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RESEARCH ARTICLE

THE EFFECT OF USING LEARNING MATERIALS AND INITIAL ABILITY OF SCIENCE LEARNING OUTCOMES BY CONTROLLING MOTIVATION OF LEARNING AT KANDANGHAUR JUNIOR HIGH SCHOOL, INDRAMAYU, WEST JAVA AND SMP TERBUKA TANGERANG SELATAN, BANTEN.

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Abstract

This study aims to determine the effect of independent variables of learning resources and motivation to learn the results of science learning by controlling the initial ability. In addition, we also want to know whether or not the interaction between the two independent variables that affect student learning outcomes in science subjects. The method used to carry out this research is experiment. The results of the study were: 1) Science learning outcomes between students using learning modules were higher than those using textbooks after controlling initial skills. 2) There is an interaction effect between the learning source and the learning motivation on the learning outcome of IPA after controlling the initial capability. 3) For groups of students who have high learning motivation, science learning outcomes between groups of students taught with modules are higher than those of students taught by textbooks after controlling initial ability. 4) For groups of students who have low learning motivation, there is no difference in science learning outcomes between groups of students who are taught using modules or those who are taught using textbooks after controlling the initial abilities.

Introduction:-

Until now, students' learning outcomes in science subjects are still relatively low, both quality and quantity. Various efforts that have been carried out by the government have not yet provided optimal results in science subjects, especially physics at various levels of education. According to Efendi, quoted by Darmika stated that Indonesia had participated in TIMSS three times, namely in 1999, 2003 and 2007. The average score of Indonesian students' science achievements in TIMSS in 2007 was 433 so that Indonesian students were ranked 35th out of 49 countries. The average score of Indonesian students in TIMSS 2007 was below the average score of 500 and only reached the Low International Benchmark. This achievement implies that on average Indonesian students are only able to recognize a number of basic facts but have not been able to communicate and link various science topics, let alone apply complex and abstract concepts.

Science subjects taught in Open Junior High School is one of the subjects tested nationally, so this subject must be studied more deeply by Open Junior High School students. These science subjects include physics, chemistry, and biology. Almost all of this material requires an understanding that is not sufficiently expressed by text alone but also desperately needs explanation through visualization, so that with the learning media which is only a module as it has

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become the source of teaching materials for Junior Open students is very difficult to understand the subject matter of science.

important factors that affect the success of learning is that comes from the students themselves are the motivation to learn. Woolfolk (2004: 350), defines motivation as an internal state that raises, influences and controls behavior. Medium according to Adi (1994: 154) motivation comes from the word motive is defined as the strength contained in the individual that causes the individual to act or act. Motives can not be observed directly but can be interpreted in behavior in the form of stimulation, encouragement or generating the emergence of a certain behavior.

Motivation and learning are two things that influence each other, because learning is a change in behavior that is relatively permanent and potentially occurs as a result of practice or strengthening (reinforced practice) that is based on the goal of achieving certain goals. Learning motivation can arise because it is caused by intrinsic factors in the form of desire and successful desire and encouragement of learning needs, hopes for ideals, while extrinsic factors are the existence of appreciation, a conducive learning environment and interesting learning activities. However, it must be remembered that these two factors are caused by certain stimuli, so that someone wants to carry out activities of learning activities that are more active and enthusiastic.

Each learning activity requires the use of certain types of learning media and no single type of learning media is suitable for use in all forms of learning communication. Each subject requires its own type of instructional media, although it does not rule out the existence of a learning medium that can be used for various subjects. Similarly, the learning activities at Junior Open are different from regular school learning activities in general. Because the learning activities in the Open Junior High School are essentially independent learning activities that can be done by the students wherever they are, can be at home, in the fields or facilitated by the community, school or local government ie at TKB and in the parent school at times certain.

Learning is a process of change in behavior or understanding. According to Saljo (2010: 20-21) his research quoted by Widowati asks a number of students their understanding of learning and the results are grouped into five categories: (1) learning as a quality improvement in knowledge. Learning is acquiring more information or knowledge; (2) learning like memorizing. Learning is storing information that can be repeated again; (3) learning is acquiring facts, skills and methods that can be stored and used where appropriate; (4) learning such as awareness or abstract understanding. Learning includes the relationship between the parts of the subject with reality; (5) learning is interpreting and understanding reality in different ways.

