LEARNING RESPONSE OF JOURNEY LEARNING COOPERATIV LEARNING AND LEARNING MODULE IN EDUCATION MEDIA LEVEL

Suparno[1], Bulkia Rahim[2], Zonny Amanda Putra[3], Junil Adri[4], Jasman[5]

[1] Majoring Of Mechanical Engineering, Faculty Of Engineering, University Of Negeri Padang

ABSTRACT: Factors of learning methods that are less appropriate in the delivery of materials and the selection of learning media causes less well-received learning objectives by students. So this study looks at the student's response to the method of cooperative learning Jigsaw Type using modules in the course Media Education. This study aims to see the response of students in the application of cooperative learning method of jigsaw type using module in educational media course. The method used in this research is experiment by disseminating the instrument to the students who take the educational media course that apply the cooperative learning Jigsaw Type and using the learning module. Research subjects are students who take courses in education media Semester July-December 2017. Data type is primary data where data obtained from result of research from student. The instrument or measuring instrument used is a questionnaire. Descriptive data analysis techniques to describe the response of students to the method of cooperative learning Jigsaw type using modules in the course Media Education. The results obtained from this experimental research are Generating an Education Media Module. Based on the findings of this study concluded that the response of students to the method of cooperative learning Jigsaw Type using modules in the course Media Education is very positive. With the application of cooperative learning method Jigsaw Type using active student module in learning.

Keywords: Student Response, Learning Method, Jigsaw Type Cooperative, Module, Education Media

1. INTRODUCTION

The mandate of Law No. 20 of 2003 states that education is a conscious and planned effort to create an atmosphere of learning and learning process so that learners actively develop their potential to have the spiritual power of spirituality, self-control, personality, intelligence, noble character and necessary skills for himself, society, nation and state. Thus education is expected to develop the potential of learners, so that learners can solve various problems faced. The higher the quality of education, it will produce a higher quality of human resources. With good education is one way to improve the welfare of the nation.

The mission of education in Indonesia is the intellectual life of the nation. This can be done in the development of education that is shown to make changes and renewal of the future kemasa. As the curriculum develops the changes and renewals are done to achieve a better level of education. Development of development of facilities to support more effective education. One of the existing education in Indonesia is Universitas Negeri Padang (UNP).

Universitas Negeri Padang (UNP) was established on September 1, 1954, which was originally named Teacher Education College (PTPG) which in 2015 consists of several faculties including: Faculty of Education (FIP), Language Faculty, Arts and Sasra (FBSS) , Faculty of Mathematics and Natural Sciences (FMPA), Faculty of Social Sciences (FISF), Faculty of Science (FIK) Faculty of Economics (FE), Faculty of Engineering (FT) and on October 13, 2015 also has established a new Faculty namely Faculty of Tourism and Hospitality. State University of Padang as an educational institution that provides D3, S1, D4, S2 and S3 degree programs that prepare and to enter the world of work with knowledge and skills.

Faculty of Engineering (FT) is a Department of Mechanical Engineering as a master scanner and a skilled, skilled and mandatory Bachelor of Educator who needs to equip learners with the knowledge and skills in accordance with the competence of each skill. Masters of Mechanical Engineering since 2014 apply the curriculum structure of competencies related to KKNI in 2013, both S1 and D3.

Competency-based curriculum structure related to KKNI in 2013 Undergraduate Program of Mechanical Engineering Education there is the structure of subjects are: 1). MKU (General Course), 2). MKDK (Basic Course of Education), 3). MKBK (Subject Areas of Expertise), 4). MKKPP (Course Skills Process Learning), 5). MKPP (Education Development Eye). In the Learning Process Skills Course, one of them is the Education Education course which consists of 2 credits, 1 credits of Territory and 1 credits of Practice.

Some learning process of course Media Education is simple example of lecture method by relying on explanation from lecturer so less involving learners actively in learning process. The

learning process is certainly influenced by several factors that support among others learners, lecturers, facilities, environment and media teaching / education.

Educational factors that are less appropriate in the delivery of materials and the selection of instructional media causes lesson objectives are perfectly acceptable by students. Educational factors here are defined as the facilities needed in the learning process such as learning media used by lecturers. It is important that the selection of instructional media is the material needed by lecturers in interaction with the students.

