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## THE FORMATION OF STUDENTS' CRITICAL THINKING ABILITY THROUGH A SCIENTIFIC APPROACH TO LEARNING AKIDAH AKHLAK CLASS VIII MTS DDI LAPEO CAMPALAGIAN DISTRICT, POLEWALI MANDAR REGENCY

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Abstract: The purpose of this study was to describe the application of a scientific approach to learning akidah akhlak for class VII MTs DDI Lapeo, then to describe the formation of students' critical thinking ability in learning akidah akhlak for class VIII MTs DDI Lapeo, as well as to analyze the critical thinking abilities of students in learning akidah akhlak. class VIII MTs DDI Lapeo. The research method used in this research is qualitative. The results of this study indicate that the application of the scientific approach to the learning akidah akhlak for class VIII MTs DDI Lapeo has been implemented properly in accordance with the five stages of the scientific approach. As for the formation of students' critical thinking abilities in these five stages, The activity of observing students is directed to analyze and formulate problems. In the activity of asking questions, students are facilitated to make questions. Exploring activities, students are directed to collect information related to the material. In reasoning activities, students are facilitated to process the information received. In networking activities, students are directed to convey opinions and solutions in response to the formulation of problems that are made. Meanwhile, the critical thinking ability of class VIII students of MTs DDI Lapeo after applying the scientific approach is the ability to analyze and formulate a problem, provide ideas, assess the truth of information received, accept or be open to other people's opinions, solve problems on a problem, know the essence of learning akidah akhlak, analyzing the information received, and making questions and answering questions about akidah akhlak lessons. The implication of this research is that the scientific approach is a scientific approach that is very supportive in shaping the critical thinking abilities of students, because it focuses on the activeness of students, so that learning does not occur in one direction.

Keywords: Scientific Approach; Critical Thingking; Learning Akidah Akhlak.

## I. INTRODUCTION

All humans need education, because education is the key to life. A person who has education will have a better life because he knows the direction to take, whether living as an individual or living as a social being.<sup>1</sup> Education aims to form individuals

<sup>&</sup>lt;sup>1</sup>Lia Saptini Handriani, dkk., "Pengaruh Model Pembelajaran Inkuiri Terstruktur dengan Pendekatan Saintifik terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Siswa", *Jurnal Pendidikan Fisika dan Teknologi* 1, no. 3 (2015): h. 210.



with quality and character, so that they have a broad view in order to achieve better future goals, and are able to adapt to life changes that are increasingly sophisticated and rapid.<sup>2</sup>

However, what happens in the country of Indonesia if we look closely at education is still very far from expectations, in other words, the quality of Indonesian education is currently very concerning. Based on the research results stated by the UNDP (United Nations Development Program) on the Human Development Index (HDI) which was released in 2010. In this study, it was stated that Indonesia was ranked 108 out of 169 countries in the world. This means that the quality of education in Indonesia is classified as low, so it is necessary to improve quality of education in Indonesia, especially in the teaching and learning process.<sup>3</sup>

The reality of the times that continues to experience changes in global competition, forcing the world of education to be addressed. The 2013 curriculum development design also explains that entering the 21st century, education in Indonesia is faced with various challenges and opportunities, which differentiate it from previous times. Based on the framework of the 21st century's potential, there are several competencies that must be possessed in learning, namely the ability to critical thingking and solve problems, the ability to communicate and cooperate, the ability to communicate and work together, the ability to create and renew, technological literacy information and communication, contextual learning skills, easy information and literacy skills.<sup>4</sup>

In accordance with the potential framework of the 21st century above, students not only have knowledge of the material in the subject, but students are taught to have the ability to critical thingking, be strong, and be able to communicate and make good use of information. Learning that directs educators to teach students to recognize and master competencies in the subject, by recognizing the critical thinking skills of students, will make the teaching and learning process form constructive interactions between teachers and students. Critical thinking is an active process as well as a systematic or regular way of thinking so that can understand information and problems in depth, then form beliefs and truths in processing the information obtained or conveyed.<sup>5</sup>

This indicates that critical thinking will make students not only follow the lessons or received information, but students will filter and receive information so that they will gradually develop critical thinking skills. Critical thinking will become students who can process lessons and information that are well received and will help students find information related to daily life, so that the benefits are not only in the teaching and learning process but in the social life of students. The ability to critical

<sup>&</sup>lt;sup>2</sup>Lia Saptini Handriani, dkk., "Pengaruh Model Pembelajaran Inkuiri Terstruktur dengan Pendekatan Saintifik terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Siswa", h. 210.

<sup>&</sup>lt;sup>3</sup>Lia Saptini Handriani, dkk., "Pengaruh Model Pembelajaran Inkuiri Terstruktur dengan Pendekatan Saintifik terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Siswa", h. 210.

<sup>&</sup>lt;sup>4</sup>Trianto Ibnu Badar at-Taubany dan Hadi Suseno, *Desain Pengembangan Kurikulum 2013 di Madrasah* (Depok: Kencana, 2017), h. 173-174.