In addition there is a great deal of understanding about learning in the opinion of various scientists among whom Smith (2004: 198) declared learning about the understanding of the world that is interpreted into knowledge. While Woolfolk (2004: 198) states, learning as a result of experience so that changes occur relatively permanently in one's attitudes and knowledge. Changes may be intentional or unintentional, true or false, conscious or unconscious. In line with the above opinion according to Driscoll (2002: 59), learning is a change in a person as a result of interaction with the environment.

According to Snelbecker (1974: 12) learning is a process derived from an activity or a change as a reaction in the face of a situation, giving characteristic changes in activity that can not be explained as a basis in responding, maturity or temporary condition of a person, is a relatively permanent change that occurs as a result of strengthening exercises.

It can be concluded from some of these opinions that learning is a process of changing attitudes obtained through experience or practice. Learning is a permanent change in the ability of a person or a potential ability, with abilities that have the potential to clearly show that the power of learning cannot always be immediately demonstrated. Learning is a consequence of interaction and learning experiences with the world, and this interaction is an individual process of understanding. Through the interaction of individuals with the world around them and directing their experiences can enhance the individual's ability in various ways.

Another learning theory that underlies the study of science subjects in this study is more emphasis on the development of cognitive domains is what was proposed by Woolfook cited by Firdaus (2010: 14) which explains that there are three learning experts, namely Clark Hull, Edwin Guthrie and BF Skinner uses the same variable, Stimulus-Response to explain their theories, but in some principles they differ from each other. Woolfook explained

that according to Clark Hull all behavioral functions are useful especially to maintain survival. Therefore, in Hull's theory, biological needs and satisfying biological needs occupy a central position. Stimulus is almost always associated with biological needs although the response can be of various forms. However, according to Edwin Guthrie the stimulus does not necessarily take the form of biological needs, the importance of the relationship between stimulus and response tends to be temporary, therefore Galloway (1976: 76) concludes that it is necessary to give frequent stimulus to make the relationship more sustainable. In addition, a response will be stronger when it comes to various stimuli.

In relation to learning science subjects, the responses given by students are not as simple as those stated above, because each stimulus given will basically interact with each other and ultimately affect the response produced. While the response given can produce various consequences that will affect student behavior. Therefore, to understand students' behavior thoroughly which is shown by learning outcomes must be understood by the response itself and its various consequences due to the interacting stimulus.

IPA is a study of the natural world, in this case relates to a systematic way of finding out about nature, so science is not only the mastery of a collection of knowledge in the form of facts, concepts or principles but also a process of discovery. Cain & Evans through Adnanhero (2012) states that IPA contains four things: content or products, processes or methods, attitudes, and technology. IPA as content and product means that in science there are facts, laws, principles and accepted theories. IPA as a process or method means that IPA is a process or method to gain knowledge. IPA as an attitude means that science can develop because of the attitude of diligent, thorough, open, and honest. IPA as technology implies that IPA is related to improving the quality of life. If the IPA contains these four things, then in science education in schools should students be able to experience these four things, so that students' understanding of the IPA becomes intact and can be used to overcome the problems of life.

Science learning in schools is expected to be a vehicle for students to learn about themselves and the environment. Science education emphasizes the provision of direct experience to develop competencies so that students are able to explore and understand the natural surroundings scientifically. Science education is directed to "find out" and "do" so it can help students to gain a deeper understanding of the natural environment. Therefore, the approach adopted in presenting the science education is to integrate the experience of the IPA process and the understanding of IPA products and technology in the form of direct experience that impact on the attitude of students who study the science.

Open Junior High School is designed to provide the best service to children aged 13-15 years and 18 years old who due to socioeconomic conditions, transportation barriers or geographical conditions do not allow them to attend regular junior high school. The requirement of Open Junior High School candidates is basically the same as the requirement to become a regular junior high school student. However, due to its special mission, in addition to the requirement of completion of SD / MI or equivalent and age not exceeding 18 years, Junior Open student candidates are preferred for children who due to socio-economic circumstances, transportation constraints or geographical conditions do not allow for regular junior high school , also domiciled within junior high school ranges based on existing school mapping.

