Imtaq-Based Solar System Learning in Improving Mastery of Concepts and Religious Attitude Towards Madrasah Tsanawiyah Students

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Abstract: This experiment research aims to measure the mastery of students' concepts and religious attitude on solar system learning based on IMTAQ. The research was conducted on class VIII MTsN 22 Jakarta in 2017/2018. The model used in this research is a Problem Base Learning with the research design of pretest posttest control group design. The use of this research design involves two classes as research samples, one experiment class and one control class. The selection of these two classes is done by taking the subject not based on strata, random or regional but based on certain goals. The research subjects were divided into two groups, namely the experiment group and the control group. The experiment grup get Problem Base Learning model based on IMTAQ, while the control grup just get a Problem Base Learning model. The result of mastery of the concept of the experiment and control class each obtained an average gain of 49.7 and 43.7. This shows that the average pretest score of the two classes is not much different. Increasing the mastery of concepts and religious attitudes of MTsN students on the solar system material can be concluded that the average N-gain in the control class is 0.44% in the medium category, while in the experimental class the average N-gain is 0.50% in the medium category.

Keywords: *Mastery of Religious Concepts and Attitudes, Based on Imtaq*

INTRODUCTION

Madrasah are schools that are equivalent to junior high schools so that the curriculum for general subjects is the same as for junior high schools, while for religious subjects, madrasah use the Ministry of Religion curriculum. The science subjects that studied in Madrasah are the same as in junior high schools, so the learning process is the same. However, the condition of mastery of concepts is different considering the number of lessons in madrasah is more than in junior high

schools. Other factors that can affect the low mastery of concepts in Madrasah are the low input of students entering to Madrasah and the new student admission system that does not use generally accepted criteria, namely through tests without seeing the results of the national examination for the Madrasah Tsanawiyah level.. This is proven by the achievement of student learning outcomes in science subjects is still low, which is still below the KKM score of 75.

The achievement of science learning should give a different attitude after students learn the science. Students must be more critical and scientific in responding to problems. Therefore, the science learning process should involve more student activities. Students must experience the learning process directly so that they will have a learning experience. Learning conditions in madrassas show less positive things such as inadequate learning support tools, teachers who teach less skilled in using teaching aids, especially those related to solar system material.

The characteristics of madrasah tsanawiyah students are basically the same as junior high school students, but madrasah students have the characteristic that they are able to recognize Arabic letters through Arabic lessons, in addition, madrasah students have also studied the material of the Quran and hadith, thus when applied imtaq-based learning, so there will be no difficulty, but from the teacher's point of view, many do not understand the nakliyah arguments related to the material of the solar system.

The results of three daily tests in the second semester of the 2013/2014, 2014/2015, and 2015/2016 academic years respectively showed an average of 54.1, 53.8 and 54.5. Based on the value in the mastery of science concepts obtained by students that are still below the predetermined KKM, which is 75, then this is still a problem that causes the UH value obtained to be less than the maximum. In addition to the average test results that have not reached the KKM, students' religious attitudes regarding science in Madrasahs have not yet emerged. The causal factors include the competence of teachers who lack mastery of teaching materials and are less skilled in using various learning tools and media and are less skilled in linking science with religious knowledge, another thing that causes students to lack religious attitudes is that teachers rarely give role models to students such as rarely say the name of Allah when getting pleasure or calamity.

The author chose the material of the solar system as a study in this research, because the material of the solar system is very interesting to study and there are many nakliyah arguments related to the solar system, such as the occurrence of the universe according to science, due to the explosion of a star which then scattered to form planets, while according to QS Al-Anbiyâ´ verse 30; which means: And do those who disbelieve do not know that the heavens and the earth were once one unit, then We separated the two. And from water We made all living things. So why don't they believe?

The innovation of imtaq-based science learning is the emergence of the study of nakliyah arguments into science learning, which at first the teacher only explained purely natural science without relating it to the nakliyah arguments, thus from the imtaq-based learning process several things were obtained. new, including; (1) students become more confident in the existence of God's creation, (2) students can learn science and religion at the same time, (3) students become more grateful for the blessings that God has given.

