

Implementation Model Creative Group Investigation in Family Welfare Education Study Program (Fashion)

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Abstract—The purpose of this study is to implement tailoring learning model using creative group investigation in the family welfare education (fashion) study program. This research uses Rn D research method with qualitative and quantitative. Subjects of the research were students of Family Welfare Education (Busana) Negeri Padang State University. The data were analzed qualitatively and quantitatively. The results of the study illustrate that students collect data, interpret through discussion, and synthesize individual contributions into group products. Lecturers present general topics for the class, which are divided into groups to investigate and report on sub-topics. After the subtopic is selected, the group solves the subtopics as a task for individuals, and the subgroup carries out assignments to prepare group reports. Lecturers are facilitators and resources. The use of investigation groups can be very effective for high-level thinking skills and can make a very effective method in class. Students are invited to think creatively based on their academic knowledge in order to seek to interpret and synthesize individual contributions into products.

Keywords—Implementation, Creative Group Investigation

I. INTRODUCTION

In order to face the globalization era that is full of challenges today, improving the quality of human resources is an increasingly important development focus. There are three main challenges faced namely global challenges with competition, internal challenges and the challenges of Vocational Education itself. Therefore, to face some of the challenges that are quite heavy, education is needed that can bring people apart from various obstacles in education activities themselves.

One of the fashion courses is Tailoring, which is a high-level course for students, because they study after getting a basic course. Tailoring courses are decisive courses for undergraduate students who want to take industrial practice or field practice (teaching practice), because with the knowledge and skills possessed by students after learning Tailoring, students will have the competencies needed to make quality clothing, including also the application of the application to other fashion courses.

But in the Tailoring course the opposite occurs. Based on temporary observations and teaching experience, where students are less active in learning, students only receive information and material explanations from the subject lecturers. Then a temporary interview was conducted with several students who had attended the course, "students got difficulties in the practice of making Tailoring clothing that

was comfortable for the users, where the clothes made were often inappropriate for the users, because the practice for Tailoring clothing was the first thing we did. , and the level of work is quite difficult, such as constructing a suit pattern, sewing techniques that are not used yet, for the selection of materials we are still in doubt, because in that market a lot of sealing materials are sold, so which one is right we don't understand. This also causes low motivation to learn and do practical tasks by students.

Inappropriate learning approach chosen by lecturers results in less effectiveness learning in the classroom. Another problem is students have low prior knowledge. It makes the class become passive. Judging from the competencies written in the syllabus there are those that have not been taught before, such as the formation of directly constructed patterns, which students have never done before. In learning due to limited time, the lecturer gave a job sheet with material explanations globally. During this time learning still uses conventional methods, which causes some students lack to practice, especially in pattern making, and sewing techniques specifically for arm, collar and lining installation. Thus the learning process in the field of Clothing, especially the Tailoring subject in the Family Welfare Science Department, has not been implemented optimally.

Based on the above phenomenon, so that students want to learn well, have the motivation to work in groups / together find new things in understanding the material being taught, especially in the practice of making various fashion models, making patterns that are fast and appropriate for the wearer, and willing to submit opinions, and discussing in class need to find a solution so that the learning process is more meaningful for students, as well as an effort to improve the performance of graduates in answering global challenges. The lecturers can use various learning models. One of the various learning models that can be done to overcome learning problems / solutions is the development of Creative Group Investigation learning models in the Tailoring course. Through the development of the Creative group investigation model requires students to have good skills in group process skills (group process skills) with 3 main concepts, namely: research or inquiry, knowledge or knowledge, and group learning dynamics or the dynamics of the learning group [1].

The advantage of developing the Creative group investigation learning model in the Tailoring course is because it is used in Fashion learning that requires creative from students. The development of this model is also a learning concept that helps lecturers associate between the Tailoring Clothing material that is taught, with the real-world

situation and encourage students to make the connection between their knowledge and its application in daily life as a society. Students will try to observe a number of well-known tailors, how the fashion making process is carried out with Tailoring techniques starting from designing models, students will also make observations to the market to find and select key ingredients and supporting materials in accordance with the theory, discuss with students to determine pattern construction, sewing techniques and correct completion. In this case students are required to be creative, because they will also understand and try to apply with the knowledge acquired and practice in groups, discuss together until they find the best form of clothing made.

Based on the above phenomenon, the accuracy of the lecturer in choosing the learning model is expected to reduce the failure of students in understanding the subject matter or completing the task independently. Therefore, it is necessary and important to conduct research with the title "Implementation of Creative Group Investigation Learning Models in Tailoring Courses."

