# artikel

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# DEVELOPMENT OF RELIGION MATERIALS BASED ON SYNECTIC APPROACH TO JUNIOR HIGH SCHOOL STUDENTS

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**Abstract: Development Of Religion Materials Based On Synectic Approach To Junior High School Students.** Problems faced by teachers and students is the lack of teaching materials that can enhance students' understanding of competence. Understanding ability not only from low ability but also come to advance level. Especially the aspects of understanding the abstract of religious material at the first school level. **Objectives**: The aim of the study was to produce religious teaching materials based on a synectic approach that was valid, practical and effective. **Method:** The research methodology is research and development. This type of research produces products such as teaching materials. Teaching materials are expected to help students carry out learning activities easier. **Finding:** Based on the results of the study, religious teaching materials in the understanding of abstract concepts, for junior high school students, have been tested and declared valid, practical and effective to use.**Conclusion:** The Religion Material have been tested and valid for using in student.
**Keyword:** Religious Material; Abstract Concept; Synectic; Imagination; Analogy; Illustration

*Abstrak: Pengembangan Bahan Ajar Agama Islam Berbasis Pendekatan Sinektik Untuk Siswa Sekolah Menengah Pertama. Masalah yang dihadapi guru dan murid adalah minimnya bahan ajar yang dapat meningkatkan kompetensi pemahaman siswa. Pemahaman yang tidak sekedar kemampuan pemahan tingkat sedang tapi sampai pemahaman tingkat yang tinggi. Terutama aspek pemahaman abstrak materi agama siswa tingkat sekolah pertama. **Tujuan:** Untuk menghasilkan bahan ajar Agama Islam berbasis pendekatan sinectik yang valid, praktis dan efektif. Metode: Penelitian dan pengembangan. Jenis penelitian ini menghasilkan produk berupa bahan ajar. Bahan ajar yang diharapkan dapat membantu siswa melaksanakan kegiatan pembelajaran yang lebih mudah. **Temuan:** Berdasarkan hasil penelitian maka bahan ajar agama pada sekup pemahaman konsep abstrak, untuk siswa sekolah menengah pertama, telah melalui uji dan dinyatakan valid, praktis dan efektif untuk digunakan. **Kesimpulan:** Bahan Ajar Agama Islam telah diuji dan valid untuk digunakan pada siswa.
**Kata Kunci:** Bahan Ajar Agama Islam, Konsep abstrak, Sinektik, Imajinasi, Analogi, Ilustrasi*

## A. INTRODUCTION

The problem of religious learning is on the issue of the low mastery of students' understanding of competency standards that should be mastered.This is due to the difficulty of religious material because of its nature which includes abstract material concepts. Therefore difficulties can not only come from students in absorbing these lessons, but even the teacher in teaching religious material is also difficult. Difficulties precisely because teachers find it easy to teach aspects of abstract understanding. But in reality the student learning outcomes are low especially the affective aspects. This means there is a problem that teachers should have the skills to manage learning from previous training as stated by Prof. Amer Alsaleh (Amer Alsaleh, 'The Impact of Teacher Intervention on Reaction to Aggression among Kuwaiti School Children', International Journal of Humanities and Social Science, 8.7 (2018), 56–66 <https://doi.org/DOI: 10.30845/ijhss.v8n7p6>.). Logically if the subject matter is abstract then the way to teach it the teacher must try to explain in ways that cause as if the material delivered is congress. But in reality the teacher does not have much time to think and create to design learning - for example - teaching materials that will be used.

Teaching materials are likely to be a means of student learning. Teaching materials should contain the scope of the material is poured with an interactive narrative and comes with instruction activities, aided by visualization of the image as an illustration in accordance with the competence to be achieved. But unfortunately the teacher is only able to use printed material without a lot of creativity to attract students to read.

Teaching materials should be designed based on a particular learning approach or model to attract readers. Therefore in this study the researchers were interested in designing the development of religious teaching materials, especially religious subjects, aspects of the concept of abstract understanding, namely about faith (faith in God, their properties, the asma'ul Husna and other relevant) based on the synectic approach. The synectic approach is a learning activity assisted in analogy thinking. It is assumed that by analogy, the subject matter of the abstract concept aspect will be digested by the mind with the help of concrete examples.