Student learning process is influenced by learning media both on campus and at home. Generally students only focus on campus course, after at home focus their learning is reduced due to other factors such as working to play and others. This affects the learning process of students, understanding of students in deepening the discussion of learning so that the impact on student learning outcomes.

Lack of teaching materials or learning resources is one part of the cause of the not maximal understanding of students in the learning subjects Media. For that need to add references and reproduce teaching materials Media Education to support the ability of students in understanding the lesson. The result of the Semester of July-December 2016, which has two sections of the Education Media course, the student's competence achieved is still not maximal as shown in Table 1.1.

Table 1.1. Value Semester Course Media Education Semester July-December 2016.

No	Section Code		Education Media of Course	
	Numeric Value Interval	Letter Value Interval	Frequency (f)	Percentage (%)
1	0 – 39	E	5	8,47
2	40 – 49	D	0	0,00
3	50 – 54	C-	1	1,69
4	55– 69	C	5	8,47
5	60 – 64	C+	5	8,47
6	65 – 69	B-	13	22,03
7	70 – 74	B	13	22,03
8	75 – 79	B+	11	18,64
9	80 – 84	A-	6	10,17
10	85 – 100	A	0	0,00
amount			59	100,00
Small Value 64, Value under B-			16	27,12
Great Value 65, Value above C +			43	72,88

Based on Table 1.1. of the 59 students, only 43 students (72.88%) who scored 65 upwards or B- upwards. Of the students under 65, there are 16 students (27.12%), actually one-third of the first semester students of class of 2014 who are under 65 and below 40 or E score as much as 8.47%

Students of Mechanical Engineering Department come from various high school (senior high school) such as: Senior High School (SMA) both from the Department of Natural Sciences (IPA) and come from the Department of Social Sciences (IPS), Vocational School (SMK) both from Department of Mechanical Engineering, Electrical Engineering, Electronic Engineering, Building Engineering and others and Madrasah Aliyah (MA). Students find difficulties in understanding the material given so as to maximize and overcome the slow understanding in the course then the students need other references to improve understanding in learning Media Education. Origin of Mechanical Engineering Department students of 2016 to take the media education courses Semester July-December 2016 can be seen in table 1.2.

Table 1.2 Data Department of student origin in the course Media Education Semester July-December 2016.

No	Major	Number of Students	Percentage (%)
1	IPA	58	61,05
2	Multimedia	1	1,05
3	Technical Information	2	2,11
4	Light Vehicle Engineering	8	8,42
5	Mechatronics	2	2,11
6	Machining Technique	10	10,53
7	Welding Technique	1	1,05
8	Automotive Engineering	7	7,37
9	Mining Engineering	1	1,05
10	Computer network Engineering	3	3,16
11	Motorcycle Engineering	1	1,05
12	Building Image Technique	1	1,05
	amount	95	100,00

Based on Table 1.2. from 95 students, there were 58 students or 61.05% came from SMA IPA. Students who come from SMK Engineering Department of Engineering 10 students or 10.53%. Students who come from SMK Welding Engineering Department 1 student or 1.05%. The rest of SMK other majors, it can be concluded that students of Department of Mechanical Engineering sebahagian not familiar about Mechanical Engineering, especially in the learning media education. So much needed media support for learning

The learning process will be done in the previous locale using the lecture method which resulted in the lack of student activeness. The strategy in teaching determines a student's success in learning locally. To overcome these symptoms and problems researchers try to use learning methods that make students more active. To support the students' activity increased, the Jigsaw cooperative learning method was used. Researchers choose cooperative learning method Jigsaw model because in the learning process students can develop themselves in groups, mutual opinion, not only fixated in one group as in other methods and in this Jigsaw model all students in groups are required actively so that not dominated one or two students only. Another factor that makes researchers choose Jigsaw learning model is:

a. This learning model can encourage students to express their ideas verbally and compare with their friends' ideas. This is especially meaningful when in the troubleshooting process.
b. This learning model can train students to express opinions, improve communication skills.
c. This learning model can help motivate students and improve the ability to think creatively in interacting during group learning.

(1) states that, "Jigsaw is one type or model of flexible cooperative learning". Much research has been done in relation to the cooperative learning model on the basis of Jigsaw. The research has consistently shown that the students involved in this Jigsaw Model Cooperative learning achieve better performance, have better and more positive attitudes toward learning, in addition to mutual respect for differences and opinions of others.