II. METHOD

The type of research used is research and development (R&D). Based on the expert opinion above, then research and development is a type of research that is widely used to solve practical problems in the world of education, which refers to what procedures and methods teachers / lecturers do to improve the learning process which is their responsibility to produce effective learning.

Some development models include procedural models, conceptual models, and theoretical models. Among the three models, this study chose procedural models. The procedural model is a descriptive model, where the steps followed produce a product. The procedural model developed based on the adoption of the Group Investigation model on Tailoring learning that will be tested for validity, and practicality, and its effectiveness for Clothing students. Research Procedures Based on the problems and objectives of the study, the procedure for developing Creative Group Investigation learning models in the Tailoring course was carried out by adopting the ADDIE model consisting of five stages, namely analysis, design, development, implementation, and evaluation [2].

The intended implementation is the stage of realizing the forms of action in the learning process in accordance with the validated Tailoring material products, namely: Tailoring learning model books, student books, Lecturer books (Learning guidelines). This is intended to determine the effectiveness of its application to the learning outcomes of Tailoring. At this stage the implementation of the model was carried out through quasi-experimental design research.

The population in this study were all students who took Tailoring courses in the Family Welfare Department Study Program in Clothing Fashion Department, which consisted of 40 students. This research used total sampling. The experimental class will be taught with a creative Group Investigation model on Tailoring learning and the control class is taught with conventional Tailoring learning.

The research instrument for the development of models of creative group investigation models was questionnaires,

observation sheets, and interviews. The use of this questionnaire is based on the assumption that through questionnaires, validators can do an assessment of the learning model developed. The research questionnaire contains questions about indicators for the development of learning models. Assessment is based on the rating scale model. Questionnaires used in this study are prepared in following the steps a (1) compile a grid according to the indicators and sub-indicators specified, (2) compile a statement in accordance with the lattice that has been made compilation of the questionnaire is done carefully so that each statement item have good construct validation.

Observations were made to determine the development of the Creative group investigation model in planning and improving learning in the Family Welfare Department Clothing Education study program. Also observation was the learning situation in class when the lecturer explained Tailoring learning with the help of Creative group investigation model. Interviews were conducted to obtain information about the effectiveness of the development of the Creative Group Investigation model for planning and improving fashion learning at the Family Welfare Department. This information can be obtained from interviews with Fashion Lecturers, PBM Lecturers, students who learn Tailoring with the relevant lecturers and practitioners who evaluate the learning model.

To measure the feasibility of the Investigation Group approach in this study, quantitative method, using rating scale and qualitative methods with persistence of observation and triangulation were used. Quantitative is not limited to measuring attitudes but to measure respondents' perceptions of other phenomena, such as the scale of socioeconomic status, institutions, knowledge, abilities, process activities and others [4].

III. RESULT

The implementation phase is the stage where the product is developed and which has been validated by the validator and revised. It is applied in the learning process. The implementation of the model was carried out on students of the 2013 A fashion dress program, which was carried out by the lecturers of the course, namely: Hadiastuti, S.Pd, M.Pd. Before the model is implemented first the researcher gives an understanding to the lecturer about the model implementation instructions in the classroom learning process. Besides that, lecturers were given all development products which consisted of: model books, lecturer books and student books to better understand the implementation of the model. In this implementation phase the experimental class is the 2013 A fashion class and the 2013 fashion dress class control class.

The evaluation (appraisal) stage is the last activity in the development of Creative Group Investigation models in accordance with ADDIE steps. Researchers conducted an evaluation consisting of learning processes and results. Process validation aims to find out the practicality of the model and evaluation of learning outcomes aimed at seeing the effectiveness of the model. After testing the requirements for data analysis and knowing that the data is normally distributed. to test the effectiveness of the application of the Creative Group Investigation model developed in the Tailoring learning process. Practicality and value of ICC

lecturer books and student books can be seen in the following table: The practicality of the lecture book used in the tailoring learning process takes place. On the easy-to-understand aspect with an average of 4.3 in the practical category, in the interesting aspect with an average of 4.60 in the prakatis category, in the efficient aspect with an average of 4.48 in the practical category. Thus it can be concluded that the lecture book is very practical to use.

Tailoring Learning Outcomes of Students Teaching with Creative Group Investigation Model Implementation Data obtained from the 2013 Fashion Clothing class B student learning outcomes in the KK Study Program for the Family Welfare Department in the 6th semester of the 2015/2016 Academic Year. The number of students studying using 20 Creative Group Investigation models. After obtaining the value of the learning outcomes, it can be seen that the highest score achieved by students is 90 and the lowest value is 68.