The learning process at Open Middle School focuses on independent learning, both individually and in groups. These activities are conducted in the learning places (TKB) as well as in their respective homes with modules as the main learning resource. In order for this learning process to be more effective, when learning at TKB students are assisted by the Civil Teacher as a facilitator. Because not all subjects can be absorbed entirely through independent learning, all the difficulties faced need to be solved together through face to face with the subject teachers concerned. In addition, face-to-face activities are also intended to make improvements or deepening of the material including to do the science lab work. These face-to-face activities are conducted together and guided by the Teacher of the relevant subject matter. In general, this face-to-face activity is carried out at the main school, but there are also those held at TKB with visiting teacher systems, especially for TKB-TKB, which is far from the main school and there is no public transportation.

According to Reigeluth (1983: 20) learning outcomes are generally categorized into three groups, namely: (1) the effectiveness of learning measured by students' learning achievements; (2) learning efficiency measured by effectiveness divided by student learning time and / learning development costs; (3) the attractiveness of learning is measured by the tendency of students to remain at home to continue the learning process. While according to Gagne

and Briggs (1988: 49-50), learning outcomes are abilities acquired by a person after he follows a particular learning process. Judging from the definition of learning as stated above, it can be concluded that the form of learning outcomes is in the form of behavior change, although not all behavioral changes that occur in individuals can be said to be learning outcomes. Reigeluth says that learning outcomes are observable behaviors that show a person's ability. Learning outcomes in the form of behavioral changes also appear in various forms. According to Bloom the form of learning outcomes includes three domains, namely: cognitive, affective, and psychomotor, this theory is very well known as the Bloom Taxonomy.

According to Utari (2012: 2) Bloom's taxonomy is a hierarchical structure that identifies skills ranging from low to high levels. Of course to achieve a higher goal, a low level must be met first. Within this conceptual framework, Bloom's educational objectives are divided into three domains of intellectual behaviors: cognitive, affective and psychomotor. The Cognitive domain contains behaviors that emphasize the intellectual aspects, such as knowledge, and thinking skills. Affective spheres include behaviors related to emotions, such as feelings, values, interests, motivations, and attitudes. While the Psychomotor domain contains behaviors that emphasize manipulative functions and motor skills / physical abilities, swimming, and operating the machine.

Furthermore, according to Gunawan (2012: 17-18) Bloom taxonomy cognitive domain is one of the basic framework for categorizing educational goals, preparation of tests, and curriculum around the world. The framework of thought by Benjamin Bloom contains six main categories in the order starting from the low level to the highest level, namely: (1) knowledge; (2) understanding (comprehension); (3) application (application); (4) analysis (analysis); (5) synthesis; and (6) evaluation (evaluation). One important thing in the taxonomy of instructional objectives is the existence of hierarchies that start from the instructional objectives at the lowest level to the highest level. In other words, a goal at a higher level cannot be achieved before the goal is reached at the level below it.

Learning resources according to Achmad cited by Nur (2012: 3) are all kinds of sources that exist outside of a person (learners) and which allows (facilitate) the learning process. AECT (Association for Education and Communication Technology) states that learning resources are all good sources of data, people and certain forms that can be used by students in learning, either separately or in combination so as to facilitate students in achieving learning goals or achieving certain competencies.

Learning resources according to Achmad cited by Nur (2012: 3) are all kinds of sources that exist outside of a person (learners) and which allows (facilitate) the learning process. AECT (Association for Education and Communication Technology) states that learning resources are all good sources of data, people and certain forms that can be used by students in learning, either separately or in combination so as to facilitate students in achieving learning goals or achieving certain competencies.

According to Nur that the source of learning is essentially a component of the instructional system that includes messages, people, materials, techniques and environment, which can affect student learning outcomes. Thus it can be concluded that the source of learning is all kinds of resources that exist outside of a person (students) and can facilitate the learning process.

