

The Model of Scientific Learning with Bruner, Piaget and Vigotsky's Theory Approach at Elementary Madrasah Schools in Banten

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ABSTRACT

The use of integrated thematic models at the elementary school or Madrasah Ibtidaiyah (MI) education level, namely combining several contents into one unit called thematic, in the learning process uses a scientific approach with the formation of the learning process through observing, asking, trying, reasoning, and communicating (5M). The aims of study were to describe the scientific approach learning model in integrated thematic learning and to describe the obstacles in the scientific approach in integrated thematic learning for students of Madrasah Ibtidaiyah in Banten. The theory used in this study is an integrated thematic learning model based on theory from Bruner, Piaget and Vygotsky. This study uses a qualitative approach, with descriptive qualitative method. This type of research uses phenomenology. The data analysis technique used the Interactive Analysis technique of the Miles and Huberman models including data collection, data reduction, data presentation and conclusions. The results showed that 1) the scientific approach model in integrated thematic learning using the scientific approach was carried out using the Problem Based Learning method and 2) Obstacles in the scientific approach in integrated thematic learning include a) less than optimal teacher readiness in the process of applying the scientific approach to thematic learning; b) Its implementation is still partial in each subject; c) cannot yet be presented through a unified whole with the theme.

Keywords: *Study, Model, Learning, Scientific and Thematic.*

A. INTRODUCTION

Curriculum development in Indonesia, especially basic education, has become very complex. Student progress in improving learning outcomes is a benchmark for learning success. Curriculum changes in learning are one of the things that must be addressed by teachers in implementing learning models. Improvements in the learning model are the teacher's task so that students have increased learning.

One of them is the use of integrated thematic models at the elementary or Madrasah Ibtidaiyah (MI) education level, namely combining several contents into one unit called thematic, in the learning process using a scientific approach with the formation of the learning process through observing, asking, trying, reasoning, and communicating (5M). The application of a scientific approach is intended for students to learn constructively, namely the learning process by playing students as the main actors (student centered) and teachers as facilitators and motivators. It is hoped that students experience meaningful learning, so that they can more easily achieve the expected competencies.

Integrated thematic learning is a learning approach that integrates various competencies from various subjects into various themes. Integrated thematic learning has student-centered characteristics. Students are encouraged to find, do and experience it contextually by using all the resources they have and the surrounding environment. "learning becomes more meaningful, because students directly "do" (doing) and "experience" (experience) themselves an activity (learning)".(Rusman, 2017). The learning process using a scientific approach aims to provide an understanding of students to know and understand some material and information from various sources, time and place in the same direction from teacher.(Prastowo, 2019)

Integrated thematic learning which is very complex certainly requires an approach so that thematic learning is achieved effectively, while the scientific approach in learning thematic learning is a set of plans that contain activities designed to achieve goals education. (Lubis, 2020) The characteristic of the scientific approach is highlighting the dimensions of observation, reasoning, discovery, validation, and explanation of a truth. (Setiawan, 2019)

Based on the results of observations, review of student documents and interviews with Madrasah Ibtidaiyah in Bantenthat implementation of the curriculum there are several obstacles, including teachers having difficulty implementing thematic learning activities due to a lack of references about various models, strategies and learning methods that can used in the study. The existence of this learning shows that students' involvement in the learning process still tends to be passive so that it does not motivate students to take lessons. Students

sometimes still hesitate, Embarrassed, Afraid and reluctant to when asked by the teacher to ask questions, answer questions, or express opinions. This has an effect on student learning outcomes which are still low seen during observations in Madrasah Ibtidaiyah in Banten the average test score for the odd semester of the 2022/2023 academic year is still below the KKM score. In addition, teachers experience difficulties in developing teaching materials sourced from teacher and student books provided. The teaching materials provided are still too narrow and require teachers to find and develop them. The next problem is that assessment on thematic learning is difficult to apply and understood by the teacher. Assessment of thematic learning is a combination of several subjects, is the most important part in a lesson. Because with the teacher's assessment can evaluate learning activities in accordance with the expected goals.