Based on the problems that have been described, it is necessary to do imtaq-based science learning. Research on learning involving Imtaq has been carried out by Komariah (2015), Gito (2012) and Khatimah (2014). The results of the three studies show that IMtaq-based science learning can improve learning outcomes. Instilling the values of students' attitudes and morals, as well as students' motivation and character. Imtaq-based learning does not only explain the concept of science contextually as contained in handbooks or student guidebooks, but the learning process is strengthened and linked to nakliyah arguments, namely the Quran and hadith, while religious attitudes are more about students' positive tendencies towards the learning process carried out. in the classroom associated with the Quran and hadith. The application of imtaq-based learning of the Solar System, namely by connecting or linking pure science with nakliyah arguments, namely the quran and hadith, is expected to increase mastery of religious concepts and attitudes.

Based on the problems and some research results as well as the importance of linking science with the postulates of nakliyah, it is necessary to do research on learning the solar system based on Imtaq. This learning is expected to increase the mastery of religious concepts and attitudes.

METHODS

Study this use quasi- experimental method with use two group, that is group control and group experiment. Study this implemented in semester 2 of 2017-2018 at Madrasah Tsanawiyah Negeri 22 Jalan Buni No. 81 Cilangkap, Cipayung, East Jakarta. Subject study this is participant educate class VIII as many as 2 groups as many as 64 students each group of 32 students. Study this use non-equivalent *pretest- posttest control group design.* Study this used for determine difference Among assigned class _ learning based on imtaq with class control. Study could see like table 3.1:

Table 3.1 Design Research

Group	Pretest	Treatment	Posttest
A	O_1	X	O2 _
B	O2 _	-	O_4

Description:
A : Experiment class
B : Control class
O1: Test _ pretest in class experiment
O2: Test _ end (posttest) in class experiment
X : Learning with -based PBL method Imtaq
O_3 : Test pretest in the control class
O4: Test _ the end (posttest) in the control class

RESULTS AND DISCUSSION

For class control used the Problem Based Learning (PBL) learning model while for class experiment using the -based PBL learning model imtaq. Study this conducted three meetings, meetings first pretest and continued with ending material with posttest. Destination main from study this is for describe effectiveness learning with using a -based PBL model imtaq to understanding concept and attitude religious participant educate. Learning based on problem is method teaching that is characterized existence problem real as context for participant educate, think critical and skill break problem and get knowledge.

In group control, learning with the PBL model commonly used by teachers. Teacher showing a video show to participant educate with give related problems with Theory about happening or formation natural universe this. Participant educate observing, asking questions, collecting data, listening and taking notes about material delivered by the teacher and working on the worksheets given. Participant educate welcome for write answers and discuss the worksheets. Students present the results of the discussion and other students are welcome to ask questions and criticize the group. At the end of each lesson, students are guided by the teacher to conclude the learning that has been carried out. In the control group, observations were also made to obtain data on the religious attitudes of students. The implementation of learning for the first, second, and third meetings went according to the lesson plan. All materials were delivered and in general the three meetings were carried out in accordance with the lesson plans.

The implementation of learning in the experimental group applies learning Imtaq -based PBL model . In the learning model presented problems that must be solved by students. Problem given through video views about happening natural universe. Student observe video that and that is with admire God 's creation. Then worksheets are also given to students to strengthen students' understanding of concepts, which are then presented in front of the class. To increase enthusiasm in learning, students are given ice breaker more _ first . In general, learning in the experimental group was carried out in accordance with the lesson plans. In the

experimental group, observations were also made to obtain data about the religious attitudes of students at each meeting.

During the learning process, questions arise from students, but these questions are not answered directly by the teacher but the teacher provides feedback that directs students to explore the initial concepts that have been previously owned by students, so that in the end the answers they want from the teacher. answered by themselves. This method is an attempt to optimally involve students in building knowledge.

The average pretest value for the experimental class was greater than the control class, then after the treatment was carried out, the students' conceptual understanding of the experimental class was greater than that of the control class. Based on the analysis of the pretest and posttest scores of students in the experimental class were 48.3 and 73, 3. While the average scores in the control class were 41.7 and 66.8.