<sup>&</sup>lt;sup>5</sup>Eka Supriyati, dkk. "Profil Keterampilan Berpikir Kritis Siswa SMA Swasta di Sragen pada Materi Sistem Reproduksi", *BIOEDUKASI Jurnal Pendidikan Biologi* 11, no. 2 (2018): h. 73.

thingking is the ability to develop or find alternatives to a problem, then adopt it and use it as an approach to questions that must be answered.<sup>6</sup>

The critical thinking abilities of students are not only limited to general subjects, but also religious lessons. The ability of critical thingking in religious lessons, especially in akidah akhlak is needed as a barometer in determining right and wrong morals, as well as being a critical process before making a decision.<sup>7</sup>

However, efforts to form critical thinking skills of students are a challenge in itself for an educator or who is involved in education every day. Many efforts can be made, there must be a lot of success, even though the achievements of these successes have different levels of satisfaction. One of the efforts to form critical thinking skills of students is to use the correct learning approach and one of them is the scientific approach. In Permendikbud no. 65 regarding Primary and Secondary Education Standards has indicated the need for a learning process using guidelines for the principles of a scientific or scientific approach.<sup>8</sup>

The scientific approach is also an approach based on student reasoning so it is needed at this time. Moreover, the times are constantly changing and developing, so the curriculum must also change, more to improve reasoning, not just subject matter.<sup>9</sup>

In addition, the scientific approach is an approach used in the learning process with process component steps consisting of: observing, questioning or asking, exploring, and gathering information, associating or reasoning, and communicating or forming networking.<sup>10</sup> So that this scientific approach can be used in shaping the critical thinking skills of students, because it focuses more on the activeness of students in every learning activity.

Nurul Yusri stated that the scientific approach applied by the teacher has a relationship with students' critical thinking abilities. This can be seen when the application of this approach produces scientific learning teachers who show that these skills are dominant in managing the object of study, while the weakest skills are in evaluating and monitoring. The teacher's scientific learning skills are related to students' scientific learning skills, of which the most dominant is related to the teacher's procedures in managing the object of study in the form of independent assignments, such as looking for references to light material and optical tools from various references.<sup>11</sup> This indicates that in the application of the scientific approach there will be seen the scientific learning skills of teachers and students Asmi, Fahinu, and La

<sup>&</sup>lt;sup>6</sup>Hendra Surya, *Cara Belajar Orang Jenius* (Jakarta: Gramedia, 2013), h. 159

<sup>&</sup>lt;sup>7</sup>Eva Latipah, "Keterkaitan Kemampuan Berpikir Kritis dengan Akhlakul-Karimah pada Siswa SMP Ma'had Islamy" *Jurnal Pendidikan Agama Islam* 17, no. 1 (2020): h. 57.

<sup>&</sup>lt;sup>8</sup>Kementerian Pendidikan dan Kebudayaan, *Diklat Guru dalam Rangka Implementasi Kurikulum* 2013. Konsep Pendekatan Scientific (Jakarta, t.p., 2013), h. 8.

<sup>&</sup>lt;sup>9</sup>E. Mulyasa, *Pengembangan dan Implementasi Kurikulum 2013*. (Bandung: Remaja Rosdakarya, 2014), h. 60

<sup>&</sup>lt;sup>10</sup>Ridwan Abdullah Sani, *Pembelajaran Saintifik untuk Implementasi Kurikulum 2013*, (Jakarta: Bumi Aksara, 2014), h. 53

<sup>&</sup>lt;sup>11</sup>Nurul Yusri, "Keterkaitan *Scientifik Learning* dengan Kemampuan Berpikir Kritis (Kajian Proses Pembelajaran di Sekolah Dasar Budi Mulia Dua Sedayu Bantul)", *Tesis* (Yogyakarta: UIN Sunan Kalijaga, 2015), h. vii.

Arapu also stated that there was an effect of using a scientific approach in learning on students' critical thinking skills.<sup>12</sup>

Learning activities in this scientific approach develop thinking skills of students and their curiosity in learning, so that it is hoped that with this approach students can be motivated to observe phenomena that are in their surrounding scope, so that they can provide conclusions. <sup>13</sup> Lia Saptini stated that in critical thinking activities there are indicators such as focusing questions, analyzing ideas, inducing, evaluating, and being able to provide reasons so that it is very relevant to develop critical thinking skills using a scientific approach.<sup>14</sup>

Nur Kholik, Miftahul Ulum and Mukhlasin stated that there are two ways to apply the scientific approach, namely: 1). The first step is planning, such as preparing lesson plans, preparing learning resources, and preparing the media used in learning. 2). The step is the implementation step, in which there are five learning activities in it, observasing, asking, gathering information, reasoning, and communicating. While the critical attitude that can be found in students is seen in the ability of students to express original ideas and thoughts through collecting and managing information, then mention them in discussion forums or in class learning. <sup>15</sup> In Rahadizack's research, he stated that the steps of a scientific approach in learning, which consisted of observasing, asking questions, gathering and processing information, and in conveying results, students have the ability to compile and answer questions relating to the material in learning. As for formulating questions, students use the keywords 5W + 1H, namely what, why, where, who, when, and how. <sup>16</sup>

Anna Shinta Raharja, in her research explained that the scientific approach has many advantages, including students extracting their own knowledge, involving potential cognitive processes in stimulating intellectual development, especially in high-order thinking skills of students, and the scientific approach also prioritizes creativity and findings of students so that the learning experience they get is based on their own awareness and importance. This illustrates that the scientific approach can instill the critical thinking character of students. <sup>17</sup> Noer Indria Chriswanti, Elok Sudibyo, and Yuliani stated that the application of a scientific approach can improve students' critical thinking skills and is obtained when students are actively involved in learning using this

<sup>&</sup>lt;sup>12</sup>Asmi, Fahinu, dan La Arapu, "Pengaruh Pendekatan *Scientifik* terhadap Kemampuan Berpikir Kritis Siswa dalam Pembelajaran Matematika Siswa SMPN 2 Kendari", *Jurnal Penelitian Pendidikan Matematikan* 3, no. 1 (2015): h. 45.

<sup>&</sup>lt;sup>13</sup>Abdul Majid dan Chaerul Rahman, *Pendekatan Ilmiah dan Implementasi Kurikulum 2013* (Bandung: Rosda, 2014), h. 70.