There is no optimality in integrated thematic learning, so an approach must be taken in the integrated thematic learning process. Based on the phenomena that occur in the object of research, the conception of applying the scientific approach in learning includes components: observing, asking, trying, reasoning, and communicating. These five activities are activities in developing thinking skills to develop students' curiosity. It is hoped that students will be motivated to observe the phenomena around them, record or identify facts, then formulate the problems they want to know in questioning statements. Penelitian (Arlianty, Febriana, & Diniaty, 2017) shows that the scientific approach in the learning process of observing, asking, experimenting and associating data has a high category. (Abdulhak, 2017) explained the teacher in designing scientific learning assessments, as many as sixty point three percent were considered capable and eight percent scored very well.

(Okoro, 2016) showed that teachers' understanding of thematic approaches in social studies teaching was not good enough; teachers do not have adequate thematic practical approaches in social studies teaching; and that the teacher's years of experience are not a determining factor for the teacher's use of thematic teaching in social studies teaching. (Sufairoh, 2016) showed that there is a significant effect of the scientific approach applied to the scientific literacy competence of students' cognitive, affective, and psychomotor where it is better than the control results. (Permatasari, 2017) found that: (1) there is a significant effect of guided inquiry learning on student learning outcomes (2) there is a significant effect of the scientific approach on student learning outcomes (3) there is an interaction between the guided inquiry learning model and the scientific approach on student learning outcomes in the excretion system material. Based on these conclusions, it is suggested that teachers' abilities are encouraged to dig deeper into the potential and performance of students. the

purpose of this study, among others, is to explain the scientific approach learning model in integrated thematic learning at Madrasah Ibtidaiyah Bantenas well as the obstacles encountered in implementationscientific approach learning model at Madrasah Ibtidaiyah Banten.

B. LITERATURE REVIEW

a. Learning model

Learning is a process of building meaning from information obtained through observation, hearing and feeling stimulation, learning never knows the word finish, because the demands of the times are constantly evolving, so that problems are increasingly complex and challenging to be overcome and find a way out, related to learning there are several expert definition, Skinner, Barlow, Shah defines learning:(Sufairoh, 2016) "a process of progressive behavior adaptation". Learning is a process of adaptation or adjustment of behavior that takes place progressively. This process is caused by the existence of a stimulus relationship with a response where certain stimuli will cause a response certain. (Arlianty et al., 2017), Meanwhile, according to Cronbach, giving a definition of learning is "Learning as shown by change in behavior as a result of experience (learning as an activity shown by changes in behavior as a result of experience).

While Howard Kingsley stated: "learning is the process by which behavior (in the broader sense) is originated or changed through practice or training (learning is a process in which behavior (in a broad sense) arises or is changed through practice or training)". Cronbach provides a definition of "learning is shown by a change in behavior as a result of experience".(Setiawan, 2019). Learning is showing a change in behavior as a result of experience), while Bruer, O'Neil and Perez (Hanum, 2017) provide restrictions:"learning is to observe, to read, to initiate, to try something yourself, to listen, to follow directions". (Learning is observing, reading, initiating, trying something yourself, listening, following instructions/directions), as well as Geoch, says "learning is a change in performance as a result of practice". (Learning is a change in appearance as a result of practice).(Okoro, 2016)

Based on these definitions it is explained that learning is a process of changing behavior or appearance, with a series of activities such as reading, observing, listening, imitating and so on. In fact, learning will also be better if the subject learns to experience or do it in detail, comprehensively and applicatively, so it is not verbalistic. Learning as an individual activity is actually individual stimuli sent to him by the environment in a systematic, continuous and gradual manner. Thus, the occurrence of learning activities carried out by an individual can

be explained by a formula between the individual and the environment that occurs interactively.