Based on the background of the above problems researchers want to see the response of students in the application of cooperative learning jigsaw and learning modules in the education media.

2. HEADINGS

2.1. Response

(2) the response is an activity (activity) of the organism is not merely a positive movement, every type of activity (activity) caused by a can also called a response. In general, responses or responses can be interpreted as a result or impression gained from observations about the subject, event or relationships obtained by summing up information and interpreting messages

(3) the term response in communication is a communication activity that is expected to have results or in after communication called effect. A communication activity that gives effect in the form of response from communication to message launched by communicator

2.2. Learning Jigsaw Model

This model was developed and piloted by Elliot Aronson in Rusman. In this jigsaw model was published in 1978. The meaning of Jigsaw in English is a jigsaw and some even call it by the term puzzle that is a puzzle composing pieces of images. Cooperative learning jigsaw model takes the pattern of how to work a saw (zigzag), ie students do a learning activity by working with other students to achieve common goals.

Cooperative learning Jigsaw is one model of cooperative learning that encourages students to actively and assist each other in mastering the subject matter to achieve maximum performance. As expressed by (4) that, "Cooperative learning Jigsaw model is a model of cooperative learning by means of students learn in small groups consisting of four to six people are heterogeneous and students work together positive and responsible each other independently and responsibly."

Jigsaw model cooperative learning model of this student has many opportunities to express opinions and process information obtained and can improve communication skills, group members are responsible for the success of the group and the completeness of the material part that is learned and can convey information to other groups.

2.3. Education Media

Educational media is a medium whose use is integrated with the purpose and content of teaching that is usually intended to optimize the achievement of a teaching and learning activities (Santoso S. Hamidjojo).

Learning media media contains material about communication theory and learning, media concepts and principles, types and kinds of media, learning media characteristics, organizational systems and media selection, advantages and disadvantages, two-dimensional non-projection learning media, print media, three dimensional media / model , projection media, photography, computer-based media, Audio Visual media, and interactive multimedia. Designing, creating and displaying media learning

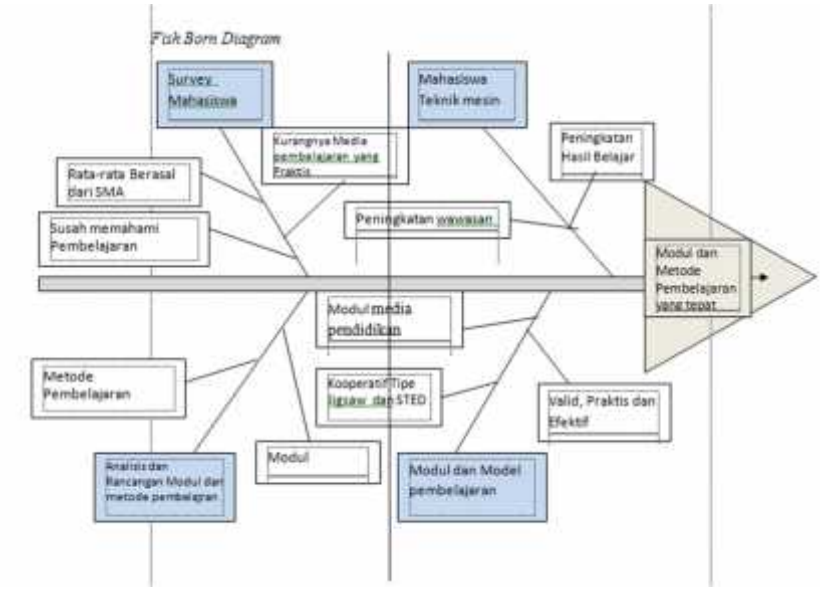
Learning using modules is similar to conventional learning. In conventional learning, learners can only information or material lessons from teachers while on learning using the module, learners can be two sources, namely the first of the teacher and the second of the existing module. So the learning using the module is teacher-centered and supported by the use of learning modules, learning is obtained from teachers and in addition to the modules already provided. If learners forget about the material can learn from the existing module. This means that learning by module

learners can learn or can learn from the teacher and from the module.