<sup>&</sup>lt;sup>14</sup>Lia Saptini Handriani, dkk., "Pengaruh Model Pembelajaran Inkuiri Terstruktur dengan Pendekatan Saintifik terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Siswa", h. 212.

<sup>&</sup>lt;sup>15</sup>Nur Kholik, dkk., "Implementasi Pendekatan *Saintifik* dalam Upaya Membangun Sikap Kritis Peserta Didik pada Pembelajaran Akidah Akhlak (Di MTS Sudirman Jimbaran, Semarang)", *Al-Munawwarah-Jurnal Pendidikan Islam* 11, no. 1 (2019): 1.

<sup>&</sup>lt;sup>16</sup>Djoko Rehadi Wibowo, "Pendekatan Saintifik dalam Membangun Sikap Kritis Siswa pada Pembelajaran Akidah Akhlak (Studi MIN di Yogyakarta II), *Jurnal Pendidikan dan Pembelajaran Dasar* 4, no. 01 (2017): h. 13-140.

<sup>&</sup>lt;sup>17</sup>Anna Shinta Raharja, "Penanaman Karakter *Critical Thingking* melalui Pendekatan Saintifik Berbasis Lingkungan Sekitar pada Pembelajaran IPA" *Raharja* 1, no. 01 (2019): h. 2.

scientific approach. Because one of the characteristics of learning using a scientific approach is that it involves processes in cognitive aspects that have the potential to stimulate higher-order thinking skills, one of the higher-order thinking skills is critical thinking.<sup>18</sup>

Widya Pratiwi stated that the scientific approach directs students to practice analytical thinking so that they can make the best possible decisions and not think mechanically. In addition, this approach emphasizes the importance of collaboration and team work in matters related to material. In addition, Widya stated that the scientific approach would have a positive impact on students' thinking abilities, although in fact it still needed adaptation in the use of the learning environment and relevant learning media. It should also be realized that sometimes preparation and planning are limited, especially with the aim of increasing students' critical thinking skills that will be far from optimal, so that the use of scientific approaches and learning is consistent, because in it students are required to be open-minded to the learning situation. which requires thinking, finding out, asking questions, exploring, looking for problems or solutions, and providing information on learning materials.<sup>19</sup> Baiq Azmi Sukroyanti and Ika Sufianti stated that the scientific approach to learning which affects students' thinking skills and build of skills, concludes, provides further explanations, and discusses strategies as tactics.<sup>20</sup> Eva Latipah stated that the ability to critical thingking, which has many indicators in it, is also needed in conditioning a person to have good morals.<sup>21</sup>

MTS DDI Lapeo, one of the madrasah tsanawiyah in Polewali Mandar Regency, based on the results of observations and interviews with teachers at the madrasah, found that a scientific approach has been used in shaping the critical thingking of students. So that researcher is interested in examining how to shape cirtical thingking of students through the scientific approach in MTS DDI Lapeo. To limit the scope of the research, the researcher chose Akidah Akhlak class VIII MTS DDI Lapeo in Campalagian Sub-District, Polewali Mandar Regency. The formulation of the problem in this study are:

- a. How is the application of the scientific approach to learning akidah akhlak for class VIII in MTS DDI Lapeo?
- b. How is the formation of students' critical thinking skills through a scientific approach to learning akidah akhlak for class VIII MTS in DDI Lapeo?
- c. How is the critical thinking ability of students through a scientific approach in learning akidah akhlak for class VIII in MTS DDI Lapeo?

So that the research objectives carried out by researchers are as follows:

a. To describe the application of the scientific approach to learning akidah akhlak class VIII in MTS DDI Lapeo.

<sup>&</sup>lt;sup>18</sup>Noer Indria Chriswanti, dkk. "Peningkatan Keterampilan Berpikir Kritis Siswa Melalui Penerapan Pendakatan Saintifik pada Materi Getaran dan Gelombang, *E-Pensa Journal* 04, no. 2 (2016): 2-4

<sup>&</sup>lt;sup>19</sup>Widya Pratiwi, "Optimalisasi Pendekatan Saintifik dengan Pembelajaran Inkuiri untuk Meningkatkan Kemampuan Berpikir Kritis di Madrasah Ibtidayyah". h. 190.

<sup>&</sup>lt;sup>20</sup>Baiq Azmi Sukroyanti dan Ika Sufianti, "Pengaruh Pendekatan Saintifik terhadap Keterampilan Berpikir Siswa". h. 36.

<sup>&</sup>lt;sup>21</sup>Eva Latipah, "Keterkaitan Kemampuan Berpikir Kritis dengan Akhlakul-Karimah pada Siswa SMP Ma'had Islamy". h. 58.

- b. To describe the formation of students' critical thinking skills through a scientific approach to learning morals for class VIII in MTS DDI Lapeo.
- c. To analyze the critical thinking skills of students through a scientific approach to learning akidah morals for class VIII in MTS DDI Lapeo.

