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Scientific approach to the learning of Islamic religious education in the covid-19 period: A study in Bunut Hulu state high school

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ABSTRACT

The curriculum 2013 uses a scientific approach in learning development, with the expectation of encouraging students to find out from various sources, solve problems, think analytically, emphasize the importance of collaboration and creativity. When implementing that approach, Indonesia and the world's population are facing the Covid-19 pandemic to respond that phenomena, learning, and teaching in many schools are conducted online, using certain media and learning resources. This research was conducted at SMAN 1 and 2 Bunut Hulu, using a qualitative approach with descriptive methods. Data collection techniques using in-depth interviews. The study results show that learning cannot be carried out correctly in the emergency situation of Covid-19. Teachers have difficulty applying the scientific approach to carry out offline learning once a month to balance online learning.

Introduction

Based on the Law on SISDIKNAS Number 20 of 2003, education is a conscious and planned effort to create a pleasant learning atmosphere to develop their potential in religion, self-control, intelligence, and skills (UU No 20, 2003). This curriculum is a government response to the education needs of the community to build quality education. Pedagogically, the curriculum is an educational design that provides opportunities for students to develop their potential in a pleasant learning atmosphere and following their abilities to have the qualities desired by society and the nation. Judirically, the curriculum is a public policy based on the philosophical foundation of the nation and judicial decisions in education (Daryanto, 2014). The 2013 curriculum involves three main things: implementing thematic learning, using a scientific approach in the learning process, and authentic assessment in learning evaluation. The scientific method also called the scientific approach,

requires teachers to develop learning with scientific steps by observing, questioning, reasoning, trying, and communicating. According to Hosnan, the scientific approach is an approach that involves cognitive processes in learning and can stimulate students' high-level thinking skills (Dasar, 2016), this is related to Bruner's learning theory which says that there are four main things in his theory, first students can learn and develop his mind when he learns and use his mind, the two students will get intellectual satisfaction when he performs cognitive processes and discoveries, the three students can understand discovery techniques when he gets the opportunity to make discoveries, fourth by making discoveries it will strengthen memory power students.

Learning is a process of interaction, whether the interaction between fellow students, students, and teachers, or students with learning resources in an educational learning environment (Sufairoh, 2016). The learning process is a series of activities that include planning, implementation and assessment. The learning approach is a term that is widely used in various contexts with meanings that are not always the same. According to Ahmad Sudrajad the approach can be said to be the teacher's point of view of the learning process (Abdullah, 2018). Meanwhile, Sanjaya defines learning as a system that helps the teaching and learning process which contains a series of activities arranged in such a way as to create an internal teaching and learning process (Djalal, 2017). And Suprayekti added that the learning approach describes a learning model that is used to regulate the achievement of curriculum goals and give signs to teachers how to achieve these goals (Djalal, 2017). So it can be said that the learning approach is a collection of methods and methods used by the teacher in carrying out teaching and learning activities.

"Science" from Latin scientia which means knowledge, is systematic and structured which is obtained by observing carefully and conducting experiments. The scientific approach is a series of teaching and learning activities arranged in such a way that students can build concepts and principles through scientific stages such as observing, asking, trying, reasoning and communicating (Sufairoh, 2016). This scientific approach is included in the approach in the 2013 curriculum which is categorized as a student-centered learning approach because in its implementation it emphasizes the activeness of students in learning activities and the teacher is only as a facilitator during the teaching and learning process. The scientific approach in the Indonesian curriculum first appeared in the regulation of the minister of education and culture Number 65 of 2013 concerning the standard of the primary and secondary education process (Aprison, 2017). The Ministry of Education and Culture also explained that the scientific approach is a learning model that uses a series of scientific activities starting from observing, asking, trying, reasoning and communicating. For the learning process at the Junior High School (SMP) and Senior High School (SMA) levels in the 2013 curriculum, it uses a scientific approach. Learning must cover three domains, namely the realm of attitudes, knowledge and skills. The scientific approach is believed to be a bridge for the

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development of students' attitudes, skills and knowledge, because in the realm of attitudes it will produce students "know why" from the core of the material being studied, from the realm of students' skills "know how" and from the realm of knowledge students "know what". And it is hoped that the final results can improve and balance the abilities of students both soft skills and hard skills.

Teaching using a scientific approach is believed to be more effective than traditional learning. According to Daryanto, the research results prove that by using a traditional learning approach, the absorption of information from the teacher is 10 percent after 15 minutes and the acquisition of contextual understanding is 25 percent. However, in learning using a scientific approach, the teacher's absorption of information is more than 90 percent after two days and the acquisition of contextual understanding is 50-70 percent.