Similar to those of common learning materials more abstract understanding that concept exist in matter of religious subjects. Lessons that are conceptual in abstract understanding, when viewed from the solution as the findings of previous research results can be shown, for example, S.Chandrasekaran research. This study proves that zoology material includes abstract concepts that have been successfully taught using a technique called synectic (Dr.S.Chandrasekaran, 2014). The Tabyebeh Tajari study concluded that the synectic learning method was more effective than the lecture about educational progress and creativity in lesson social studies (Tajari & Fateme Tajari, 2011). Similarly, Nalan Bayraktar Balkır examined synectics as a prewriting technique. The findings revealed that the smooth writing of participants increased significantly at the end of the program  . In contrast to the previous research, this time the researchers will use synectic as the basis for developing Islamic Religion teaching material especially in the aspects of the concept of abstract understanding (such as kimanan to God, the concept of the nature of God and the Names of God) for junior high school students ".

The problems that will be examined in this study are: What are the real conditions of the learning process of religious material especially in

understanding the abstract concepts of students in the Bengkulu Middle School? How to produce religious teaching materials based on a valid syntactic approach to improve understanding of abstract concepts Bengkulu City Middle School Students? How to produce religious teaching materials based on a practical syntactic approach to improve understanding of abstract concepts Bengkulu City Junior High School Students? How can the effectiveness of teaching materials based religion sinektik approaches that have been developed to increase understanding of the abstract concept of junior high school students in the city of Bengkulu?

While the product specifications to be produced are: (1) The teaching materials developed are religious teaching materials based on the synectic approach using the principles of the Dick & Carey model, prioritizing the system approach as a basis or reason for the vital position of teaching materials in learning, with reasons- the following reasons: (a) focus of learning, (b) accuracy of the links between components in learning, (c) empirical processes and can be repeated. (2) Religious teaching materials developed based on the KTSP curriculum with a focus on improving the understanding of abstract lesson concept material (Faith in God, Asmaul Husna and Praised Behavior) of students at school.

The curriculum for religious studies in Indonesia is a curriculum designed by the government. Therefore, of course, it cannot be separated from the direction and objectives of the development of the Indonesian state. This cannot be denied because usually a country is headed according to the politics of the ruler. As research evidence says "A questionnaire identifies internal and external pressures, which shows that 43 out of 75 planners and designers of Islamic Studies indicate that the curriculum is subject to political and social pressure. They noted that politicians can intervene to pursue political goals or fulfill social needs. Planners confirm

that they plan and design the curriculum carefully to avoid controversy (Kalthoum Alkandari, 2018).

**Concept of Understanding Abstract Religion Material**

One of the tasks of the Islamic Education Teacher is to internalize Islamic values to students through interaction in the learning process that they do. The success of teachers in teaching and learning activities is highly dependent on approaches, models and methods or techniques as well as other learning tools such as the instructional materials set. Learning failures are often due to the teacher's lack of design in learning. Learning failures are often due to the teacher's lack of design learning, namely religious material, especially aspects of aqeedah (Faith in Allah, Asmaul Husna) and morals (Praised Behavior) as basic capital that must be provided to students.But there are still teachers who consider this material to be easily taught by using existing teaching materials, namely teaching materials arranged based on plain text. While in reality there are still many in teacher learning making students less understanding one of the concepts of aqeedah teachings that are abstract in nature. Understanding of students is still at a low level of understanding, feels lazy, saturated, and cannot arouse motivation or interest in participating in religious learning. In addition, many students lack confidence to show their abilities to others. One of the conditions that must be fulfilled so that religious learning especially the aspects of Aqidah and Akhlaq are in accordance with the objectives, namely to achieve creative abilities, the selection of strategies or learning models and teaching materials must be considered carefully. An interesting new approach in developing creativity has been designed by Gordon with the name syenectic very relevant to use in learning the understanding of abstract concepts of religious material.

Overcoming this problem, namely the difficulties of junior high school students in understanding the abstract concepts of religious material aspects of aqeedah and morality, it will be tried to develop teaching materials based on the synectic learning approach. This teaching material is really expected to help both students and teachers in the learning process.

Along with the development of early adolescents (junior high school students) with a character that has begun to develop, which is a way of thinking that is starting to be critical, and of course the demands of the present who have advanced, must get a positive response. One response is to think and innovate in learning. This is also the reason why the development of religious teaching materials with the synectic approach needs to be done.