Implementation group learning _ experiment use -based PBL learning model imtaq. Before enter to planning -based PBL learning imtaq, we must know learning model syntax in PBL. Stages and activities carried out in study this contained in Table 1

Table 4.1 Learning Model Syntax *Problem Based Learning (PBL)*

Phases	Teacher Activities
Phase 1 Orientation participant educate on problems	Explain destination learning about solar system material that is member members of the solar system, rotation and revolution earth. Show and display videos about occur its the solar system. For example, a video about fact solar system and planets. Member planetary member of Sun to the farthest planet, object object sky that is comets, asteroids, and meteors. Motivating participant learn to be involved in activities solving problem. Explain logistics needed _ like formation Duty group, as well as direct participant for gather with the group each.

Phase 2 Organize participant educate for study	Help participant educate define and organize Duty related learning _ with problem the that is about the solar system, members of the solar system. Directing participant educate for to do study relevant theory _ with problem as well as look for source person other
Phase 3 Guide investigation individual and group	Push participant educate for gather appropriate information _ that is how is the solar system that happen.
Phase 4 Develop and present results creation	Help participant educate in solve problem like planning and preparing report as well as help student in share Duty with his friend.
Phase 5 Analyze and evaluate the solving process problem	Help student To do reflection as well as evaluation to investigation participant educate in the processes carried out as well as ask group for presentation.

Concept Mastery

The main objective of this research is to determine influence -based PBL learning model imtaq to mastery religious concepts and attitudes learners. In class control and experiment given mastery same concept _ that is with do 30 questions about the solar system, the questions given about the solar system based on imtaq that is solar system related questions _ with the Qur'an. Based on the results obtained for the experimental class N-Gain value is 0.50 with moderate increase criteria while for the control class the N-Gain price obtained is 0.44 with moderate increase criteria.

These results indicate that there is an increase in the mastery of concepts for the two classes. In the experimental class, learning using the PBL model based on Imtaq is more effective in understanding students' concepts. Based on the class learning of the experimental class students using the -based PBL model Imtaq is more focused and focused in learning. Students are more active in learning such as asking questions, giving opinions, answering quizzes given. When the test was carried out the experimental class looked more serious so that the results obtained were maximal. In the control class, it was seen that they were active during learning, but some students were still noisy in class so that it interfered with other students

who were serious about learning. Children are not bored in class, not sleepy and this is very good for a learning atmosphere in class.

The increase in the value of the experimental class is greater than that of the control class, it can be seen from the difference in the difference between the pretest and posttest scores of the class. At the time of learning with the method PBL based Imtaq students feel more happy and very interactive learning is able to improve the memory of students because the model / PBL -based Imtaq more could grateful God 's favor with His majesty over creation natural universe this . In the control class with only With the PBL model alone , students tend to be passive when the teacher asks or stimulates students to ask questions or have an opinion. The analysis of increasing concept understanding in both classes was carried out by t test .

Concept mastery data were taken from the post-test control class and experimental class, by working on 26 multiple choice questions that were valid with a reliability of 0.79 . The description of the data on the mastery of the concept is contained in Table 2.

Table 2 Data Description of Student Concept Mastery in Experiment and Control Class

Description	Mastery Draft Control Class Students		Mastery Draft Experiment Class Students	
	Pretest	Poestest	Pretest	Posttest
Average Value	41.7	66.8	48.3	73.3
Standard Error	0.02	0.02	0.02	0.02
Standard	18.0	17.0	11.2	16.7
Range	65.4	61.5	42.3	50.0
Minimum Value	15.4	34.6	23.1	42.3
Maximum Value	80.8	96.2	65.4	92.3
Total Amount	1084	1738	1256	1906
Amount of Data	3 2	32	32	32

Analysis of Students' Concept Mastery *Pre test Results*

At the first meeting the teacher *pre-tested* the students in both the control class and the experimental class. The results of the two pre-tests will be tested for the difference in average. It is necessary to know whether the two classes depart from the same conditions. To determine the technique of testing the average difference, normality and homogeneity tests are needed. Normality test results using Kolmolgrov-Smirnov . The results of the normality test can be presented in Table 3.