#### **II. THEORETICAL REVIEW**

#### a. Scientifik Apprcoach

## 1. Defenition of Scientifik Approach

The scientific approach was introduced for the first time in the world of education in America, in the late 19th century which was an emphasis on formalistic laboratory methods that refer to scientific facts.<sup>22</sup>

In general, the scientific approach is divided into two terms, namely the approach and scientific. The approach is the teacher's view of students in conducting assessments, determining attitudes and actions faced with expectations that can solve problems by managing of classes which is comfortable and pleasant in the learning process.<sup>23</sup>

With this approach, a teacher in carrying out his duties as an educator and teacher can determine its views on students with the aim of good classroom management and most importantly the achievement of the learning objectives that have been predetermined in the learning design. While there are scientists who call it an approach, but not infrequently there are those who call it a method, even though the characteristics are similar. The scientific approach is also called the scientific approach, which is an approach used in learning by using a scientific process. What students learn and get in the teaching and learning process, which is obtained with their own senses and minds will make students experience directly in creating knowledge, not just being told.<sup>24</sup>

According to Machin, the scientific approach is an approach that designs learning in such a way that students can carry out the reconstruction of concepts, laws, and principles by going through stages such as observing which will identify or find problems, formulate problems, propose or formulate a hypothesis, collect data with various techniques, analyze data, draw conclusions and then communicate the concepts, <sup>25</sup> laws, and principles found.<sup>26</sup>

According to the researcher the scientific approach is an approach in which the teacher as an educator uses a method or mechanism to gain knowledge in accordance with procedures based on a scientific method, not a non-scientific method.

<sup>&</sup>lt;sup>22</sup>Ika Maryani dan Laila Fatmawati, *Pendekatan Scientific dalam Pembelajaran di Sekolah Dasar* (Yogyakarta: Deepublish, 2015), h. 1.

<sup>&</sup>lt;sup>23</sup>Syaiful Bahri Djamarah, *Guru dan Anak Didik* (Jakarta: Rineka Cipta, 2013), h. 24.

<sup>&</sup>lt;sup>24</sup>Ika Maryani dan Laila Fatmawati, Pendekatan Scientific dalam Pembelajaran di Sekolah Dasar. h. 2.

<sup>&</sup>lt;sup>25</sup>Syarifuddin, Inovasi Baru Kurikulum 2013 Pendidikan Agama Islam dan Budi Pekerti (Yogayakarta: Deepublish, 2018), h. 62.

<sup>&</sup>lt;sup>26</sup>Lia Septian Hendrian, dkk., "Pengaruh Model Pembelajaran Inkuiri Terstruktur dengan Pendekatan Saintifik terhadap Kemampuan Berpikir Kritis dan Hasil Belajar Fisika Siswa", *Jurnal Pendidikan Fisika dan Teknologi* 1, no. 3 (2015), h. 212.

## 2. Stages of the Scientific Approach

## a) Observing

The activity of observing prioritizes the meaning of the concept of the learning process or is called meaningful learning. In this method, it has many advantages, for example presenting the media on a real object, participants can be happy and challenged, and its implementation is relatively easy. But it needs to be known, this observation activity requires a long and mature preparation, as well as a lot of relative costs and energy and if it cannot be controlled it will obscure the learning objectives to be achieved in the learning process. Observing activities are very suitable in learning in order to increase the curiosity of students and this is the reason for the meaning of high learning. In addition, in this activity of observing, students can find the fact that there are objects that are analyzed with the subject matter used by the teacher as an educator.<sup>27</sup>

By observing, students can find facts about the relationship between objects, then analyzed using learning materials.<sup>28</sup>

b) Questioning

An effective teacher will be able to inspire students so that they can improve and develop aspects of attitudes, knowledge, and skills. When the teacher asks questions, at the same time the teacher guides or guides their students to learn well, where this activity is related to the previous activity, namely asking questions, the teacher as a facilitator in the class provides opportunities for students to ask questions about what has been seen, listened to, or read.<sup>29</sup>

According to the author, related to the activity of asking questions that this activity provides opportunities for students to train their vocals and their ability to compose sentences, so that beforehand it is better for teachers to provide understanding to students so that they can ask questions as best as possible, but don't be afraid to ask.

## c) Explore

In order to obtain real and authentic learning outcomes, students must explore or carry out an experiment or explore, where this is applied when receiving subject matter. In this case, students must have process skills in developing natural knowledge and surrounding. and can use scientific methods and scientific attitudes so that they can solve problems faced in everyday life. In this information gathering activity, students can read more books, then attention to the phenomenon or object being studied, to conduct experiments, so that in this third activity a number of information will be collected.<sup>30</sup>

<sup>&</sup>lt;sup>27</sup>M. Hosnan, *Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21*. (Bogor, Ghalia Indonesia, 2014), h. 41.

<sup>&</sup>lt;sup>28</sup>Daryanto, *Pendekatan Pembelajaran Saintifik Kurikulum 2013* (Yogyakarta: Gava Media, 2014), h. 60.

<sup>&</sup>lt;sup>29</sup>Daryanto, Pendekatan Pembelajaran Saintifik Kurikulum 2013. h. 64.

<sup>&</sup>lt;sup>30</sup>Kementerian Pendidikan dan Kebudayaan, *Diklat Guru dalam Rangka Implementai Kurikulum* 2013. Konsep Pendekatan Saintifik. h. 9.

## d) Reasoning

The term of reasoning in the scientific approach used in the teaching and learning process and is part of the 2013 curriculum, describes that teachers and students are active actors. The point of emphasis is that students must be more active than their teachers. Reasoning is a logical and systematic thought process towards observable empirical facts that can be obtained based on knowledge. Reasoning in question is scientific reasoning, but non-scientific reasoning is also not always useless.<sup>31</sup>

#### e) Communication/Networking

Networking is also called collaborative learning which is a personal philosophy and is more than a collection of learning techniques in formal classrooms. Collaboration in essence is a philosophy of interaction and human lifestyle that places cooperation as an important social structure, so that it is designed as best as possible in order to achieve common goals. In addition, forming this network places the authority of the teacher as a more directive or learning manager and students must place themselves more actively in learning.<sup>32</sup>

In this activity, students get the opportunity to communicate with the teacher about the material they get. In communicating activities, at this stage students will write or tell what was found in previous activities, namely looking for information, associating and finding patterns.<sup>33</sup>

In addition, in this fifth activity, students properly compiled the information obtained, either together in a group or individually. Then the teacher can also clarify so that students can correctly know the activities that have been carried out in learning, whether there is still anything that needs to be improved or not. In other words, the teacher can confirm the activities of students in the teaching and learning process.