The synectic approach is an activity that brings students learning more fun. The syntax in it challenges students always want to practice critical thinking and develop thinking creativity. This is because one of the important elements of the synectic approach is the way of learning with the help of thinking and analytic activities or metapora. Following is the general framework of the synectic phase cited from (Bruce Joyce, 2009) below:

Tabel 1 Syntax for Making Samething New, Strategi One

| Phase One: Description of Present Condition | Phase Two: Direct Analogi |
|---|---|
| Teacher has studens dscribe situation or situation as they see it now | Student sugest direct analogies, select one and explore (describe) it further |
| Phase Three: Personal Analogy | Phese Four: Compressed Complict |
| Teacher has students "become" the analogy they selected in phase two. | Studens take their descriptions from phese two and three, and explain the points of similarity between the new material and the direct analogy |
| Phase Five: Direct Analogy | Phase Six: Re-examination of Original Task |
| Students provide their own direct analogy based on the compressed complict. | Teacher has students move back to original task or problem and use the last analogy and/ or the entire synectcs experience |

Tabel 2. Syntax for Making the Stange Familiar, Strategi Two

| Phase One: Subtantive Input | Phase Two: Direct Analogi |
|---|---|

| Teacher will provide Information on new topic | Teacher suggest direct analogy and ask student to describe the analogy |
|---|---|
| **Phase Three**: Personal Analogy | **Phese Four**: Comparing Analogies |
| Teacher has students "become" the direct analogy | Studens Identify and explain the points of similarity between the new material and the direct analogy |
| **Phase Five: Explaining Differencees** | **Phase Five: Exploration** |
| Students explain where the analogy does not fit | Studen re-explore the original topic on its own terms |
| **Phase Seven**: Generating Analogy | |
| Students provide their own direct analogy and explore the similarities and differences | |

If the syntax above is observed it looks complicated. So in the application for the basis of developing religious teaching materials there needs to be simplification. But it does not reduce the synectic meaning in principle and remains pleasant. Another reason that makes it interesting is that the term analogy is also called "*qiyas or amtsal*".The term amtsal has been very popularly known as one of the ways Allah SWT understands His messages to humans found in the Qur'an. Wiliam JJ Gordon's findings on this syntactic approach are applicable developments in the message implicit in the Qur'an which has long existed, long before the inventor of the synectic approach was born. It's just that there are still many education practitioners, both teachers or Islamic learning designers who have not utilized it to the fullest. Through this study, we will try and test how this synectic-designed learning can increase the understanding of abstract religious teachings.

The synectic approach based learning model is learning that is designed based on the Qur'an's instructions by utilizing synectic steps with the help of media images, media objects, stories as illustrations. Because the design of this learning is supported by various (multi) devices or media, it can be expressed in the form of interesting media. Teaching materials tailored to this media in theory will help students.

The assumption is based on the results of research on the use of multimedia presented by K. Wiyono at.all, including: (1) information or subject matter through text can be remembered better if accompanied by

images (media) (K. Wiyono, Liliasari Liliasari, A. Setiawan, 2012). This is explained by the dual coding theory by Allan Paivio (1986). According to this theory that the system of human cognition consists of two subsystems, namely the verbal system, and the image system (visual) (K. Wiyono, Liliasari Liliasari, A. Setiawan, 2012). (2) According to Kadek Sukiyasa et al. based on the results of the analysis of his research, shows that the delivery of automotive electrical system material using animation media can increase student learning motivation (Kadek Sukiyasa, 2013); (3) According to the theory of "quantum learning" students have different learning modalities, which are divided into three types, namely visual, auditive and kinesthetic(Amin, 2011). The diversity of learning modalities is overcome by using instructional materials. Because each student who has a different type of learning can be represented by teaching materials with a variety of development concepts in it.

This study aims to produce a new teaching material, namely religious education teaching materials with a synectic approach adopted from Gordon, which is designed to strengthen the cognitive structure of students, as a reference for learning effective treatment models in order to improve students' ability to understand abstract concepts. The Gordon synectic model is so modified and adapted to existing conditions and harmonized with the learning needs of Islamic Education, so that religious materials can be obtained with new synectics and can accelerate the process of understanding students.

Therefore this new teaching material is expected to foster a new understanding of material that is abstract in nature. Material in the form of a Divine message contained in the holy book of the Qur'an (M. Suyudi, 2005). For this expectation, it takes a model and strategy approach that is truly chosen with full consideration so that the learning process takes place effectively and efficiently. One of the religious learning approaches

that are considered to be able to achieve the above goals is to use the analogy or qiyas and amtsal thinking models which actually was exemplified by the Prophet Muhammad. in teaching his students namely his friends (Irjus Indrawan, 2013). The way that the Prophet exemplified is also the analogy or qiyas which turns out to be the main element of the syntactic approach introduced by William J.J. Gordon (William J. J. Gordon, 1961). William JJ Gordon is an inventor and psychologist. He is recognized as the creator of a problem solving approach called Synectics, which was developed while working in the Invention Design Group of Arthur D. Little(Bruce Joyce, 2009).