The scientific approach is intended to understand students to know, understand, and practice what is being studied scientifically (Husfiqoh, 2015). This scientific approach puts forward observation, reasoning, discovery, validation, and explanation of truth (Daryanto, 2014). In the learning process with the 2013 curriculum, it is carried out using a scientific approach (scientific), the steps for implementing a scientific approach include:

1. Observe

Observing is very useful for students to fulfill their curiosity, by observing students find information that there is a relationship related to the object being observed with the material being studied. It is stated in Permendikbud Number 18a that teachers should give students the opportunity to see, read, hear and listen. Because it helps students train seriousness, accuracy and finding information. And the teacher can facilitate students to make observations and train to pay attention either by seeing, listening or reading from an object. Because this method of observing prioritizes meaning in the learning process, if it is not controlled, it will obscure the meaning and purpose of learning.

2. Asking

In the activity of observing, the teacher opens the opportunity to ask the students as wide as possible to ask questions about what they have seen, read, heard and heard. Described in Permendikbud Number 18a of 2013 asking questions helps students find out information that they do not understand or get additional information about what they are observing. Asking serves to develop creativity, curiosity and the ability to formulate problems in critical thinking. Asking questions can help teachers to estimate learning difficulties that students are facing and prepare to find solutions. By asking questions, students can also develop students' speaking skills, asking questions and giving logical answers and using good and correct language. As well as good

questions from the teacher can improve the cognitive abilities of students.

3. Trying

The activity of trying aims to get real or authentic learning outcomes through collecting data. Experimental activities can be done in two types: trying out the principles / procedures obtained through discussions and applying these principles / procedures to new situations. The activity of trying is more emphasized on collecting data to be used as material for discussion with students in ongoing learning. Teachers must also provide opportunities for students to collect information from what they have observed (Salim, 2016). Experimental activities can also be carried out, especially for the appropriate material and subjects.

4. Reasoning

Reasoning activities in learning the 2013 Curriculum refer to the association learning theory. Associative learning refers to students' ability to group various ideas and associate various events that then enter them into memorabilia (Daryanto, 2014). In Permendikbud Number 18a of 2013, reasoning is processing information that has been collected through trying / experimenting and the results of observing and gathering information. Processing of information from its nature adds breadth and depth of understanding to information processing that is looking for solutions from several sources with different opinions to contradictory ones. In reasoning activities, teachers and students are active actors and in the 2013 curriculum learning, of course, students must be more active than the teacher.

5. Communicate

In the curriculum's 2013, teachers are expected to provide opportunities for students to communicate the results of what has been reasoned. Communicating can be done through writing or retelling what has been learned individually or in groups. The students' results are presented in class and assessed by the teacher as student learning outcomes or student group learning outcomes. Communicating is the end result of learning where students are able to express attitudes and skills in written, oral or relevant works (Salim, 2016). The purpose of learning to use a scientific approach is to improve students' thinking skills, shape students' ability to solve problems systematically, and foster student motivation in learning where students think that learning is necessary.

The curriculum's 2013 uses a scientific approach, the learning process is expected to be directed to encourage students to find out from various sources, not only being told by the teacher, learning is directed so that students can formulate problems or ask questions not only to solve problems or answer, learning is directed to train participants analytical thinking students in

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decision making and learning emphasize the importance of cooperation, collaboration and creativity in solving problems. However, with the announcement of the first case by President Joko Widodo on Monday, March 2, 2020, Indonesia was faced with a pandemic period caused by COVID 19. To help prevent COVID 19, a Circular of the Secretary General of the Ministry of Education and Culture was issued Number 15 of 2020 which contained implementation policies and learning guides in the emergency period of COVID 19. With abnormal conditions, learning cannot be carried out normally as usual. Teachers still have to give students the right to get quality education and teachers are required to carry out learning online (online) by using certain media and learning resources or offline (offline) using television, radio, books, or independent learning modules.

In this study, the researchers chose SMAN 1 Bunut Hulu and SMAN 2 Bunut Hulu because the two schools were high schools that covered six villages or sub-districts in Bunut Hulu District, and how SMAN 1 Bunut Hulu and SMAN 2 Bunut Hulu implemented a scientific approach in mass learning. emergency COVID 19. In practice there are various obstacles in carrying out learning during the emergency period of COVID 19, especially for schools that cannot carry out face-to-face learning. This is also experienced by SMAN 1 Bunut Hulu and SMAN 2 Bunut Hulu where when implementing online or offline learning the scientific approach cannot be implemented optimally. When learning cannot be done face-to-face, the teaching and learning process can be replaced with Distance Learning and utilizing available communication technology tools, but what happens if what hinders the teaching and learning process is precisely the communication tool. As not all students have a means of communication (Mobile), or do not have internet data and signal networks that are not available in the student's residence, it is the reason students cannot participate in active learning. But not only this causes the implementation of Distance Learning to the maximum extent, but the understanding of parents indirectly also affects, due to the lack of parental knowledge of the importance of children's education and the relatively low economic conditions of the family, when the child does not go to school children are invited to work and help their parents. Based on the explanation above, the researchers are interested in raising the problem of how teachers carry out learning and the application of the scientific approach during the emergency period of COVID 19 because during the pandemic, all aspects of human life are affected, including education.