#### b. Critical Thingking Skill

The definition of critical thinking is very varied. There are those who define critical thinking with the skills to develop or find alternatives in problem solving, then adopt them and serve as approaches to questions that must get answers.<sup>34</sup>

Critical thinking is an activity through a way of thinking about an idea that has a relationship with a given concept or has been described.<sup>35</sup>

The formation of children critical thinking skills, including in students, if they are properly nurtured, it will foster awareness to think from an early age.<sup>36</sup> Ennis in Asmi, Fahinu, and La Arapu explained that there are six basic elements related to critical thinking, which is called FRISCO. The six basic elements are 1). Focus which is the first thing to do in knowing information, so focusing on a problem requires

<sup>&</sup>lt;sup>31</sup>M. Hosnan, Pendekatan Saintifik dan Kontekstual dalam Pembelajaran Abad 21. h. 72.

<sup>&</sup>lt;sup>32</sup>Ika Maryani dan Laila Fatmawati, Pendekatan Scientific dalam Pembelajaran di Sekolah Dasar. h. 30.

<sup>&</sup>lt;sup>33</sup>Kementerian Pendidikan dan Kebudayaan, Diklat Guru dalam Rangka Implementasi Kurikulum 2013. Konsep Pendekatan Saintifik. h. 10.

<sup>&</sup>lt;sup>34</sup>Hendra Surya, Cara Belajar Orang Jenius (Jakarta: Gramedia, 2013), h. 159

<sup>&</sup>lt;sup>35</sup>Forum Mangunwijaya, *Menyambut Kurikulum 2013* (Jakarta: Buku Kompas, 2013), h. 163.

<sup>&</sup>lt;sup>36</sup>Ahmad Susanto, *Teori Belajar dan Pembelajaran di Sekolah Dasar* (Jakarta: Buku Kompas, 2013), h. 163.

knowledge. The more knowledge they have, the easier it will be for students to recognize or find out information. 2). Reason is a search for the truth of the statement to be described or put forward. It should be noted, in expressing a statement, it must be accompanied by reasons that support the statement. 3). Inferense or make a statement must be an opinion that fits the right reasons. 4). Situation means in a truth depending on the situation that occurs. So it needs knowledge of a situation related to the problem. 5). Clarity or clarity means ensuring a truth is a statement of a situation that occurs. 6) Overview or review means looking back at a process, with the aim of ensuring a statement is true to the existing situation so that it can relate relationships with other situations.<sup>37</sup>

To form critical thinking skills, Dr. Bhisma describes how to teach critical thinking skills in weighing important and unimportant factors, concrete and abstract, which can influence a situation in order to find or make the best solution of a problem.

Based on the results of cognitive research, educators have confidence in educational institutions that need to focus attention with the aim of teaching critical thinking skills to college students, including students and cultivating their intellectual traits.<sup>38</sup>

According to the author, related to the meaning of critical thinking, namely the ability to think analytically, raisonally, and selectively so that arguments can be accepted logically and can provide concrete evidence of the statement conveyed, not just ordinary thinking, but there is reasoning that leads to new knowledge and foster creativity.

## c. Akidah Akhlak Learning

Akidah akhlak learning consists of three terms, namely learning, akidah, and akhlak. Learning can be defined narrowly as a process or a way so that someone can carry out learning activities. Then learning is broadly defined as a systematic process or activity, in which there is interactive interaction between the teacher as educator and students as learners, learning resources, and an environment that creates conditions and allows learning to occur in students, whether it occurs in in class and outside the classroom, whether attended physically by educators or not with an effort to master the learning objectives or competencies that have been predetermined.<sup>39</sup>

In language, the word of akidah comes from 'aqada-ya'qidu-'aqdan-aqidatan'. 'Aqidatan can be given the meaning of knot, bond, agreement, and firmness.<sup>40</sup> Akidah in term, can be seen from the viewpoint of some experts, namely according to Hasan Al-Banna ', aqaid is the plural form of aqidah which is a matter that must be believed to be true in the heart, which will bring calm or tranquility of the soul, and make a belief that there was no hesitation in it at all.<sup>41</sup> According to Abu Bakar Jabir al-Jaxairy, akidah is a number of truths that can be accepted and generally accepted by humans based on reason, revelation, and truth. The truth is put by humans in the heart then it is believed

<sup>&</sup>lt;sup>37</sup>Asmi, Fahinu, dan La Arapu, "Pengaruh Pendekatan *Scientifik* terhadap Kemampuan Berpikir Kritis Siswa dalam Pembelajaran Matematika Siswa SMPN 2 Kendari". h. 47.

<sup>&</sup>lt;sup>38</sup>Bhisma Murti, "Berpikir Kritis (Critical Thingking)" Seri Kuliah Blok Budaya Ilmiah. h. 3.

<sup>&</sup>lt;sup>39</sup>Zainal Arifin, *Evaluasi Pembelajaran* (Bandung: Remaja Rosdakarya, 2014), h. 10.