The assumption of the correct application of the synectic for abstract material is based on the following statement;

> "The syntactic process is developed from several assumptions, one of which is that analysis of certain irrational and emotional processes can help individuals and groups to improve their creativity by constructively using irrationality. Irrational aspects can be understood and controlled consciously. The attainment of this control through the use of metaphors and analogies carefully is a synectic object (William J. J. Gordon, 1961)".

The opinion above confirms that abstract concepts (irrational aspects) can be easily understood through synectic. Suhudi also believes that; "Analogy or amtsal can be used to understand something abstract, so that it can be sensed so that it is easily accepted, because the meanings processed by amtsal have not crossed the mind unless illustrated". Ayat Al-Quran surah Al-Baqarah: 264 The following can be used as the basis;

> *O ye who believe, do not remove (reward) your alms by mentioning it and hurting (the recipient's feelings), like someone who spends his wealth because of mercy on humans and He does not believe in Allah and the day after. And the parable of the man is like a slippery stone on which there is land, and a heavy rain falls on the stone, and then He becomes clean. they have not mastered anything they have tried; and God does not guide the unbelievers (Surah Al-Baqarah (2): 264).*

The parable revealed in the verse above is the way God understands His servants to quickly absorb the message meant in it. This is amtsal as a basis for developing a synectic approach to explain religious material about abstract concepts. But the reality in its implementation as a means of accelerating the learning process requires illustration. So as an implication is the application of certain media as a tool to accelerate understanding. The media can be media objects, media images, or media stories. This is the character of learning with amtsal or synectic meaning relationships.

Synectic is the process of discovering the connection of things that were not known before or even contradictory. He includes various efforts to coordinate everything into a new structure in order to find relationships between one another. In other words, thinking of synectic is the process of identifying all things that were not known before to find a way out, making allegations or hypotheses.

On a practical and applicative level, synectic activities are metaporic by finding analogies that creativity becomes a conscious one. Metapora-metapora form a relationship of equality and distinguish objects or ideas from one another. Learning models such as this invite students to animate and appreciate a number of knowledge into the realm of affection so that there is a process of perception and appreciation that encourages students to interpret each learning experience of their faith. Understanding the concept of aqeedah which incidentally is abstract as learning outcomes are finally achieved.

An abstract thing, that is something that cannot be seen and held. Therefore if there are abstract words in the lesson delivered, the teacher needs to explain them, such as the words of faith and forgiveness. Such terms should be explained through events in the story. They only understand the words in the true sense. As for abstract things that are words that are difficult to explain and require abstract thinking as well.

While abstract learning is learning that uses abstract ways of thinking. The goal is to gain understanding and solving problems that are not real. In learning abstract things a strong sense of role is needed in addition to mastery of principles, concepts and generalizations. Included in this type are learning mathematics, chemistry, cosmography, astronomy, and also some material in the field of religion such as tauhid (*aqidah*) (Muhibbin Shah, 2003). Learning abstract aspects of religion, as well as learning mathematics that requires evidence(Visitaeva M.B., Latipova L.N., Egorova E.A., Getmanova E.S, Ermakov V.P., Chirkova E.A., 2018).. The study concluded that children feel interested in learning with evidence-based teaching methods . Acceleration occurs because there is no need to wait for a more mature age to understand the meaning of the concept of aqeedah which is true and able to color behavioral attitudes in everyday life.

Thus noble deeds will be manifested in a person because they have true aqeedah and sharia. A Muslim who has true aqeedah or faith will certainly manifest in everyday attitudes and behavior based on his faith. For example, a person who has true faith in God will always follow all of God's commands and stay away from all His restrictions. Thus, he will always do good and stay away from things that are prohibited (bad). Faith in others (angels, books, and so on) will make attitudes and behavior directed and controlled, so that they will manifest noble morals. The same thing happened in the case of sharia implementation. All Islamic sharia provisions lead to the realization of noble character. A person who performs prayers in accordance with the applicable provisions, for example, will surely bring him to always do the right thing and avoid evil and evil deeds.

Based on the above theoretical foundation it can be understood that; First; The study of the characteristics of religious teachings as material in

the subject of Islamic Education (religious), is known to have material that is an abstract concept especially with regard to faith in the unseen. Delivering the material is not easy, aka it is difficult to arrive at a complete and fast understanding, but that does not mean it cannot be conveyed to students, as long as educators want to strive to be creative and innovated by referring to the Qur'an's instructions.