Pre-test Normality Test Control Class and Experiment Class

PRETES	Kolmolgrov-Smirnov			Information
	Statistics	df	Sig.	
control _	0.136	32	0.141	Normal
Experiment	0.123 _	32	0.200	Normal

Data are normally distributed for class control with significance value 0.141 > 0.05 while in class experimental data are also normally distributed with score significance of 0.200 . so it can be seen that the control class and the experimental class are normally distributed. Furthermore, both classes were tested for homogeneity using Levene's test . The results of the homogeneity test of the control class and the experimental class with a significance value of 0.055, with = 0.05 then score significance > , so the data is homogeneous .

After knowing the data is normally distributed and homogeneous, so that the hypothesis test used is parametric statistics, namely the Independent t-test test. At the value of F looks significance 1.231 > 0.05 then the data variance is the same , and because P value 0.025 < 0.05 then there is difference mastery draft class control and class experiment .

From the Independent t-test test shows the value of sig.(2-tailed) 0.025 > 0.05, this means that Ho is accepted so that there is a difference in the initial knowledge of the control class and the experimental class, both classes come from the same conditions.

Improved Mastery of *N-Gain Concept*

The results showed that mastery of the concept of -Based Learning Imtaq with using the Problem based Learning learning model the results are better than those using the general-based PBL. This can be seen from the *N-gain value of* the experimental group which is higher than the group control contained in table 4.

Table 4 Obtained *N-Gain Values for* Control and Experiment Groups

Group	Gain %	N-Gain	Category
Group Control	43.7	0.44	Currently
Group experiment	49.7	0.50	Currently

In general, the description of student learning outcomes for mastery of concepts in the control class and experimental class is in Table 5 .

Table 5
Student Learning Outcomes For Concept Mastery

Class	**Statistical Parameters**	**Score**		**(%) *N-Gain***	**Category**
		Pretest	**Postes**		
Control	Amount student	32	32	43.7	Currently
	Average	41.7	66.8		
Experiment	Amount student	32	32	49.7	Currently
	Average	48.3	73.3		

Data processing results of the initial test, final test and N-gain for students' mastery of concepts in the Solar System material control class and experimental class.

Based on Table 4.5. above the average percentage value the pretest-posttest of the experimental class was 60.8 % and the control class was 54.25 %. Furthermore, the average percentage of N-gain in the experimental class and the control class by 46.7 %.

Average score The students' concept mastery pretest in the control class was 41.7% and the experimental class was 48.3%, while the average posttest score for the control class was 66.8% and the experimental class was 73.3%. More presentations the average N - gain normalized for the control class is 43.7% and the experimental class is 4 9.7 %. The above shows that there are differences in the increase in mastery of concepts of students who study the material on the Solar System based on Imtaq and through Problem Based Learning compared to the increase in mastery of concepts of students who study the topic of the Solar System. with -based PBL learning general.

a. Concept Mastery Hypothesis Test

Before testing the hypothesis, first know the normality and homogeneity of the data. The complete data is presented in Table 6

N -Gain Normality Test for Control Class and Experiment Class

	Kolmolgrov-Smirnov			Information
	Statistics	df	Sig.	
Control Class	0.118	31	0.200	Normal distribution
Experiment Class	0.163	31	0.310	Normal distribution

Data are normally distributed for class control with a significance value of 0.200 > , where = 0.05, and for class the experiment is also normally distributed