The learning model is the pattern of interaction between students and teachers in the classroom which concerns approaches, strategies, methods, learning techniques that are applied in the implementation of teaching and learning activities in class. The learning model is a conceptual framework that describes systematic procedures and organizes learning experiences to achieve certain learning goals and serves as a guide for learning designers and teachers in planning and carrying out activities learning. (Setiawan, 2019)

The strategic position and function of learning has a basic conceptual framework. In a learning model it is determined not only what the teacher has to do, but also involves the stages, the expected social system, the principles of teacher and student reaction and the support system required. The choice of learning model is strongly influenced by the nature of the material to be taught, the goals to be achieved in the learning, and the level of ability learners.(Setiawan, 2019)

b. Integrated Thematic Learning

Integrated thematic learning is an approach to learning that is designed by linking several aspects in either one subject or several subjects with the aim that students can acquire complete knowledge and skills so that learning more meaningful.(Prastowo, 2019) Integrated thematic learning in Islam has been carried out since the time of Rasulullah SAW. As stated by Ahmad Tafsir, that the curriculum of the Prophet Muhammad SAW, as a whole has included coaching on aspects of the body, mind, and spiritual.Namely when several people converted to Islam, it was done at the house of al-Arqam bin Abi al-Arqam which was used as a place for teaching.What the Prophet did according to Abdullah bin Salam and his friends when they raised Saturday and hated camels after converting to Islam. Enter the religion of Islam, some read salmi and some read silmi (as a whole) because it is part of the word Islam which means into all of its Shari'a with out exception.(Rusman, 2017)

Based on jalalain's interpretation and the explanations of Mujib and Mudzakir in Islamic education which states that Islam requires an interdisciplinary and integrative model of all problems life. And also explained, the concept of integrated learning is in accordance with the concept of Islamic education where learning integrates all life's problems to produce perfect and complete human beings in accordance with the goals of Islamic education. Based on the Indonesian dictionary, thematic means concerned with the theme. While the thematic as stated by Trianto and Andi Prastowo which states that an integrated learning model

(integrated learning) at the kindergarten and elementary school levels. The thematic word comes from the word theme which means something that has been described or something that has been placed. Therefore, what is meant by integrative thematic learning in an Islamic perspective is a learning activity carried out to gain knowledge, insight and skills by integrating all problems in life. If the higher the knowledge he gets, the more he will feel that he is lower than him (Allah) or what is also called tawadhu'.

c. Scientific approach

Learning activities with a scientific approach namely providing understanding to students in knowing and understanding various materials using a scientific approach, which means that students are expected to be able to find information on their own obtained from various sources of observation through integrative thematic learning steps.

The scientific approach is learning to think creatively, as:

“Creative thinking approaches in cognitive psychology focus on the creation and development of ideas. Cognitive and creative approaches to critical thinking operate separately communicate little”.(Permatasari, 2017).

The scientific approach was introduced in the United States in the 19th century as a method for scientific learning. According to Maria and F. Michael explained:

“The scientific method has the characteristics of "doing science". This method allows teachers or curriculum developers to improve the learning process, namely by breaking the process down into steps or stages in detail which contains instructions for students to carry out learning activities”

The scientific approach is very relevant to Bruner's, Piaget's and Vygotsky's learning theories, namely Bruner's four discovery learning theories, namely:

- 1) One only learns and develops his mind when he uses his mind;
- 2) By carrying out cognitive processes in the discovery process, students will get sensations and intellectual satisfaction which become intrinsic rewards;
- 3) That one may learn some technique of invention simply by having the opportunity to make the discovery; And
- 4) Someone who makes discoveries, will be able to strengthen retention memory.

Meanwhile, Piaget's theory states that learning is related to the formation and development of schemas, while schemas are mental structures or cognitive structures that can make a person able to adapt and coordinate their environment. Meanwhile, Vygotsky's theory

states that learning takes place when students work or complete assignments that have not been studied, but are still within the reach of students' abilities to complete them.