<sup>40</sup>Yunahar Ilyas, Kuliah Aqidah Islam (Yogyakarta: LPPI, 2014), h. 1

<sup>&</sup>lt;sup>41</sup>Yunahar Ilyas, Kuliah Aqidah Islam. h. 1

to be valid about its existence and will reject everything that is contradictory to the truth that is embedded in that heart.<sup>42</sup>

The third term is akhlak in language, which is a word that comes from akhlagun and khuluqun as the plural with the meaning of temperament, character, and custom.<sup>43</sup> The term of akhlak is the power in the soul, where there is an impulse in it to perform an action without any prior thought and reflection.<sup>44</sup> So that when the three terms are combined, it becomes akidah akhlak learning which is a conscious and planned effort with the aim of students knowing, understanding, living, and believing in Allah SWT, then realizing all of that in the form of noble deeds or noble morals, based on sources of Islam, namely the Alguran and hadith through activities of guidance, teaching, training, and the use of experience. This is in line with respect for the beliefs of other religions by connecting them with inter-religious harmony in society, so as to create national unity dan oneness, especially in Indonesia.<sup>45</sup> The explanation of the meaning of akidah akhlak above, gives the researcher an idea that akidah akhlak is one of the branches of religious knowledge in which it adheres to a belief in something that is firmly planted in the heart and cannot accept something that is contrary to this belief and contains lessons on how this belief can have an influence on human character or nature, which outwardly appears without consideration.

## III. RESEARCH METHODOLOGY

The research method used in this study is a qualitative method that describes situations and events systematically, completely and actually, involving factors and characteristics that influence each other or research that produces descriptive data such as written or spoken words from the people observed and the observed behavior, <sup>46</sup> then explain the problem that is being researched. So that in order to see the interplay of relationships, where it does not stand alone in relation to the focus of the research, the type of research used is qualitative research, not testing hypotheses. This research also observes firsthand the place of research regarding a phenomenon that occurs naturally.

This research was conducted at MTS DDI Lapeo, which is located in Lapeo Village, Campalagian District, Polewali Mandar Regency, West Sulawesi Province. MTS DDI Lapeo is located right next to the Lapeo Mosque which is a famous religious tourism destination in West Sulawesi.

There are two sources of data used in this study, namely primary data sources and secondary data sources. Primary data sources such as the Headmaster of Madrasah Tsanawiyah (MTS) DDI Lapeo; Deputy Head of Madrasah Tsanawiyah Madrasah (MTS) DDI Lapeo (curriculum); Akidah Akhlak Teachers (especially Class VIII

<sup>44</sup>Rusyja Rustam dan Zainal A. Haris, *Buku Ajar Pendidikan Agama Islam di Perguruan Tinggi*. (Yogyakarta: Deepublish, 2018), h. 312.

<sup>45</sup>Anni Faida, "Implementasi Pembelajaran Aqidah Akhlak dalam Pembentukan Karakter Siswa (Studi Multi Kasus di MIN Pundensari dan MI Plus Sabilul Muhtadin Pakisrejo Rejotangan Tulungagung", *Excecutive Sumary* (Tulungagung: Program Studi Ilmu Pendidikan Dasar Islam Program Pascasarjana IAIN Tulungagung, 2015), h.6-7.

<sup>46</sup>Sulaiman Saat dan Sitti Mania, *Pengantar Metodologi Penelitian Panduan Bagi Peneliti Pemula* (Gowa: Pusaka Almaida, 2019), h. 129.

<sup>&</sup>lt;sup>42</sup>Yunahar Ilyas, Kuliah Aqidah Islam. h. 1

<sup>&</sup>lt;sup>43</sup>Miswar dan Pengulu Abd. Karim Nasution, *Akhlak Tasawuf* (Bandung: Ciptapustaka Media Pressindo, 2014), h. 1.

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Akidah Akhlak teachers); Students; and all stakeholders in the MTS DDI Lapeo environment. The source of the secondary data obtained from this research is from books, research results, journals, magazines, print media, and other documents relevant to this research, and then archive searches from various libraries are carried out.

In this study, data collection methods were observation, interviews, documentation, and tests. The data analysis technique used is through the stages of data reduction, data presentation, and drawing conclusions.

#### IV. RESEARCH RESULTS AND DISCUCCION

## a. Application Scientifik Approach of Akidah Akhlak Learning Class VIII MTs DDI Lapeo

The five stages of the scientific approach that have been carried out by akidah akhlak teacher in MTs DDI Lapeo, especially the teacher of akidah akhlak in class VIII r, are using the five stages of the scientific approach or 5 M, namely observing, questioning, exploring, reasoning, and forming networks. The data from the results of this study were obtained after conducting research for approximately 3 months, specifically observing the application of the scientific approach of class VIII MTs DDI Lapeo for four meetings, with an offline system (outside the network). The more specific description is as follows:

1. Observing

Observing activities of akidah akhlak learning iniMTs DDI Lapeo's at the first meeting began with the help of images related to tawakal behavior, ikhtiyar, patience, gratitude and qana'ah in everyday life.<sup>47</sup> At the second meeting, students observe the picture and listen to the teacher's explanation regarding the meaning of tawakal behavior, ikhtiyar, patience, gratitude and qana'ah.<sup>48</sup> Furthermore, in the third meeting, students observed the picture and listened to the teacher's explanation on how to identify tawakal, ikhtiyar, patient, gratitude and qana'ah behavior.<sup>49</sup> The fourth meeting of students observing the picture and listening to the teacher's explanation of examples of tawakal behavior, ikhtiyar, patience, gratitude and qana'ah.<sup>50</sup> In observing activities, the teacher as an educator not only provides instructions for observing what is in the picture, but after that will provide an explanation of what students have not understood.

2. Questioning

The teacher's activities in asking questions are according to what is stated in the lesson plan made by akidah akidah teacher, namely the first meeting the of class VIII in MTs DDI Lapeo, the questioning activity is carried out by asking questions about the meaning contained in the picture and relating to the arguments of tawakkal, sincere,

<sup>&</sup>lt;sup>47</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 28 Oktober 2020.

<sup>&</sup>lt;sup>48</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 3 November 2020.