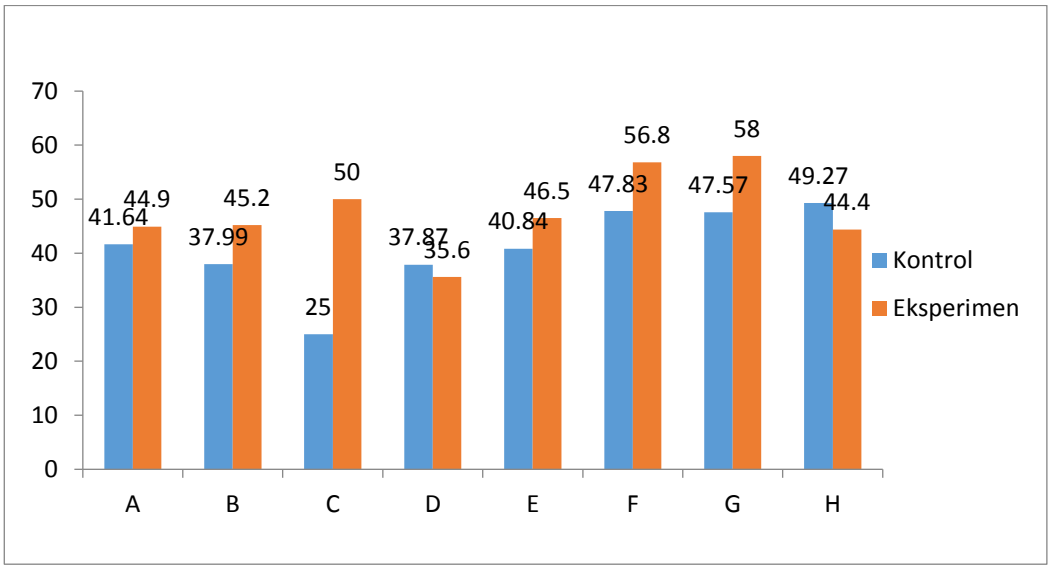
with a significance value of 0.300 > 0.05 . Based on Table 4.6, it can be seen that the control class and the experimental class have a normal distribution. Furthermore, both classes were tested for homogeneity using *Levene's test* . Gain homogeneity test results for control class and experimental class with significance of 0.060 with = 0.05, then the data is homogeneous . After knowing that the data is normally distributed and homogeneous, test the hypothesis use parametric statistics with independent t-test.

The results of the independent t-test were obtained score significance (2-tailed) is 0.779 then score significance 0.779 > 0.05, Ha accepted it means there is enhancement mastery draft student by significant with using the -based PBL learning model imtaq.

b. The results of students' abilities in each sub and concept domain indicators

Topic of the Solar System taught in the control and experimental classes consists of several sub-concepts, namely the concept of the Solar System, members of the Solar System, Planets, Perihelion and Aphelion, Rotation Earth and Revolution, Distance Sun, Comet, Meteor and Meteorite. To measure students' mastery of concepts in these sub-concepts, 26 multiple-choice tests were used. Tests using the same questions were given to both classes, each with 32 students, the control class 32 students, while the experimental class 3 had 2 students. Overall, the results of the *prettest - posttest* and N - *Gain results* in percentages for each sub-concept in the measurement topic are shown in the appendix.

Based on the percentage of acquisition of mastery scores for each sub-concept of the *pretest* experimental class, the highest value occurs in the sub-concept of rotation and revolution of the earth by 72% and the lowest value is in the sub-concept of members of the solar system by 31% while the *pretest percentage* of mastery of each sub-concept in the control class, the largest value is 63% in the sub-concept of planet location and size rotation and revolution the earth, while the lowest value is in the sub-concept of the earth's rotation by 25%. The percentage of *posttest* in the experimental class with the highest score is in sub rotation earth by 92% and the lowest is in the sub-concept of members of the solar system, members of the solar system and perihelion and aphelion of 63%, while the percentage of *posttest* control class has the highest value in the large sub-concept. rotation and revolution earth, rotation Earth by 81% and the lowest is in the sub-concepts of members of the solar system and rotation earth with a value of 56%. Thus, it can be concluded from the description above that there is an increase in conceptual mastery in each sub-concept in the experimental class and control class.