Second; Students can accept even abstract religious teachings, according to the level of maturity of their acceptability without having to wait for an older age. This is called acceleration. Students are philosophically and psychologically born with a number of prominent potentials as a platform to accept the concepts of developing mental and spiritual teachings. Psychologically, early adolescents (middle school age) have begun to be able to think critically both in terms of intelligence and intuition.

Third; Alqur'an contains instructions or signs on how to teach abstract material so that the people are still able to understand according to the will of revelation. For example, Al-Baqrah verse 24, which implies how Allah SWT. convey (revelation) material teachings with parables (amtsal). There are still many other verses that use a similar style. Likewise, the Prophet Muhammad in several hadith describes how he became a great teacher reflected in the process of learning to use explanation through clear parables.

Fourth; teaching abstract concept material to early adolescents is very interesting and quickly absorbed by using parable-based teaching materials. In terms of learning approaches that are often known as synectic.

## B. METHOD

This research is Research and development (R & D). Research aims to produce certain products and test the effectiveness of certain products (Sugiyono, 2013). According to Sugiono (2013) the research steps are: (1) potential and problems, (2) data collection, (3) Product design, (4) design validation, (5) design revision, (6) product testing, (7 ) product revisions, (8) usage trials, (9) product revisions, (10) mass production).Teaching materials that have been compiled in the first draft are then tested for validity, practicality and effectiveness. The results of the test material scor are then converted to obtain qualitative values with the conversion table.

Table 3. Quantitative Data Conversion to Qualitative

| Range Value for Qualitative Data Percentage Score | Range Value for Qualitative Data Percentage Score | Range Value for Qualitative Data Percentage Score | Range Value for Qualitative Data Percentage Score |
|---|---|---|---|
| A | X >4,2 | 81%-100% | Very valid / practical / effective |
| B | 3,4 <X≤ 4,2 | 61%-80% | Valid / practical / effective |
| C | 2,6 <X≤3,4 | 41%-60% | Valid enough / practical / effective |
| D | 1,8 <X≤2,6 | 21%-40% | Less Valid / practical / effective |
| E | ≤ 1,8 | 0%-20% | Very Less Valid / practical / effective |

**Synectic Based Religious Material**

Religion teaching materials aspects of aqeedah (Faith in Allah, Asma'ul Husna and Praised Behavior) based on the synectic approach include the following components:

1. Presentation of material in teaching materials provides examples of the existence of links to real situations.
2. Presentation of material motivates students to make a connection between the knowledge they have and knowledge of the findings of research, the development of science and technology and its application in daily life.

3.  Presentation of material in teaching materials can make students faced with something that can be analogized, then continued activities based on synectic syntax. Besides that the teacher can start teaching and learning activities by submitting descriptions of material, recommendations for reading books, and other learning activities that lead to preparation for problem solving.

4.  Presentation of material in this teaching material can make students identify as many as possible the relevant problem agendas in the Religion lesson. One of them is chosen and formulated in the form of a hypothesis (temporary answer to the problem question). The problems chosen are then formulated in the form of questions, or hypotheses. Providing opportunities for students to feel and portray themselves towards objects or objects analogized, analyzing problems they face, is a technique that is useful in educating students to get used to finding images in other objects towards understanding critically learned material.

5.  The basis of the approach used in presenting teaching material is synectic. The synectic approach is also an interesting and fun learning model in developing innovations. The main element in synectic is the use of analogies. In synectic practice, students "play" with analogies so that they can relax and begin to enjoy the task of making metaphorical comparisons. Then, they use these analogies to solve problems and come up with interesting ideas. Based on this, the synectic learning model gives freedom to students to develop imagination and insight with new perspectives. Synectic learning models can be used as a tool to achieve one of the learning objectives of religioussubjects in the aspects of aqeedah and morality which are abstract concepts of understanding in school.

6. Analogy that encourages students to know something new or unfamiliar with something foreign, guiding students to improve their problem solving abilities, creative expression, empathy and insight in social relations, observing objects, conducting their own trials and so on. Students learn actively to feel something that is related to the problem at hand, thus unintentionally students connect problems with knowledge they already have.

7. Group learning with material that has been obtained by students to discuss with friends with the guidance of the teacher.

8. Examples of practice questions about understanding the concepts of abstract material on religion and how to solve them.