Understanding the module according to Wijaya (1992: 86), is the text of the program organized in the form of certain units for learning purposes. Meanwhile, according to the Ministry of National Education (2005: 2), the module is defined as a unity of learning materials presented in the form of "Self-Instruction", meaning that the learning materials are arranged in the module can be studied independently with limited assistance from teachers or others . Although there are various module boundaries, there is a common opinion that the module is a curriculum text provided for self-study, since the module is a self-contained unit and consists of a series of learning activities designed to help students achieve a set of objectives specifically and clearly. Thus, module teaching can be tailored to individual student differences, ie learning activities and learning materials. Module boundary in the module preparation manual (Wijaya).

Method:-

This study aims to determine differences in the influence of independent variables, namely learning resources and learning motivation on learning outcomes of science by controlling the initial ability. In addition, we also want to know whether there are interactions between the two independent variables that affect student learning outcomes in science subjects.

This research will be conducted at Open Junior High School which is randomly selected from all Open Junior High Schools in Indonesia with the conditions chosen by the Open Junior High School which are considered equal, based on the initial draw obtained as a sample of 2 (two) school locations as follows:
a. SMP Terbuka Kandanghaur, Indramayu, West Java.
b. SMP Terbuka Tangerang Selatan, Tangerang, Banten.

The research was carried out at the beginning of the second semester of the 2014-2015 school year. Research material is a science subject for class VIII students of semester 2
The method used to carry out this research is an experiment with the following variables:
1. Dependent variable

The dependent variable in this study is called the criterion variable (criterion variable). The observed criteria variable is the learning outcomes of science subjects in open junior high school.
2. Independent variable

The independent variables in this study consist of two variables, namely:
a. Treatment variables, namely learning resources consisting of modules and textbooks.
b. Moderator variables, namely learning motivation which consists of high learning motivation and low learning motivation.

In this study also consider the affixed variables that are not the focus in research but can affect the results of research and can not be manipulated, the variable is the student's early ability as a covariate variable.

Because the criterion and attribute variables are divided respectively, then the appropriate research design used in this study is the 2x2 design. The research experimental design can be presented in Table 3.1 below.

Table 3.1 Research Design

Learning Resources Motivation Learniung	Modul	Teks Book
High	A_1B_1 $[X, Y]_{11k}$ $k = 1,2, \ldots, n_{11}$	A_2B_1 $[X, Y]_{21k}$ $k = 1,2, \ldots, n_{21}$
Low	A_1B_2 $[X, Y]_{12k}$ $k = 1,2, \ldots, n_{12}$	A_2B_2 $[X, Y]_{22k}$ $k = 1,2, \ldots, n_{22}$

Information:
A1B1 = Group of students learning to use modules with high learning motivation
A1B2 = Student group learning to use module with low learning motivation
A2B1 = Group of students learning to use textbooks with high learning motivation
A2B2 = Student group learning to use textbook with low learning motivation
X = Score of students' initial ability in science lesson
Y = Score of science learning outcomes
K = Group (sample of each cell)

Results And Discussion:-

RESULT

Differences in Science Learning Outcomes between Students Using Learning Modules and Learning Text Books After Controlling Initial Abilities (Main Effect)

The hypothesis tested:
$H_0: \mu_{A1} \leq \mu_{A2}$
$H_0: \mu_{A1} > \mu_{A2}$
The result of calculation of ANKOVA (Table 4.14) on source of variance between A indicates that the price of Fcount is 7,51>Ftable price equal to 4,09 at $\alpha = 0,05$, null hypothesis is rejected or there is difference of science

learning result between student who is taught by Learning Module and Textbook learning. Furthermore the acquisition of the mean score of the learning outcomes of the group of students taught by the learning module $\bar{Y}\_A1 = 72.05$ and the group of students taught with the Textbook learning $\bar{Y}\_A2 = 67,16$; it can be seen that the learning result of the group of students who are taught with the learning module is greater than the result of the students 'learning which is taught by the textbook of learning, it means that the learning module has proven to give more effective effect to the students' science learning result. So it can be concluded that the science learning outcomes of students who use the Learning module are better than students who use learning textbooks. Thus the research hypothesis states that there is a difference between the learning outcomes of science students who use the learning module with students who use textbook learning, after controlling the ability of the students tested the truth.
Interaction between Learning Resources and Motivation Learning to Result Learning Science After Controlling Interaction (Interraction Effect).