Picture 1. Comparison of the Percentage of *N - Gain* Mastery of Concepts in Each Sub Concept

Information:

A = Understanding the Solar System.
B = Members of the Solar System
C = Planets
D = Perhelium and Aphelion
E = Earth's Rotation and Revolution
F = Sun Distance
G = Comet
H = Meteors and Meteorites

Based on Picture 1. above, the normalized *N-Gain value* for each sub-concept mastery, the experimental class has a higher *N-Gain* percentage compared to the control class. In the experimental class, the highest percentage of *N - Gain* is in the sub-concept rotation the earth is 76.9%, and the lowest is in the sub-concept of the rotation and revolution of the earth by 22.2 %, this is due to the lack of learning time interesting and at the beginning of learning do not use ice breaker to break the ice and learning can not see directly so that the students' post-test scores decreased. In the control class, the highest percentage of N - *Gain is in the* big sub concept rotation and revolution the earth by 63.64% while the lowest is in the sub-concept of the rotation and revolution of the earth by 18.75 % .

1. Religious Attitude

Attitude religious is described as obedient attitude and behavior _ in worship in accordance with the religion he adheres to , character religious very

important in life someone and be attitude life which refers to order and prohibition attitude that has set in rule his religion .

Attitude religious at MTsN 22 indeed already formed because already implanted since enter school to this madrasa , and this country 's tsanawiyah madrasa have more religious lessons many compared to school general other . Every morning before lesson started student tadarusan , memorizing the Qur'an and habituation pray duha so for attitude religious his already look .

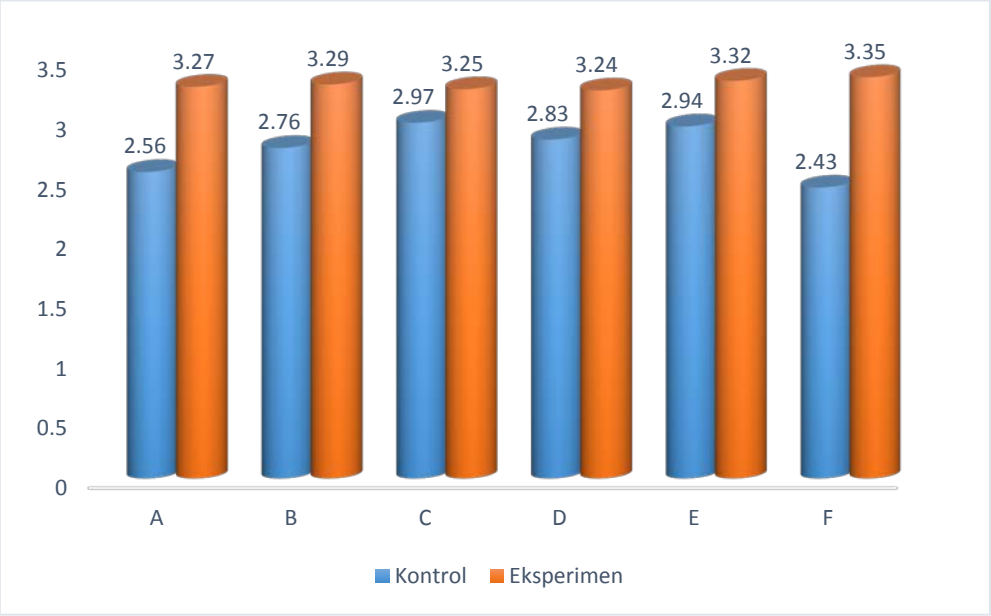
Religious attitude data was taken using a Likert scale questionnaire, totaling 30 questions with 5 answer choices, namely strongly agree, agree, hesitate, disagree and strongly disagree. Description of scientific attitude data can be seen in table 8.

Table 8 Description of the Religious Attitudes of Students in Experiment Class and Control Class

Description	Attitude Religious Control Class	Attitude Religious Experiment Class
Average Value	73.37	84.23
Standard Error	0.05	0.04
Standard Deviation	12.91	7.39
Variance / variety	161.48	52.97
spiky	32.7	34.4
tilt	0.18107	-0.1735
Range	43.00	29,00
Minimum Value	51.00	60.00
Maximum Value	96.00	89.00
Total Amount	2201	2527
Amount of Data	32	32

2. Students' Religious Attitude Results per-Indicator

The results showed that the religious attitude of the experimental group was better than the control group. The results of religious attitudes for each indicator are presented in Picture 2 .