(5) conventional learning method is a traditional learning method or also called lecture method, because since this method has been used as a means of oral communication between teachers and students in learning and learning process. In learning history the conventional method is characterized by a lecture accompanied by explanations as well as the division of tasks and exercises.

Learning on conventional methods, learners listen more to the teacher's explanation in front of the class and carry out the task if the teacher gives the exercise questions to the students. Commonly used in conventional learning include lecture method, question and answer method, discussion method, assignment method.

3. RESEARCH METHOD



Gambar 3.1. *Fishbone Diagram*

4. RESEARCH FINDINGS

This data is obtained through a questionnaire given to students to see the response of students learning media education cooperative jigsaw and learning modules. The results obtained as shown in Table 4.10. the following:

Table 4.1. Student Response Data of Jumbsaw Cooperative Learning and Learning Module on Education Media Course.

No	Rated aspect	Average	Information
1.	By using this model jigsaw model cooperative learning module I can know the purpose of learning that I do.	4,85	Strongly agree
2.	I can learn jigsaw model cooperative education medium with module.	4,24	Strongly agree
3.	Using a jigsaw type cooperative model module can help me learn independently.	7,27	Strongly agree
4.	I easily use this jigsaw model cooperative learning module	1,21	Strongly agree
5.	Explanations / drawings / tables in the module can make it easier for me to understand the concept of learning activities.	4,85	Strongly agree
6.	I easily read the text and sentences that exist in this jigsaw type cooperative learning media education module	2,42	Strongly agree
7.	I easily understand the language used in this jigsaw type cooperative learning media learning module.	1,82	Strongly agree
8.	Jigsaw model cooperative model	3,64	Strongly agree

No	Rated aspect	Average	Information
	modules are designed according to the material.		
9.	The jigsaw type cooperative model module developed can improve my reasoning to understand the learning materials	6,06	Strongly agree
10.	This jigsaw type cooperative learning model helps me make it easier to understand educational media materials.	3,03	Strongly agree
11.	This jigsaw type cooperative learning model motivates me to learn educational media.	1,82	Strongly agree
12.	This jigsaw type cooperative learning model attracted my interest to learn the media of education.	2,42	Strongly agree
13.	This jigsaw model cooperative learning module makes me more active in learning	83,03	Strongly agree
Percentage of Assessment		3,59	Strongly agree

Table 4.1. obtained the average result of student responses to learning cooperative jigsaaw learning module in the education media course that is 83.59%, so it can be concluded that the student response to learning kooperativ jiqsaaw and learning module in the media education is very positive.

5. DISCUSSION

Based on the result of research data analysis, it was found that student's response to jigsaw cooperative learning and positive learning module, because with jigsaw cooperative learning model and learning module can increase students' knowledge in group learning and self study

Another factor that facilitates lecturers is by cooperative jigsaw method and learning material module contained in the learning module is in accordance with the characteristics of students and the concept of Synopsis and SAP. The easy-to-use process, both for lecturers and students, is likely to increase the effectiveness and efficiency of time in the learning process so that learning will be easy to implement, interesting and fun for students. This means the implications of cooperative learning jigsaw and this learning module can be used to convey and improve the understanding of lecture materials in the educational media courses.

The importance of applying jigsaw cooperative learning and learning module in the learning process of educational media course, because the developed method can foster creativity, innovation of educator in creating a fun learning atmosphere, foster interest and desire of student to learn by lecturer direction.

6. CONCLUSION

Based on the result of research data analysis, it was found that student's response to jigsaw cooperative learning and positive learning module, because with jigsaw cooperative learning model and learning module can increase students' knowledge in group learning and self study.

7. REFERENCES

(1) Lie, Anita. 2002. Kooperatif : mempraktikkan kooperatif diruang-ruang kelas, Jakarta: Grasindo.
(2) Djalaludin Rahmat. 1999. *Psikologi Komunikasi*: Bandung. Remaja rosda karya
(3) Ahmad Subandi. 1982. Psikologi Sosial: Jakarta. Bulan Bintang.
(4) Lie, Anita. 2002. Kooperatif : mempraktikkan kooperatif diruang-ruang kelas, Jakarta: Grasindo.
(5) Djamarah, Bahri, Syaiful dan Zain, Aswan. 2010. *Strategi Belajar* Mengajar. Jakarta: Rineka Cipta.