9. A summary of the material that has been studied.

10. Tests that can be used as a basis for assessing student achievement.

11. The questions given in teaching materials are questions of analogy in which students can relate the knowledge they have after learning.

**Validity Test**

Based on the results of the research of the validators, the teaching material of Religion with synectic-based is stated to be very valid in material, construction and language indicated by the following table:

**Table 4. Recapitulation of validation results**

| No | Type of Validation | Average Expert validator | Average Practitioner validator | Average Amount | Criteria |
|----|--------------------|--------------------------|--------------------------------|----------------|----------|
| 1 | Focus Feasibility of content | 4,71 | 4,65 | 4,68 | Very valid |
| 2 | Focus Presentation | 4,66 | 4,76 | 4,71 | Very valid |
| 3 | Language Focus | 4,66 | 4,67 | 4,66 | Very valid |
| 4 | Focus on Integrity | 4,66 | 4,67 | 4,66 | Very valid |
| 5 | Focus on media visualization | 4,60 | 4,80 | 4,70 | Very valid |
| Average Number of Rating Scores | | | | 4,68 | Very valid |

The table 4 means that religious teaching materials in very valid categories can be used with little revision. Revisions include the improvement of

suggestions from the validator such as the problem of consistency in numbering, complementing the hadith and mahfuzhat at the end of each discussion in teaching materials. The images used should use images that are often encountered by students and are helpful to students' understanding. After minor revisions, the teaching materials ofreligion with the synectic approach are ready to be tested in the field.

**Practical Test**

**Table 5. Test Recapitations of Small Group Student Responses**

| total Student | Item Amount | Ideal score | Score of acquisition | Average Score | % | Qualification | description |
|---|---|---|---|---|---|---|---|
| 10 | 20 | 1000 | 930 | 4,65 | 93 | Very practical | A little revision |

        The table 5 above is a recap of the results of the student response test showing that;

1. Synectic-based religious teaching materials according to the results of the response questionnaire of small group students are 4.6 or 93%, based on percentage criteria included in the category of "very good". The results of filling out the response questionnaire were used as input in conducting revisions to improve the quality of the development of developed religious teaching materials. The results of small group trials conducted on students obtained student responses to the product development of religious material based on the synectic approach there are comments, namely: background color and writing on the concept map lacking contrast, the images displayed are less clear, the colors are too mixed and much so that the material focus is distorted.

2. Synectic based religious teaching materials according to the results of the questionnaire responses of small group students produced an average score of 4.65, based on the practicality criteria included in the category "very practical". Practical analysis based on instrument filling data by students shows that the teaching material is in draft II; the

parts of synectic-based teaching materials can be used very well without significant obstacles. Teaching materials that have been declared "very good" and "very practical" can be used in the real learning process. However, there is a slight revision based on students' comments and suggestions regarding the images and instructions on the use of products for the development of synectic-based religious teaching materials with the subject matter of God's Faith, Asma'ul Husna, and Praised Behavior.

**Effectiveness Test**

Effectiveness tests carried out after the practicality test process produce valid and practical teaching materials. This teaching material was tested on 97 VII grade students of junior high school. (Junior High School 17, junior high school 20, and junior high school 12 in Bengkulu City Indonesia). In this effectiveness test, what will be analyzed is the effectiveness of Islamic Education teaching materials based on a synectic approach consisting of analysis of activities in the teaching and learning process which consists of testing teaching materials to students and teacher activities in managing learning, student responses to the learning process, and student learning outcomes after the learning process.

1. Analysis of the activities of students and teachers using teaching materials

Test of effectiveness, obtained analysis of student activities in the learning process and teacher activities in managing learning. The total score of the average activity is obtained by summing the average score of teachers and students divided into two, so that the average number of 4.4 is obtained. While the average number of activities of teachers and students is 4.60 and 4.20 respectively. This shows that students do a lot of active activities. The observation shows that the effectiveness of these students is also supported by their enthusiasm in conducting discussion activities or asking the teacher / friend. While the activity of

the teacher observes, motivates, gives instructions, and guides students in solving problems. Then it can be concluded that the activity of the teacher in accordance with the criteria set out in chapter III is that if the teaching material is categorized as very effective it means that the textbook with the synectic approach can greatly maximize the activity of students and teachers in the learning process.