Picture 2 Religious Attitude of Control and Experiment Class

Information:

A = Excited study religious teachings .
B = Science science linked with religious teachings
C = Commitment to Allah's commands and prohibitions
D = Desire for dig verses of the Qur'an
E = Actualizing religious teachings in daily life
F = Religious teachings made as source idea development

Picture 2 shows that the average religious attitude in all aspects of the experimental class is better than the control class. Assessment of religious attitudes from values 1 to 5. Attitude of Commitment to Allah 's commands and prohibitions and actualize religious teachings in life daily has the highest score of 4.67 (very good category) and the control class of 4.67 (very good) that is same in attitude Commitment to Allah 's commands and prohibitions and actualize religious teachings in life everyday . The lowest aspect of religious attitude is passionate study religious teachings of 1.20 (less) in the experimental class still has a less category and a value of 1.00 (less) in the control class. Religious attitudes obtained an average value of the whole, namely the control class obtained a value of 2.75 (good) and in the experimental class 3.29 (very good).

3. Religious Attitude Hypothesis Test

Before testing the hypothesis, first know the normality of a data. The complete data is presented in Table 9

Table 9 Normality Test of Religious Attitudes in Control Class and Experiment Class

	Kolmogrov-Smirnov			Information
	Statistics	df	Sig.	
Control Class	0.138	32	0.132	Normal distribution
Experiment Class	0.137	32	0.125	Normal distribution

Data are normally distributed for class control because the significance value is 0.132 > , with = 0.05, the data is also normally distributed for class experiment with value significance 0.125 > . Based on Table 9, it can be seen that the control class and the experimental class have a normal distribution. Furthermore, both classes were tested for homogeneity using Levene's test. The results of the homogeneity test of the religious attitude of the control class and the experimental class with a significance of 0.252, the data is homogeneous because significance 0.252 > 0.05. After knowing that the data is normally distributed and homogeneous, the hypothesis is tested using parametric statistics with the Independent t-Test test.

Independent test results t - test si, obtained score significance of 0.261 > 0.05, then Ha is accepted it means there is enhancement attitude religious in solar system learning with -based PBL model imtaq .

Discussion

Imtaq-based science learning gives students a sense and spiritual spirit in their natural self-awareness for active learning. Students can find learning resources with verses of the Qur'an by looking directly at nature and being guided to be able to meditate. This is what can make students more aware and deep when learning to acquire true knowledge. In addition, students can also obtain learning resources either through books or the internet which are then reviewed with the input of information in the Qur'an. If students have difficulties, they can ask the teacher. Learning activities carried out by students will be more meaningful so that they will be stored in long-term memory because students do it themselves and are guided by the teacher.

In the learning process, it is assisted with a Problem Based Learning model. This action is taken so that students get a new innovation to make students enthusiastic and focused on learning.

After students study with learning based on imtaq so many attitude visible student _ including : (1) Students very honor the teacher , (2) Students very polite in act , (3) No there is fight between friends , (4) Students could grateful the favor of Allah who has given , (5) students have good and solid understanding of religion so that formed good character _ in self students .

This learning can increase students' mastery of concepts, so that based on the N -gain category for the control group the average is 0.44 (medium category), the experimental group is 0.50 (medium category), both have the same category, but there is an increase in the experimental class. This shows that science learning based on Imtaq with Method Learning Problem Based Learning provides an increase in mastery of concepts. This results in students having more awareness of faith and piety so that students are embedded with a strong determination to do things with self-awareness with students imagining more of what they see listed in the Qur'an, then these results will be able to better mastery of concepts is formed on the results that have been processed.

Implementation of integration between the material of the Solar System accompanied by verses of the Qur'an can stimulate students ' critical thinking about the relevance of the verses of the Qur'an with scientific facts found in everyday life so that students do not only accept dogmatically. every religious subject matter obtained from the teacher.