Hypothesis in Test:
H_0: Interaction A X B = 0
H_1: Interaction of A X B ≠ 0
The result of ANKOVA calculation (Table 4.14) on source variance of Interaction A x B shows that the price of Fcount is 6,08>Ftable price equal to 4,09 at $\alpha = 0,05$, Ho is rejected and H1 accepted. This means that the use of learning resources has an influence on the learning outcomes of science depending on learning motivation, after controlling the initial ability, and vice versa. Thus the research hypothesis states that there is interaction between the use of learning resources with motivation to the results of science learning tested truth.

In the form of graph of interaction between the use of Learning Resources with learning motivation to the learning result of IPA seen in Figure 4.9.

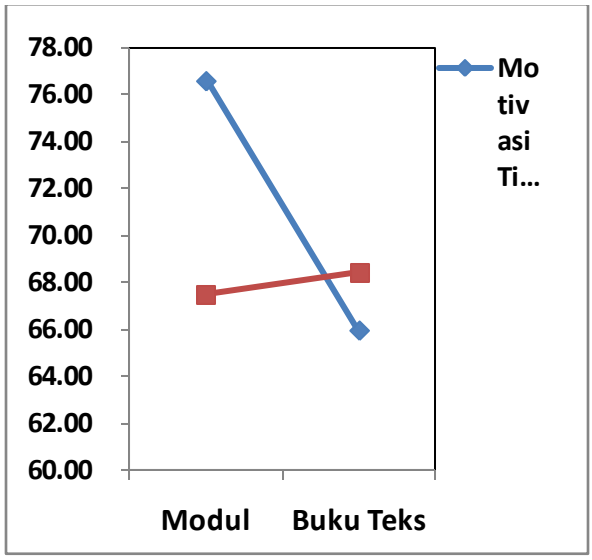

Figure 4.9 Graphs of interaction between learning resources and learning motivation toward IPA learning outcomes after controlling initial ability

3. Differences in Student Science Learning Outcomes Using Learning Modules and Learning Textbooks on Students Who Have High Learning Motivation After Controlling the Early Effect (Simple Effect)
Hypothesis tested:
H_0: $\mu\_A1B1 \leq \mu\_A2B1$
H_0: $\mu\_A1B1 > \mu\_A2B1$

Further test results with Tukey test in Table 4:15 shows that the comparison of science learning outcomes of students using learning modules and textbooks of learning in students who have high learning motivation obtained Q value = 5.22>Qtabel = 4.26 at $\alpha = 0.05$, Ho is rejected and H1 accepted, so it can be said that the learning outcomes of science students using learning module is higher than the value of student learning outcomes that use textbooks of learning in students who have high learning motivation after controlling the initial ability.

Based on the results of the average residual test (Table 4.16) obtained value Y¯_ (res) A1B1 = 72.45> Y¯_ ((res) A2B1) = 66.40, this means that the learning outcomes of the students are taught using the learning module higher than the results of student learning taught by textbooks of learning in students who have high learning motivation. These results also indicate that students who have high learning motivation are appropriately applied to the use of module learning resources. Thus it can be concluded that the learning outcomes of science IPA students who are taught with the Learning module is better than the results of student learning taught by using textbooks, for students who have a tendency to learn high motivation after controlling the initial ability.

Next is the research hypothesis which states that the science learning outcomes of students who use learning modules are higher than students who use learning textbooks, for students who have high learning motivation after controlling the initial ability tested the truth.

Differences in Student Science Learning Outcomes Using Learning Modules and Learning Text Books, for Students Who Have Low Learning Motivation After Controlling Early Effects (Simple Effect)
Hypothesis tested:
H_0: μ_A1B2≥ μ_A2B2
H_1: μ_A1B2 <μ_A2B2

Based on the results of further tests with Tukey test in Table 4:15 it is known that the comparison of science learning outcomes of students who were taught using learning modules and textbooks of learning on students who have low learning motivation obtained value Qhitung = 2.79 <Qtabel = 4.26 at α = 0 , 05, Ho accepted and H1 rejected, thus statistically there is no difference of science learning outcomes of students who use Learning module and students who use textbooks of learning in students who have low learning motivation after controlling the initial ability.

