among others motivated students to love learning, high tolerance, mutual respect, care with friends and the environment. The academic success of International Integrated Islamic Junior High School Luqman Al Hakim Yogyakarta became the second rank of private school for National Examination result, the school obtained Accreditation A. Holistic education is a combination of intellectual, emotional and religious. If this is well developed, it will form a "holistic" soul, which reflects a superior character. Through holistic education, learners are expected to be themselves (learning to be), learn in a way that suits themselves, acquire social skills, and can develop character and emotional.

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