2. Analysis of Student Response

The average response score per student was obtained by calculating the total score of all aspects of the student's response questionnaire that was assessed, then divided by the number of responses questionnaire students assessed. The average score of the student response questionnaire is obtained by summing the average score of responses per student, then divided by the number of students. The average score of the student response questionnaire is 4.57. The recapitulation of student response questionnaire sheets can be seen in appendix 14 page 361-365. The average score of student responses is obtained by the following formula; $\bar{R} = \frac{\sum_{i=1}^{n} \bar{R_i}}{n}$

$$\bar{R} = \frac{82,3}{18}$$
$$\bar{R} = 4,57$$

3. Analysis of students' daily exam results

Daily test results data during the learning process are obtained through the value of test results after the end of the learning process. The average score of student results is obtained by summing the score of learning outcomes per student per SMP, then divided by the number of junior high schools (totaling 3 schools). The average student learning outcome is 82.23. Then converted to an average score is 4. The average score of student learning outcomes is obtained by the following formula:

$$\bar{H} = \frac{\sum_{i=1}^{n} \bar{H}_i}{n}$$

$$\bar{H} = \frac{12}{3}$$

$$\bar{H} = 4$$

The effectiveness test results give a value of 4. The average score of effectiveness is obtained by the following formula:

$$\bar{E} = \frac{(\bar{A}x30\%) + (\bar{R}x30\%) + (\bar{H}x40\%)}{100\%}$$

$$\bar{E} = \frac{(4,4x30\%) + (4,57x30\%) + (4x40\%)}{100\%}$$

$$\bar{E} = 4,29$$

Based on the analysis of the data obtained, it can be seen that the effectiveness of this teaching material is in the effective category. This shows that the synectic-based religious teaching materials are very effective to use and provide benefits to the learning process that is the effectiveness of activities in teaching and learning activities, responses and student learning outcomes.

## C. DISCUSSION

Product design teaching materials religion aspects of abstract understanding based on synectic is an approach based on the psychological assumptions of creativity, namely; a) bring out the creative process towards awareness and develop significantly the creative capacities of individuals and groups; b) creativity is a new mental development pattern. Many rational and emotional problem solving will generate fresh ideas, and; c) emotional and irrational elements must be understood in order to increase success. Gordon added that there were four views about the creativity model; 1) one's creativity is a daily activity, lasts a lifetime and is developed in order to improve problem solving skills, express themselves creatively, foster a sense of empathy and

establish social relations; 2) creative processes are not mysteries, but can be described and used to train individuals to improve the quality of their lives; 3) creativity is present, created and related to all fields; and 4) increasing creative thinking both individually and in groups can be done either through ideas or products in various ways (Bruce Joyce, 2009).

The application of synectics to a religiuos teaching material aims to improve students' creative thinking skills on these subjects, "synectics are designed to increase the creativity of both individuals and groups" (Bruce Joyce, 2009). There are five stages of the synectic learning model that can be used as a reference by teachers and students when carrying out teaching and learning activities in the classroom and as the basis for the design of teaching materials, namely;

Explanation stage, which is communicating new topics or material. This stage is very supportive for the success of students, especially when he gets new material. The stage of clarification of new material in this school is marked by the emergence of; (a) a process that makes it easier for students to understand the new material delivered by the teacher; (b) a number of difficulties clarifying new material and resolving it using parables, figures of speech and examples; (c) the application of question and answer techniques to students on new material explained by the teacher and students seemed enthusiastic in answering the teacher's questions. Enthusiasm of students answering teacher questions is an indication of positive attitudes and perceptions. To find out that students have learned well, the components of the teacher and curriculum must really interact with students. As curriculum implementers, teachers are required to be able to decide how to organize the implementation of a curriculum as operational as possible. Abdullah Idi (Abdullah Idi, 2014)suggests that curriculum implementation is almost entirely dependent on teacher contributions. However good the education facilities are if the teacher does not carry out their duties properly, the

implenentation of the curriculum will not be maximal. Means at this stage, the teacher is required to be able to describe the structure of curriculum material. This stage also requires teachers to develop new topics or materials, especially when developing learning plans to be more structured but creative. Arend E. Carl, (2009)said that professional teachers are creative generative teachers, namely teachers who think about things to do and always try to find more effective ways of working. Patankar & Jadhav, (2013)and allso L Millard, (2000)asserted that teachers as curriculum developers must be able to identify problems and needs while addressing their problems and class needs by designing structured and effective learning.