Increased mastery of concepts generated in Faith and Taqwa-based learning guided by the Qur'an and Hadith because during the learning process students are trained through the following stages: students identify the problems encountered in the material presented (via the video shown). Identification is important so that students can formulate problems clearly. Next, students look for references from various sources, especially the Qur'an, which looks at the verses to solve the problems they face by making plans. When looking for references students get a lot of information from various sources, perform analysis, and synthesis. The search for knowledge makes the acquisition of student knowledge more meaningful. The implementation phase of solution planning is done by looking directly at the nature around the school with a predetermined time under the guidance and supervision of the teacher.

The integration of science with the Qur'an and Hadith can shape the character of students. Al-Qur'an as the main source of good values can be used as a guide for students to study it. The attention of the Qur'an on character education can be proven by the many verses of the Qur'an that explain morals. In addition, science subjects have characteristics that can shape students' characters such as curiosity, logical, critical, creative, honest, responsible and independent (Budimah et al, 2014). So that the integration between the two can increasingly obtain good student character, especially religious attitudes.

In this study, a religious attitude test was carried out in the form of a Likert scale questionnaire, which aims to provide an overview of the religious attitudes of students in the control class with conventional learning and the experimental class with Faith and Taqwa-based learning. The results of the hypothesis test showed that there were differences in religious attitudes between the control group students and

the experimental group students. Where the religious attitude of experimental students is better than the scientific attitude of the control group, the highest scientific attitude value is on the indicator of trust in Allah SWT both the control group and the experimental group, this attitude needs to be maintained considering that faith and piety in awareness in life are very important in religious attitudes, such as patience. in the face of something such as a test in a lesson. The attitude of always preaching amar ma'ruf nahi munkar gets the lowest score from other aspects, this needs an emphasis on further learning from these aspects.

Observation data on students' religious attitudes were carried out by the teacher during the learning process. The observations showed that the religious attitude of the experimental group was better than the control group, but in general the religious attitudes of the two groups were in good category.

Students' responses to learning are known by interview questionnaires into the experimental class, totaling 32 students. From the interview results obtained a positive response to science learning based on Imtaq on the material of the Solar System . This matter shown by the enthusiasm of students towards IMtaq-based science. Obtained from the results of the responses that are classified as very good. Because learning with the Problem Based Learning method is one that can make learning interesting and can attract students so that the absorption in learning becomes faster and students become more able to control good and real self-awareness. With the implementation of IMtaq - based science learning on the Solar System material , students are motivated in learning, active in learning, students can discuss with classmates or ask the teacher if there is material that has not been understood and use the Qur'an as a source.

From the results of observations made during the science learning process containing the A-Qur'an and Hadith on the Solar System material , it was found that teachers in general were able to carry out learning as planned. During the activity, the teacher acts as a guide and motivator. From the results of observations at the preliminary stage, problem determination, formulation and analysis of results and closing are categorized as good, while at the stage of planning and predicting the results are quite good.

CONCLUSIONS

Based on the results of data analysis, the findings and discussions that have been put forward and formula problem happened that is how solar system learning based on imtaq in increase mastery science concepts and attitudes religious :

1. Based PBL learning model imtaq could increase results mastery high concept.
2. Based PBL learning model imtaq could increase attitude religious students.

So could drawn conclusion that -based science learning Imtaq with the Problem Based Learning Model on the material of the Solar System can increase mastery draft as well as attitude religious .

Imtaq - based science learning with The Problem Based Learning method on the Solar System material can improve religious attitudes in two different classes, namely the control class and the experimental class with a medium category. Students give positive responses to learning science learning based on Imtaq with the Problem Based Learning model on the material of the Solar System

Imtaq - based science learning with the Problem Based Learning model on the material of the Solar System can help students develop thinking skills and problem solving skills with investigations, encourage cooperation in completing assignments, and involve students in more relevant investigations, namely using the Qur'an so that students are able to interpret their findings independently. The success and achievements of students can be achieved if the learning process is quality, so that science learning is based on Imtaq with Problem Based Learning Method on Solar System material class VIII at MTsN 22 Jakarta .

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