<sup>&</sup>lt;sup>49</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 11 November 2020.

<sup>&</sup>lt;sup>50</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 18 November 2020.

patient nature , gratitude and qana'ah.<sup>51</sup> In the second meeting, the questioning activity was carried out by asking the meaning of tawakkal, ikhtiyar, patience, gratitude and qana'ah.<sup>52</sup> The third meeting, the questioning activity was carried out by asking how to identify the characteristics of tawakkal, ikhtiyar, patience, gratitude and qana'ah.<sup>53</sup> The fourth meeting, the questioning activity is carried out by asking again for examples of behavior towards oneself, especially the application of tawakkal, ikhtiyar, patient, gratitude and qana'ah characteristics.<sup>54</sup>

## 3. Exploring

The exploration activities carried out by the Akidah Akhlak Teacher are in accordance with what is stated in the RPP, namely the first meeting of exploring activities carried out by reading and gathering information from various material sources about the nature of tawakal, ikhtiyar, patience, gratitude and qana'ah along with their arguments.<sup>55</sup> The second meeting, exploration activities were carried out by gathering from various sources regarding the understanding of the nature of tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>56</sup> The third meeting, exploration activities were carried out by gathering from various sources on how to identify the nature of tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>57</sup> The fourth meeting, the exploration activity was carried out by gathering from various sources about examples of people who believe in the nature of tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>58</sup>

4. Reasioning

Reasoning activities are in accordance with the lesson plans that have been made by the akidah akhlak teacher, at the first meeting reasoning activities are carried out by making concept maps through internal group discussions about the arguments of tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>59</sup> At the second meeting, reasoning activities were carried out by matching each other's formulas and internal discussions regarding the notions of tawakal, ikhtiyar, patience, gratitude and qana'ah

<sup>&</sup>lt;sup>51</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 28 Oktober 2020.

<sup>&</sup>lt;sup>52</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 3 November 2020.

<sup>&</sup>lt;sup>53</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 11 November 2020.

<sup>&</sup>lt;sup>54</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 18 November 2020.

<sup>&</sup>lt;sup>55</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 28 Oktober 2020.

<sup>&</sup>lt;sup>56</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 3 November 2020.

<sup>&</sup>lt;sup>57</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 11 November 2020.

<sup>&</sup>lt;sup>58</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 18 November 2020.

<sup>&</sup>lt;sup>59</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 28 Oktober 2020.

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characteristics.<sup>60</sup> The third meeting, reasoning activities were carried out by discussing each internal group and concluding how to identify the characteristics of tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>61</sup> The fourth meeting, reasoning activities are carried out by internal group discussions and concluding the phenomena of life that arise or examples of behavior that reflect tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>62</sup>

5. Networking

In accordance with the activities of forming networks that exist in the RPP in the West Kenje Zone in the RPP documentation, where at the first meeting, activities to form a network were carried out by presenting or presenting arguments regarding the nature of tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>63</sup> The second meeting, networking activities carried out by presenting or presenting the meaning of tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>64</sup> The third meeting, networking activities carried out by presenting argument on how to identify tawakal, ikhtiyar, patient, gratitude and qana'ah behavior.<sup>65</sup> The fourth meeting, networking activities carried out by presenting or presenting examples of behavior that describe tawakal, ikhtiyar, patience, gratitude and qana'ah.<sup>66</sup>

## b. The Formation of Students' Critical Thinking Ability through a Scientific Approach to Learning Akidah Akhlak Class VIII MTs DDI Lapeo

As for the formation of the critical thinking ability, namely:<sup>67</sup>

1. Observing

Specifically, the formation of students' critical thinking abilities through observing activities in learning akidah morals is as follows:<sup>68</sup>

a) Educators direct students to observe a picture related to the subject matter;

<sup>63</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 28 Oktober 2020.

<sup>64</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 3 November 2020.

<sup>65</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 11 November 2020.

<sup>66</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 18 November 2020.

<sup>67</sup>Dermawan, S,Pd.I (34 Tahun), Akidah Akhlak Teacher of Class VIII at Madrasah Tsanawiyah DDI Lapeo, *Interview*, Lapeo, 18 November 2020.

<sup>&</sup>lt;sup>60</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 3 November 2020.

<sup>&</sup>lt;sup>61</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 11 November 2020.

<sup>&</sup>lt;sup>62</sup>Observation Results of Akidah Akhlak Learning in the West Kenje Zone for Class VIII with Teacher of Akidah Akhlak at MTs DDI Lapeo on Wednesday from 08.00-10.25, 18 November 2020.

<sup>&</sup>lt;sup>68</sup>Dermawan, S,Pd.I (34 Tahun), Akidah Akhlak Teacher of Class VIII at Madrasah Tsanawiyah DDI Lapeo, *Interview*, Lapeo, 18 November 2020.

- b) Educators provide stimulation to students to be able to make questions related to images that have been seen and are linked to subject matter;
- c) Educators direct students to formulate questions used question words or 5W + 1H; and
- d) Educators guide students to collect questions as best as possible used good sentences and ask them in questioning activities.
- 2. Questioning

The implications for the formation of students' critical thinking skills by akidah akhlak teacher of class VIII at MTs DDI Lapeo are as follows:<sup>69</sup>

- a) Educators ask and provide opportunities for students to ask questions using question words or 5W + 1H; and
- b) Educators write questions on the board related to things that are not understood after observing a picture that was previously linked to the material after reading akidah akidah textbook of class VIII.
- 3. Exploring

Some specific points that describe the formation of students' critical thinking abilities through exploration activities are as follows:<sup>70</sup>