Based on the results of the average residual test (Table 4.16) obtained value Y¯_ (res) A1B2 = 72.45> Y¯_ (res) A2B2 = 68.41. Thus it can be concluded that although statistically does not show differences in learning outcomes of science students are taught with learning modules and textbooks of learning, for students who have low learning motivation tendency after controlling the initial ability, but on average classical, taught by using the learning module is higher than the learning outcomes of science students are taught by using textbooks for students with low learning motivation after controlling the initial ability.

Selanjutya research hypothesis which states that the results of science learning students are taught with learning module is higher than students who use textbooks of learning, in students who have a tendency to learn low motivation after controlling the ability of the beginning is untested.

Discussion:-

1. Learning Outcomes of Science between Teached Students with Higher Learning Module Compared with Student Groups Taught with Textbook Learning After Controlling Initial Ability

Based on ANCOVA calculations as shown in Table 4.14, the source of variance A shows that the value of Fcount = 7.51>Ftable (α = 0.05) (39) = 4.09. Thus it was concluded that there were differences in science learning outcomes between groups of students taught with the Learning Module (A1) with groups of students taught with the Learning Textbook (A2) after controlling the initial abilities. This means that the amount of Fcount value generated in testing this hypothesis is purely derived from the effect of treatment (treatment). The use of modules given to students, because the influence of learning motivation has been purified or systematically controlled.

This is in accordance with the results of science learning group of students taught using Modules with an average corrected Y Y_ (res) A1 = 71.19 while the group of students taught using textbooks with an average corrected Y Y_ (res) A2 = 68, 01. The results of the calculations indicate that the learning outcomes of IPA between the groups of students taught with modules is higher than the group of students taught by textbooks after controlling the initial ability. Thus, learning with modules conducted in this study can improve science learning outcomes better than the learning with textbooks.

This finding also answers the research hypothesis that student learning outcomes that are taught with modules are better than those taught using textbooks. It is apparent from the results of this study that the source of the module

learning gives the average high learning result value compared to the textbook learning source. This result is in line with research conducted by Padmapriya (2015) which reveals the effectiveness of independent learning modules in secondary school students, and the result is that students taught with module learning resources achieve higher average scores than students taught through activity-oriented methods. Similarly, research by Riasat Ali, et al. (2010) concludes that modular teaching is more effective as a process of teaching biology because in modular teaching students are given the opportunity to learn at their own pace, according to their level of ability and needs.

The superiority of module learning resources in science subjects in open junior high school is inseparable from the substance of the module which has shorter theoretical characteristics, with an explanation of examples of mathematical questions and illustration images that are actually almost the same as those in textbooks, and more emphasis on exercise matter independently. More modules have practice questions with the completion instructions. If the tutor teacher or tutor teacher helps explain the material being studied, students will understand the material well.

In learning resources of textbooks that contain in-depth theoretical studies, with illustrations that are sufficient to clarify the understanding of concepts and practice the questions with many and complete mathematical calculations. The characteristics of this textbook differentiate it from other learning sources, this is in accordance with the theoretical basis stated in chapter II that textbooks are the main learning source provided by the government whose contents have been adapted to the applicable curriculum and used as a tool for curriculum targets.

2. Effect of Interaction between the Use of Learning Resources and Early Ability of Science Learning Outcomes After Controlling the initial ability

ANKOVA calculation as shown in Table 4.14, the source of variance Interaction A x B shows that the value of Fcount = 6.08>Ftable ($\alpha = 0.05$) (39) = 4.09, thus Ho is rejected and H1 is accepted, this means that there are the influence of the interaction between the use of learning resources (A) and the learning motivation (B) on the learning outcomes of science after controlling the initial ability. Furthermore, it can be explained that the use of Learning Resources affects the learning outcomes of science students depend on learning motivation after controlling the initial ability, and vice versa, learning motivation (high / low) influences the learning outcomes of science students depend on the use of learning resources after controlling the initial ability.