According to Hosnan, the steps of the scientific approach (scientific approach) in the learning process for all levels are carried out using a scientific approach (scientific), including: digging for information through observing/observation, questioning/asking, experimenting/experimenting, then processing data or information, presenting data or information, followed by analyzing, associating/reasoning, then concluding, creating, and forming networks/networking. Abdul Majid that for high school subjects, certain materials or situations it is very possible that this scientific approach is not always properly applied procedurally. Under these conditions, of course, the learning process must continue to apply scientific values or characteristics and avoid non-scientific values or characteristics. namely by using the approach of observing, asking, exploring, associating; and communicate.

Integrative thematic learning is scientific through the activities of observing, asking, reasoning, trying and communicating. This can also be viewed from an Islamic perspective, as follows:

1) Observe

Observing is a learning strategy that is carried out through direct observation of certain objects of study and then analyzed according to the level of student development. Allah SWT recommends to all of us as weak humans to observe or pay attention to all forms of Allah SWT creation on this earth so that we can always think about which ones are good and which are not as a reflection of our next life, and so that we are kept away from Allah's punishments. which is a catastrophe, a disaster that can be inflicted. Therefore, it is very effective when this activity begins to be instilled in students who in fact are the future generation to achieve glory.

2) Ask

The question isa stimulus to stimulate students' thinking skills towards the knowledge they have. An effective teacher is when he is able to inspire students to improve and develop their attitudes, skills and knowledge. When the teacher asks, at that time he also guides or guides his students to study well. Meaning: "And we did not send before you, except for men whom We gave revelations to them; So ask someone who has knowledge if you don't know."

Asking questions is a student's critical inspiration which is obtained based on observations of a particular object which requires them to be satisfied with the answer to a question. In connection with the text of the verses of the Qur'an above, it shows that we

are highly recommended by Allah SWT to ask about what is unknown so that we can have additional knowledge of something we do not know, because by asking we will be able to know the world and its contents.

3) Reasoning

Reasoning is a process of thinking logically and systematically on empirical facts from the results of collecting/experimental activities as well as the results of observing activities and information gathering activities. The term reasoning here is equivalent to associating, not a translation of reasoning, although this term also means reasoning or reasoning. Reasoning is a process of critical thinking of a student towards natural phenomena and nature itself. In connection with the text of the verses of the Qur'an above, it shows that we are highly recommended by Allah SWT to reason about what is known in order to be able to link the knowledge of something with others and their creators, because by reasoning we will get a complete understanding.

4) Try

To obtain authentic learning outcomes, students must be able to conduct experiments on certain themes or materials obtained from observations. Because this trying activity is a form of method or activity carried out to develop the realm of learning objectives, namely attitudes, skills and knowledge. The real learning activities related to this try are:

- a) Determine topics according to basic competencies according to curriculum demands;
- b) Learn how to use tools and materials that are available and must be provided;
- c) Study the relevant theoretical basis and previous experimental results;
- d) Conduct and observe experiments;
- e) Draw conclusions on the results of the experiment; And

The point is that Allah will not reduce the reward of those who do good even if it is as big as a zarah, even if he does good his reward will be multiplied by Allah. No matter how small it is done will be rewarded, whoever does not do nothing will get nothing.

5) Communicate or form a network

Forming a network is meant to be the same as collaborative learning, in this learning the teacher's authority and function is more directive or learning manager, on the other hand students must be more active. If collaborative learning is positioned as a personal philosophy, students will touch on the identity of students, especially if they relate or interact with others or the teacher. in this situation, students will interact with empathy, mutual respect, and accept each other's weaknesses or strengths.

Based on this verse, it shows that in Islam it is highly recommended to give each other advice, share experiences and knowledge through amar ma'ruf-nahi munkar. Because with this activity a person will increase his sense of faith and piety to Allah SWT.