- a) Students are given the opportunity to read akidah akhlak books off class VIII that have been previously distributed;
- b) Students are directed to collect information not only from textbooks of akidah akhlak, but also from valid internet; and
- c) Students listen to explanations from educators related to the material being studied.
- 4. Reasioning

The formation of students' critical thinking skills in akidah akhlak leraning for class VIII at MTs DDI Lapeo in reasoning activities is as follows:<sup>71</sup>

- a. Students are given the opportunity to have internal discussions with each group; and
- b. Each student in each group is given the opportunity to answer the problems that have been made previously after observing and asking questions, and after gathering information.
- 5. Networking

Specifically, the formation of students' critical thinking abilities in networking activities is as follows:<sup>72</sup>

a) Educators provide opportunities for each group to present;

<sup>&</sup>lt;sup>69</sup>Dermawan, S,Pd.I (34 Tahun), Akidah Akhlak Teacher of Class VIII at Madrasah Tsanawiyah DDI Lapeo, *Interview*, Lapeo, 18 November 2020.

<sup>&</sup>lt;sup>70</sup>Akidah Akhlak Teacher of Class VIII at Madrasah Tsanawiyah DDI Lapeo, *Interview*, Lapeo, 18 November 2020.

<sup>&</sup>lt;sup>71</sup>Akidah Akhlak Teacher of Class VIII at Madrasah Tsanawiyah DDI Lapeo, *Interview*, Lapeo, 18 November 2020.

<sup>&</sup>lt;sup>72</sup>Akidah Akhlak Teacher of Class VIII at Madrasah Tsanawiyah DDI Lapeo, *Interview*, Lapeo, 18 November 2020.

- b) Educators direct and provide opportunities for students to ask questions then answer questions that have been previously made;
- c) Educators provide corrections to the answers to the questions raised, so that students can think openly; and
- d) Students are directed to conclude learning.
- c. Students' Critical Thinking Ability through a Scientific Approach to Learning Akidah Akhlak Class VIII MTs DDI Lapeo
- 1. Ability to analyze and formulate a problem or another person's argument. This is found when students sort out the actions which are classified into praiseworthy actions which are meant in the questions related to the material of akidah akhlak, namely tawakkal behavior, patience, gratitude, qana'ah;
- 2. The ability to provide ideas on problems that have been formulated. This ability is seen when students can provide ideas using language that is good, neat, clear, and easy to understand when answering questions that instruct them to give opinions related to the material of tawakkal behavior, patience, gratitude, qana'ah;
- 3. Ability to assess the truth by reexamining or reviewing incoming information.
- 4. Ability to solve problems and provide solutions to problems that will come. Students who have critical thingking skill will be able to provide solutions to problems in learning, such as tawakkal behavior material, patience, gratitude, qana'ah which is formulated how to apply it in everyday life
- 5. The ability to know the essence of akidah akhlak learning. This is illustrated when students have a high sense of a lesson and when answering question about the story of B.J. Habibi, then the students are instructed to provide the essence of the story and the lessons that can be taken in it.
- 6. Ability to analyze information to accept or reject information. This ability is a fundamental ability for students who have critical thinking skills because all the information received is not all true. The information received really needs to be traced to the truth, especially if the information or knowledge will be disseminated, including in material about tawakkal behavior, patience, gratitude, qana'ah.
- 7. Ability to ask and answer questions addressed to him. In this case, students so that they can formulate problems and answer questions addressed to them are fulfilling a sense of responsibility as the person being asked and it is their duty to share their knowledge with each other, including akidah akhlak regarding tawakkal behavior, patience, gratitude, qana'ah.
- 8. The ability to accept or be open to the opinions of others. Students who have the ability to give opinions do not adequately describe that these students have critical thinking abilities, but students must also have the ability to accept opinions that are not in line with their opinions

## V. CONCLUSIONS

1. The application of the scientific approach in akidah akhlak learning for class VIII at MTs DDI Lapeo has been implemented well, where students are directed by following five stages of learning, namely observing, questioning, reasoning, exploring, and forming networks. In each activity students appear to be active and learning does not only take place in one direction, but educators as facilitators and students are directed to independently collect information and knowledge, then the akidah akidah teacher as educator will confirm in the form of giving conclusions.

- 2. The formation of students' critical thinking skills in akidah akhlak learning for class at VIII MTs DDI Lapeo through a scientific approach, according to its five stages, namely the observation stage, students are directed to analyze and formulate problems after watching a picture related to akidah akhlak material such as behavior tawakkal, patient, gratitude, qana'ah, in questioning activities, students are directed to be able to make questions. In the third stage, namely exploring, students are directed to be able to collect information related to akidah akhlak material, especially material regarding tawakkal behavior, patience, gratitude, and qana'ah. In the fourth stage, the activity of reasoning, students are directed to process the information obtained and in the last activity, namely the activity of forming networks, students will be given the freedom to express their opinions regarding the material of akidah akhlak being discussed.
- 3. The critical thinking ability of students for class VIII at MTs DDI Lapeo on learning akidah akhlak through a scientific approach is divided into eight abilities, namely, the ability to analyze and formulate a problem, the ability to provide ideas, the ability to assess the truth of information received, the ability to solve problems or providing solutions to a problem, the ability to know the essence of akidah akhlak learning, the ability to analyze information received in akidah akhlak learning, the ability to make questions and answer questions about akidah akhlak, and the ability to accept or be open to other people's opinions.

Based on the research results and the conclusions described above. The researcher states that the scientific approach can be used in akidah akhlak learning as approach to shaping critical thinking ability of students, because of the approach this is not only based of scientifically, but learning will not only occur in one direction but it involves the activeness of students and not only make the teacher as a source of information, but it can be from books or data from a valid internet.

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