The stage of combining the process of direct analogy, analogy comparison and explanation of differences. This stage begins by asking students to submit or analyze directly the material being discussed through the media. This activity facilitates students in transmitting and transforming the material being discussed. The teacher is tasked with guiding and encouraging students to have the courage to express ideas or opinions. The activity of comparing analogies aims to identify and explain similarities, differences and relationships between aspects that exist in an object or ongoing activity. Teachers in such a way must motivate students so that students 'ability to understand the differences that exist in objects or activities analogous to the material being discussed is revealed in the discussion and students' creative thinking abilities increase. The use of learning media in the form of images, media objects and story media is intended to strengthen students' understanding of abstract material and present material visually and structured. In accordance with the results of the research statement, "when using various multimedia combinations, the unique nature of the Social Sciences can be addressed effectively" (Luiza de Sousa, Barry Richter, 2017).

The ability to read analogies assisted by media images, media objects and media stories about a material reflects high level cognitive abilities that can improve the ability to understand abstract concepts of religious material. This ability is characterized by; (a) students seem to focus and concentrate in following the learning process. This will be more revealed when the teacher asks students to describe the analogy and gives the opportunity for students to ask questions related to the material being discussed; (b) questions arise from students showing the type of question thinking. The questions raised by these students can indicate that they are doing the learning process correctly. When the questions posed by the teacher can be answered well by students, it will be known that the material discussed by the teacher can be understood by students.

Stage of personal analogy. At this stage, students are asked to submit self-assumptions such as being an object, in accordance with the material discussed. Things that are thought, felt and done by students should not be too limited. Give them the opportunity to express themselves, express their ideas and opinions as freely as possible. Activities of junior high school students in this case are characterized by symptoms; (a) students appear to present diverse ideas, using brainstorming techniques. Al-Samarraie & Hurmuzan, (2017)said Various Brainstorming (BS) techniques have been specifically proposed to develop creativity and individual productivity during idea-making sessions. Although there are limitations, there is a lack of available knowledge about the techniqueThis shows that the synectic learning model is able to train students to express their ideas; (b) brainstorming techniques used in the learning process can improve the ability to understand abstract concepts.

Exploration phase. In this stage the teacher asks students to explore again or re-explain the topic or material discussed earlier by using their own language. For this reason, guidance from the teacher is needed so that

this stage runs well. Students are also asked to make notes to document the results of their work. Student activities in junior high schools in this case are indicated by; (a) students enthusiastically explain the material previously delivered by the teacher using their own language. The words used by students to re-explain the material that has been delivered by the teacher, it tends to lead to the same meaning. This means that students are able to process the subject matter previously delivered by the teacher; (b) the results of student work are discussed with friends, so that they can be studied together.

The fifth stage is to bring up a new analogy. This stage is a direct analogy to the material being discussed. Students are expected to be able to submit direct analogies that they have mastered and are able to explain their similarities and differences. To achieve this, the teacher needs to carry out a series of activities, namely asking students to submit a direct analogy to the original material with other objects or activities, discussing similarities and differences, concluding and summarizing the results of their work. Here, what is important is argumentation, why an object or activity is analogous to the material being discussed. After completing this stage, the teacher evaluates the results of student work that contains elements of the ability to think creatively to understand abstract concepts. The purpose of this activity is to find out the creative thinking skills of students understanding abstract concepts (fluency, flexibility, authenticity and detail). Implementation of religious teaching materials with synectic in schools tends to contribute better to students in improving the ability to understand abstract concepts.

Thus, it is known that abstract concepts are conceptual materials that contain unseen objects. Unseen objects are abstract. Abstract or supernatural is an understanding of something that is an object that cannot be sensed by the human senses. Acceptance of understanding of concepts that must be accepted with faith or faith. Proof of the truth of the

concept because of the psychological effects in life such as calmness in life, happiness and so on. Sinektik with its main activity is an analogy intended to overcome the problea of difficulties in learning abstract concepts which in fact dominates religious studies.

## D. CONCLUSION

1. The real conditions that occur are the low understanding of abstract concepts of religious teachings, teaching material books have not led students to learn more creatively in thinking, the existing religious teaching materials are still text based.

2. Results of validation of synectic-based religious teaching materials for VII grade students of Bengkulu City junior high school in the form of printed teaching materials (books) with a synectic approach by experts and practitioners have met the feasibility component as a valid teaching material.

3. The process of learning activities with synectic-based religious teaching materials for VII grade students of junior high school in Bengkulu City Indonesia has fulfilled the feasibility component as a practical teaching material.

4. Student responses and the final results of learning activities with synectic-based religious teaching materials have fulfilled the feasibility component as an effective teaching material, to improve students' abstract understanding of the concept.

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