C. RESEARCH METHODS

The approach research used is a qualitative approach, because the data is in the form of distributions of information from educational subjects, namely educators, educational staff and students. Bogdan Taylor as quoted by Lexi J. Moleong defines that the qualitative method is a research procedure that produces descriptive data in the form of written or spoken words from people or subjects.(Anggito, 2018) The type of research used in this research activity is field research, in which this research focuses more on the results of data collection from informants who have determined. (Octavia, 2020). This research was conducted at the Madrasah Ibtidaiyah in Banten. The reason for the selection was carried out at Madrasah Ibtidaiyah in Banten because the learning used still had many problems so it was not optimal, especially in the learning model. Research subjects are selected informants in collecting the required information. The selection of subjects here is based on strata, or regions for certain purposes. The determination of research subjects used was purposive, namely the technique of determining informants with certain considerations and goals. These certain considerations, for example the person who is considered the most expert so that it can make it easier for researchers to explore the object being studied. The subjects in this study were a) Principals of Madrasah Ibtidaiyah Banten; 2) Teacher; 3) Education Personnel; 4) Learners.

Sources of research data include 1) Primary data obtained directly from the source. First. This primary data was obtained from the results of interviews with researchers with informants, namely the head of the madrasa/school, teachers, students, committees, guardians, supervisors, and the community at Madrasah Ibtidaiyah Banten and the selection of the informants mentioned above was inseparable from their position in the place. which is the object of study. 2) Secondary data is data obtained from Madrasah Ibtidaiyah Banten as well as various references, books related to the subject matter in this study.

According to Soerjono Soekanto, data sources are divided into three, namely: primary data sources, secondary data sources and tertiary data sources. Tertiary data sources are supporting data, namely materials that provide instructions and explanations of primary data and secondary data sources, including dictionaries and encyclopedia. Secondary data is done

because it is used as supporting data in research to strengthen primary data. The data analysis carried out was data analysis with the principle of on-going analysis, that is, it was not carried out separately after the entire data collection process was completed, but was carried out repeatedly between data collection and analysis simultaneously. This is done by verifying with the informants who are the research subjects suggested by the data.

The analysis is the process of organizing data sequences into a pattern, category and data description unit. While qualitative data analysis is an effort made by working with data, organizing data, sorting it out into manageable units, synthesizing it, looking for and finding patterns, finding what is important and what is learned, and deciding what can be told to others. Qualitative analysis is inductive, namely an analysis based on the data obtained, then developed into a hypothesis. Miles and Huberman (1984),(Majid, 2017) suggests that the activities in qualitative data analysis are carried out interactively and continue continuously until complete, so that the data is saturated. Activities in data analysis, namely data reduction (data reduction), data display (data presentation) and conclusion drawing/verification (drawing conclusions)

D. RESULT AND DISCUSSION

a. The Scientific Approach Learning Model in Integrated Thematic Learning for Madrasah Ibtidaiyah Students in Banten.

The process of implementing thematic learning at Madrasah Ibtidaiyah is one of the new policies issued by the minister of education. At the beginning of implementation, not all schools were required to implement it, because the conditions of each school were not the same in terms of facilities and infrastructure as well as the competence of the teaching staff. At the beginning of implementation, socialization was carried out regarding changes in the teacher's mindset regarding the learning process and how to implement the curriculum into the learning process, so as to produce good quality output in the academic, non-academic fields and have good character. The process of implementing thematic learning in this study is related to learning materials or resources, media and learning stages that take place in class. Learning resources are one aspect that determines the quality of the implementation of learning.

Learning activities are also carried out by way of performance to produce archived products or student work. In the learning process, students also perform performance by making portfolios or student work. The results of student work in the form of portfolios are collected in the classroom as a display of student learning outcomes. Portfolio assessment

comes from assignments or projects that must be done by students individually. The systematic workmanship is, (1) the teacher gives assignments/questions, (2) students work individually according to the abilities and skills they have, (3) the teacher assesses each result of student work, (4) students put the results of their work on each folder affixed to the classroom wall.