ANKOVA calculation data and hypothesis testing can be concluded, that the interaction effect of the use of learning resources and learning motivation on science learning outcomes after controlling the initial ability is largely determined by the differences in the use of learning resources provided and differences in student learning motivation. This can be seen with the following indications: (1) For groups of students taught with Textbooks, the learning outcomes of students who have high learning motivation (A1B1) are corrected on average by Y Y _ (res) A1B1 = 72.45, more big compared to the learning outcomes of science students who have low learning motivation (A1B2) with an average corrected by $\bar{Y}$ _ (res) A1B2 = 69.94; (2) For groups of students who are taught with learning modules , science learning outcomes of students who have high learning motivation (A2B1) are corrected on average by $\bar{Y}$_ (res) A2B1 = 66.40, higher than the science learning outcomes of students who have learning motivation is low (A2B2) with an average corrected by $\bar{Y}$ _ (res) A2B2 = 69.63; (3) For groups of students who have high learning motivation, science learning outcomes of students taught with Learning Textbooks (A1B1) have an average corrected amount of $\bar{Y}$_ (res) A1B1 = 72.45, greater than that of students taught by the learning module (A2B1) with an average corrected by $\bar{Y}$ _ (res) A2B1 = 66.40; (4) For groups of students who have low learning motivation, the learning outcomes of students who are taught with Textbooks (A1B2) have an average corrected by $\bar{Y}$_ (res) A1B2 = 69.94, higher than the students ' learning outcomes taught with module (A2B2) with an average corrected by $\bar{Y}$_ (res) A2B2 = 69.63. The results of the study indicate an interaction between the selection of the use of learning resources and motivation to learn. this means that to improve the learning outcomes of science students who have high learning motivation, they are more suitable to be taught with Textbooks, while for students who have low learning motivation are more suitable to be taught with modules.

The results of this study are consistent with the research conducted by KatrinVaino, Jack Holbrook, MiiaRannikmae (2018) concluded that learners using modules significantly increase student motivation compared to previous learning. This means that an increase in learning outcomes is influenced by motivational factors depending on the source of learning in this module and textbooks, and vice versa that increasing learning outcomes can also be influenced by factors of learning resources depending on student learning motivation. Likewise, the research conducted by Zhuomin Sun (2010) which examines the importance and effects of teaching materials in learning.

According to him, there are many factors that influence students' motivation on teaching materials, such as increased interest in subject matter, difficulty level, relevance to existing knowledge. and the benefits of teaching materials / learning resources.

Accuracy in selecting appropriate learning resources can provide a clear direction for the teaching process. In addition, the teacher can design and establish general rules or principles so that learning goes as desired. Similarly, the condition of student learning, especially the internal condition of students in this case the student's learning motivation can also determine their learning outcomes.

3. For Students Who Have High Learning Motivation, Science Learning Outcomes between Student Groups Taught with Higher Learning Module Compared with Student Group Taught with Textbook Learning After Controlling Initial Capability

The calculation of Tukey test as shown in Table 4:15 shows that Q value (A1B1; A2B1) = 5.22>Qtabel (α = 0,05), (11: 4) = 4,26, meaning that reject Ho and accept H1. Thus it can be concluded that there are differences in the learning outcomes of the IPA between groups of students using a module with high learning motivation (A1B1) with groups of students who use textbooks with high learning motivation (A2B1) after controlling the initial ability.

This is in accordance with the results of science learning group of students who use modules that have high learning motivation with an average corrected by $\bar{Y}$_ (res) A1B1 = 72.45 while the group of students who use textbooks with high learning motivation with an average corrected by $\bar{Y}$ _ (res) A2B1 = 66,40. The results of these calculations indicate that the learning outcomes of science between groups of students taught with the Learning Module who have high learning motivation is higher than the group of students taught with Learning Textbooks that have high learning motivation after controlling the initial ability. Thus learning with Modules conducted in this study can improve science learning outcomes better than learning with textbooks for students who have high learning motivation after controlling initial abilities.