Method

This research uses a qualitative approach with descriptive methods. The research location is in Bunut Hulu District which is a sub-district in Kapuas Hulu Regency, West Kalimantan Province. The population includes all SMANs in Bunut Hulu, namely SMAN 1 Bunut Hulu and SMAN 2 Bunut Hulu, and the research sample includes grade 2 Islamic Religious Education (PAI) teachers in each school. Data collection techniques in this study used in-depth interviews.

Discussion

Bunut Hulu is a sub-district that is shaded by Kapuas Hulu Regency which has two State Senior High Schools (SMAN), namely SMAN 1 Bunut Hulu which is located in Semangut Utara Village, and SMAN 2 Bunut Hulu which is located in Nanga Suruk Village. SMAN 1 Bunut Hulu which is located in Semangut Utara Village is on the main causeway connecting Pontianak with Putussibau (Kapuas Hulu). Meanwhile, SMAN 2 Bunut Hulu which is located in Nanga Suruk Village can be reached via Simpang Tiga Temuyuk and is 11 KM from the main road.

The Islamic Religious Education (PAI) teacher at SMAN 1 Bunut Hulu and SMAN 2 Bunut Hulu for grade 2 each number one person. The number of classes for grade 2 at SMAN 1 Bunut Hulu there are three classes with two majors, namely the Science and Social Studies Program, and at SMAN 2 Bunut Hulu with two classes and two majors, Science and Social Studies.

In learning using a scientific approach in normal conditions in the two schools are not much different. Learning using the method of discussion, practice, question and answer, and lectures, facilities in schools have supported the learning process with projectors and WiFi connections. During learning, students' response is quite good, because before starting learning the teacher provides some motivation to students, provides perceptions and descriptions of the material to be discussed at the meeting, before starting learning students already have a description of the material they will learn. Students are also limited to learning through textbooks or worksheets, but teachers also prepare technology-based learning such as students being invited to watch videos on You Tube related to the material or problems to be studied at that time. This encourages the learning process to be less boring.

For some material in the subject of Islamic Religious Education (PAI) a scientific approach can be implemented thoroughly, such as material related to Jurisprudence, Qur'an Hadith and Morals. For the Jurisprudence material, there is material on managing bodies where students can observe books or materials that have been provided by the teacher about caring for bodies, then ask about things they do not understand and practice together how to care for bodies and communicate them in oral, written or practical form. . For material related to being brave and honest, advising others in Islam, respecting parents and teachers, and being tolerant, the students' Jurisprudence on Islamic Economic Principles and Practices can be divided into several groups to present sub-themes to their classmates. The group in charge of looking for material from various sources such as books in the library or through each student's cellphone then presented the results of their group discussions and other students asked questions, at other times students were invited to discuss together about the material they were learning. In some of these themes students are very active in learning.

However, in certain subjects, materials or situations it is very possible that the scientific approach cannot be implemented optimally (Setiawan, 2017). Because there is an inconsistency

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between some of the PAI materials which are dogmatic or unreasonable with a scientific approach that focuses on logical things. Such as material about faith and history, because the material taught is not something that can be seen by the eye or something that is encountered everyday, causing students to become bored during learning plus the teacher only delivers these materials using the lecture method and the question and answer method, this have an impact on student responses during the learning process. In addition, for SMAN 2 Bunut Hulu, because the school's location is quite far from the main road, this causes technical problems such as WiFi connections and cellular networks are often blocked. It can also affect the ineffectiveness of using existing technology. When the learning activity takes place and the teacher invites students to discuss together, students are free to look for material related to the discussion theme via their respective cellphones, but the school's cellular network or WiFi network is actually constrained.