How much data is described above regarding the process of implementing thematic learning with a scientific approach in Madrasah Ibtidaiyah it can be concluded that during teaching the teacher uses learning resources in the form of teacher books and student books published by the government (Kemendikbud Indonesia). In the learning process, a thematic model with a scientific approach is used which is applied through various methods, namely discussion, question and answer, presentations carried out with the form of observing, asking, trying, reasoning and communicating. In carrying out learning activities each student also has an archive of what has been made and produced in the form of products or works of student learning outcomes which are stored in a portfolio results folder which is used as physical evidence of student learning outcomes.

The implementation of thematic learning at Madrasah Ibtidaiyah uses media in learning as a tool to convey messages to students. The use of media in the learning process revealed by the teacher can help students to more easily understand the message to be conveyed to students who are more enthusiastic about learning and more interested in the learning process. The use of media in the learning process can create an effective and efficient learning atmosphere. Media is a form of communication both printed and audiovisual as well as equipment that can channel messages from the sender to the recipient of the message, so that it can stimulate students' thoughts, attention and interest in the learning process. Media will make the learning process more effective and create a quality learning process.

The effectiveness of the implementation of learning is not only supported by the use of media in the process, but also involves the use of models/strategies used in their activities. Based on the results of observations and interviews, two similarities were found in Madrasah Ibtidaiyah, namely, all students stated that they preferred to be actively involved in learning activities. Most of the students stated that they preferred learning in groups. This is in line with the strengths of thematic learning, namely: 1) providing experiences and teaching and learning activities that are relevant to the level of development and needs of children, 2) fostering social skills in collaboration, 3) having an attitude of tolerance, communication and responsiveness to other people's ideas, and 4) present pragmatic activities in accordance with the problems encountered. .

The implementation of learning in Madrasah Ibtidaiyah has taken place by placing students as the main actors in constructing their own knowledge by integrating a scientific approach to the learning process. The teacher acts more as a facilitator and motivator. In the implementation of learning activities students are more often involved in group activities to find solutions to problems given by the teacher. Different data were obtained from Madrasah Ibtidaiyah in Banten, that the learning process was more teacher centered and students were only passive recipients in learning activities. the teacher teaches with a pattern of giving notes, explaining and students working on problems. In the implementation of learning activities students are rarely involved in group discussion activities,

This seems very different from the power of thematic learning in socialization material, namely: 1) fostering social and collaboration skills, 2) fun, because it starts from the interests and needs of children, 3) learning outcomes can last a long time because it is more memorable and meaningful, 4) has tolerance, communication and responsiveness to the ideas of others. In the implementation of thematic learning, it should be carried out more often with a process of discussion, question and answer, expressing ideas or ideas through group activities or presentations in front of the class. This is expected to develop social and communication skills for students to develop and to further consolidate the knowledge built through meaningful learning activities.

The integrated thematic learning scientific approach is applied in every learning activity always trying to train students' scientific skills. The learning model used by teachers at Madrasah Ibtidaiyah to support the success of implementing the scientific approach is Problem Based Learning. For how to choose a learning model, the teacher must study the characteristics of students, look at basic competencies and core competencies, as well as the material to be taught. Teachers at Madrasah Ibtidaiyah already understand the term scientific approach. He has also implemented learning with a scientific approach in classes where the teacher is good at it.

Based on the results of the interviews as evidenced by the results of observations, documentation, and field notes. In the application of scientific skills that are in the scientific approach aspect, not all of them can be carried out by the teacher, because not all the themes in it have these skills. teachers at Madrasah Ibtidaiyah reveal that the most dominant scientific skills in each lesson with a scientific approach are the skills of observing, asking, and making networks (communicating).

Besides that, Madrasah Ibtidaiyah and with evidence from the results of observations, documentation and field notes for the procedure for implementing learning activities with a

scientific approach are divided into 3 stages of activity, namely initial activities, core activities, and closing activities. After being proven by the results of observations, field notes, and documentation, teachers at Madrasah Ibtidaiyah have carried out learning with a scientific approach and have followed established procedures.