This finding answers the research hypothesis that student learning outcomes are taught with modules better than students who are taught with textbooks for students who have high learning motivation after controlling initial ability. The results of this study are in line with research conducted by Matanlukab et al. (2013) which concludes that the use of the Teaching Module in highly motivated students is better than that of students with low motivation. It further explained that the use of the module of learning can improve high-level thinking skills among students, the use of the module also enables students to achieve better performance in the exam, especially on the form of the essay. In addition, the use of learning modules can overcome learning problems such as lack of interest, concentration, skills in critical thinking and creative.

For Students with Low Learning Motivation, Learning Outcomes of Science Between Student Groups Teached with Lower Modules Compared to Student Groups Taught by Textbook After Controlling Initial Ability

Calculation of Tukey test as shown in Table 4:15, shows that the value of Qhitung (A1B2; A2B2) = 2.79 <Qtabel (α = 0,05), (11: 4) = 4,26, means that Ho accepted and H1 rejected. Thus it can be concluded that there is no difference of science learning outcomes between groups of students taught by using learning modules with low learning motivation (A1B2) with groups of students who are taught by textbooks of learning with low learning motivation (A2B2) after controlling the initial ability.

Based on the calculation of average corrected science learning outcomes group of students who were taught by using learning modules and have low learning motivation of $\bar{Y}$ _ (res) A1B2 = 69.94 higher than the group of students who taught using textbooks of learning with low learning motivation with average corrected by $\bar{Y}$_ (res) A2B2 = 68.41.

Thus the hypothesis stating that the learning outcomes of students who were taught by using learning modules were lower than students who were taught using textbooks for students who had low learning motivation after controlling the initial ability was not proven. These results are in line with other studies conducted by Matanlukab et al. (2013) which suggest that the use of learning modules has the same effect as traditional approaches to students with low cognitive level.

Conclusion:-

Based on the results of research, data analysis, hypothesis testing and discussion of research results on the influence of learning resources and motivation to learn the results of science learning by controlling the initial ability, the following conclusions are drawn:

1. Science learning outcomes between students using the learning module is higher than that of students using learning textbooks after controlling initial ability. This is evidenced by the results of ANKOVA calculations on the source of variance between A obtained Fhitung of 7.51>Ftabel price o f 4.09 at α = 0.05. While the results of descriptive data analysis showed that the results of learning groups of students who were taught with learning modules obtained an average $\bar{Y}$ _A1 = 64.20, while the group of students who were taught with textbooks learning obtained an average $\bar{Y}$ _A2 = 62.61. Thus, module learning resources can have a better impact on the improvement of science learning outcomes.
2. There is an effect of interaction between learning resources and learning motivation on science learning outcomes after controlling initial abilities. This is evidenced by the results of ANKOVA calculations on the source variance A x B obtained Fhitung = 6.08>Ftable = 4, 90 at α = 0.05. Thus learning resources and learning motivation are two factors that determine student learning outcomes of students after controlling initial abilities.
3. For groups of students who have high learning motivation, science learning outcomes between groups of students taught with modules are higher than groups of students taught with textbooks after controlling for initial abilities . This is evidenced by the Tukey test showing Qhitung (A1B1; A2B1) = 5.22>Qtabel (α = 0,05), (11: 4) = 4.26, and the average residual test result is $\bar{Y}$_ (res) A1B1 = 72.45> $\bar{Y}$_ (res) A2B1 = 66.40. Thus, to improve the learning outcomes of science students who have high learning motivation, they are more suitable to be taught using modules.
4. For groups of students who have low learning motivation, there is no difference in IPA learning outcomes between groups of students taught using modules and those taught using textbooks after controlling initial ability. This is evidenced by the Tukey test showing Qhitung (A1B2; A2B2) = 2.79 <Qtabel (α = 0,05), (11: 4) = 4,26, this means that there is no difference in learning outcomes between students taught using modules and textbooks on students with low learning motivation . Yet classically, the average residual test results obtained value $\bar{Y}$_ (res) A1B2 = 69.94> $\bar{Y}$_ (res) A2B2 = 69.63. Thus, to improve the learning outcomes of science students who have low learning motivation, in addition to using their modules can also be taught using textbooks.

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