Even in pandemic conditions due to COVID 19, even the scientific approach cannot be implemented optimally, there are obstacles faced by teachers and teachers' concerns about student enthusiasm for learning and the quality of student education has also decreased, but teachers are still trying to carry out learning using a scientific approach as a form implementation of the curriculum that has been charged for one learning year. For SMAN 1 Bunut Hulu when the beginning of the emergency period of COVID 19, learning was carried out online, the teacher used the WhatsApp application media to provide material, students were asked to study the material that the teacher had sent in the class group, then did the exercises and collected assignments to school every week, but apparently There are many obstacles in this online learning, where not all students can fully participate in learning. With several reasons such as not all students have cellphones, or there are some students who have cellphones but do not have internet packages and there are other students whose areas of residence are not covered by cellular signals, there are also students who because they do not go to school then help their parents work, because some parents think that if the child does not go to school it means not going to school, this also results in the inactivity of students in online learning. Of course, it is homework for schools and teachers on how to learn about the COVID 19 pandemic to run optimally. This is reinforced by the fact that teachers find it difficult to apply a scientific approach in Distance Learning and teachers have difficulty using existing technology.

When Kapuas Hulu District was already in the yellow zone for the spread of COVID 19, then SMAN 1 decided to carry out face-to-face learning based on what was conveyed by the Ministry of Education and Culture (Kemendikbud) and a number of related ministries regarding new policies for implementing learning during the COVID 19 period that for the yellow zone the spread of COVID 19 can carry out face-to-face learning provided that the number of students is 30-50 percent of class capacity. However, if the color of the distribution zone changes, the school must close. The teaching

and learning process is carried out by dividing the day, for class 2 learning takes place on Saturdays with a time of 30 minutes per subject and the teaching and learning process takes place from 07.00-11.45 noon. In teaching and learning during the pandemic, the scientific approach cannot be fully implemented considering the limited time to explain extensive material, learning takes place with the teacher explaining the material and giving assignments. In the learning process of the emergency COVID 19, the teacher only implements a scientific approach to observe and communicate. When learning in class takes place because of the limited time the teacher only explains the material using the lecture method, students are asked to pay attention to the teacher's explanation and the material that the teacher has prepared, and when learning is complete the teacher gives assignments to students related to the material they have learned. This is certainly not enough, therefore the teacher asks students to ask the teacher when there is something they do not understand regarding the material either directly or through messages when outside of school.

Whereas for SMAN 2 Bunut Hulu since the beginning of the COVID 19 emergency period, learning was carried out during and offline. Face-to-face learning is only carried out for class 3. The learning process takes place with the teacher preparing the material, then sending the material to the WhatsApp group, students are asked to read the material provided by the teacher then fill in the available questions, if there are questions related to material that students do not understand, students can contact the related subject teacher. Then in each class there is the class leader and the vice chairman of the class, every week the class leader goes to school to take material or assignments from the subject teacher, then the material or assignment is informed to classmates by sending it to the class WhatsApp group, for assignment collection, because almost 80% of SMAN 2 students live in the area around the school, the students can collect from the class leader or class vice president and then the class leader or class vice president collects assignments to the teacher at school while taking the next material or assignment. Because learning is not carried out face-to-face, it is quite difficult to fully combine the scientific approach with learning. Because trying in a scientific approach cannot be done in online learning. But the teacher still tries to provide material then students are asked to observe the material, students can ask for material they do not understand to the teacher or peers, then students can reason and conclude the material provided by the teacher and communicate through the questions provided by the teacher.

The obstacles faced by the teacher when carrying out learning during and offline are more centered on students and the case is almost the same as SMAN 1 Bunut Hulu when still carrying out online learning, namely not all students have cellphones to take part in learning, then not all student homes are covered by cellular signals and not all students have a data package to carry out learning coupled with the economic backgrounds of different parents, many students work to help their parents in the garden and others, this makes students lag behind and does not participate in

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learning perfectly. This causes that when the beginning of online learning is carried out by students who take part in learning 100% of the total number of grade 2 students, but after a while the graph decreases until it reaches 50% of the total number of students, therefore the school tries to pump up the enthusiasm of students by reminding them. that they are not on holiday, that these students are still in school with a different learning than usual. After pumping student enthusiasm back up, and the COVID 19 spread zone down to a yellow color, the school also took the initiative to carry out face-to-face learning twice a month per subject to balance online learning so that teachers can still control student understanding while online learning is carried out.

Conclusion

Learning and teaching at SMA 1 and 2 Bunut Hulu are performed by scientific approach, but in the covid era, this approach is more difficult to implement, including Islamic Religious Education (PAI). However, in the emergency of COVID 19, learning cannot be carried out correctly. Various obstacles faced when implementing distance Learning, such as constrained communication devices, lack of student participation and lack of understanding of teachers in using technology when implementing a scientific approach. With these various problems, the school decided to perform face-to-face learning twice a month with keep health protocol because Hulu District is in the yellow zone.

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