In terms of selecting learning media to support learning with a scientific approach based on interview results, teachers at Madrasah Ibtidaiyah use learning media according to the theme/material to be taught. Usually taken from electronic media, print media, and the environment around the school. However, after being proven by observations, field notes, and documentation, teachers at Madrasah Ibtidaiyah more often use learning media in the form of the environment around the school.

The teacher can decide that students have mastered scientific skills by carrying out daily tests, where when students get more marks from the KKM, the student is declared to have mastered the scientific skills being trained. This is evidenced by the results of observations, documentation, and field notes. The implementation of learning evaluation with a scientific approach carried out by the teacher is by applying formative evaluation and summative evaluation. As for assessment, what is used by teachers in Madrasah Ibtidaiyah is performance appraisal and written assessment, coupled with attitude assessment. Teachers at Madrasah Ibtidaiyah,

The Obstacles in the Integrated Thematic Learning Scientific Approach Implemented in Madrasah Ibtidaiyah

Pegrades are an important part of the learning process. Assessment or assessment is a planned activity to find out the state of an object using certain instruments and the results are analyzed to obtain a conclusion on the characteristics of student learning. Based on the results of observations, interviews and documentation, two similar data were obtained regarding the implementation of assessments at Madrasah Ibtidaiyah and Madrasah Ibtidaiyah in Banten. Both of them have problems in conducting assessments in the affective and psychomotor domains. For the cognitive domain, it has been running according to the rules in the teacher's book.

The difficulties expressed by the thematic teachers in each of these schools were because the existing rubric had too many aspects to assess and observe. In one class there is a number of students that is not directly proportional to the number of teachers, namely in Madrasah Ibtidaiyah in Banten there are 25 students with 2 teachers and SDN Jenggawah 3 there are 33 students with 1 teacher, so due to the limited time and energy possessed by the

teacher the teacher has not maximized assessment activities according to the criteria in the teacher's book. The second difficulty experienced by teachers is in entering student report card scores. Report card grades must be submitted on a payload basis, while the learning process and tests are always carried out thematically, so the teacher has to do two assignments. First the teacher takes the thematic value,

The less than optimal teacher performance in the assessment aspect as described above is not in accordance with the teacher ability assessment tool (APKG) put forward by the Ministry of National Education, namely, "teacher performance assessment tools include: (1) lesson plans (RPP), (2) procedures learning, and (3) learning assessment. Teachers as educators should have several competencies, including: 1) pedagogical competence, namely the teacher's ability to manage learning, especially in designing learning implementation activities, evaluating learning outcomes.

E. CONCLUSION

Based on the results of the research and discussion in the previous chapter, it can be concluded 1) The scientific approach model in integrated thematic learning at Madrasah Ibtidaiyah Banten. The learning model chosen by the teacher to support learning with a scientific approach is the Problem Based Learning model. When choosing a learning model, the teacher does not do it spontaneously, but chooses it according to the Basic Competency, the material to be taught by the teacher, and the characteristics of the students; 2) Obstacles in the scientific approach in integrated thematic learning carried out at Madrasah Ibtidaiyah Banten include 1) less than optimal teacher readiness in the process of applying a scientific approach to thematic learning at Madrasah Ibtidaiyah in Banten Integrated MI Ar-Roihan Ambulu Banten; 2) Its implementation is still partial in each subject; 3) cannot yet be presented through a unified whole with the theme.

F. RECOMMENDATIONS

After conducting research on the implementation of learning with a scientific approach, several suggestions can be put forward, namely 1) Based on research results and findings on document review, in preparing lesson plans it should be made neater and teachers are expected to be truly able to include scientific skills that will be trained on students; 2) The implementation of learning with a scientific approach in class III at Madrasah Ibtidaiyah, Banten is already underway, the teacher always trains students' scientific skills during the learning process.

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