Based on the results of data analysis can be stated an average score of 83.2 standard deviation 6.85, median 85, mode 82. Learning outcomes Tailoring Students Conventionally Teaching Learning Outcomes students obtained from the 2013 A Fashion Dress class in the Clothing KK Study Program Family Welfare Department in the 6th semester of 2015/2016 Academic Year, at the time of learning totaling 20 people. From the learning outcomes achieved by students it can be seen that the highest value that can be achieved is 86 and the lowest value is 63. Theoretically has a score range of 23 with the lowest score of 63 and the highest score of 86. Based on the results of data analysis can be expressed an average score of 77.25 deviations standard 6.58, median 79, mode 82. For more details, see the picture below:

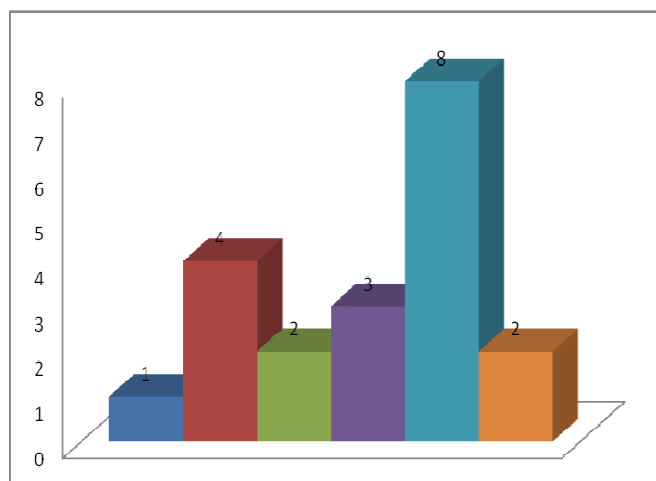


Fig. 1. Graph of Control Class Learning Outcomes Histograms

To see the comparison of the value of learning outcomes in the experimental class using the Creative Group Investigation model and the control class without using the Creative Group Investigation model can be seen in the following table:

TABLE I. STUDENT TAILORING LEARNING OUTCOMES USING THE CREATIVE GROUP INVESTIGATION MODEL COMPARED TO WITHOUT USING THE CREATIVE GROUP INVESTIGATION MODEL BASED ON MEANS AND VARIANCE CALCULATIONS.

VARIABLE	LEARNING PROCESS	
	Model	Without a model
N	20	20
Highest Score	94	86
Lowest Score	68	63
Amount of Value	1664	1545
Average	83.2	77.25
SD	6.85	6.58

The results of this study illustrate that the tailoring learning process by using the creative group investigation model generally shows good results as seen from the increase in the average value of students in this material both in the experimental class, 83.2 and control class 77.2 . In addition there are good responses from students in learning they feel interested in learning because in learning there are students able to find something in working together in their group Lecturers as material validators also gave a positive response to the tailoring learning model implemented even though there were still many improvements to the model said worthy of answers to questionnaires and interviews conducted. By looking at several indicators in the evaluation of the implementation of tailoring learning models, namely: 1) design selection, 2) tailoring fashion materials, 3) tailoring fashion patterns, 4) editing, 5) sewing techniques, 6) fittings. Based on the analysis of research findings, the implementation of the creative group investigation model in tailoring learning in fashion students.

The results of each item in point 1, as many as 9 people (60%) strongly agree categories, 6 people (40%) agreed categories, in point 2, 9 people (60%) agreed categories and 3 people (20%), strongly agree, 2 people (13.3%) and 1 (6.7%) category disagree. In point 3, 9 people (60%) agreed categories, 6 people (40%) categorized strongly agreed and in point 4, 11 people (73.3%) strongly agreed, 4 people (26.7%) agreed. Tailoring fashion material In the study will be seen about tailoring fashion material in terms of: material does not always contain elements of wool, the texture of the material is not rigid and transparent, the selection of pastel colors and motives one of which is the shape of an animal.

In the study will be seen about the tailoring fashion pattern in terms of: size, according to the design and broken lines pattern in accordance with the design, in item 1, 13 people (86.67%) strongly agree category, 1 person (6.67%) category agree, 1 category (6.67%) strongly disagrees. In point 2, 11 people (86.67%) strongly agreed, 4 people (26.67%) agreed. In point 3, 8 people (53.33%) strongly agreed, 6 people (40%) agreed. Cutting in the research will be seen about cutting in terms of: time of cutting does not have to pay attention to the direction of fiber and material motifs, according to the shape of the pattern, and cutting according to the pattern limit. Can be seen in the following table: in point 1, 6 people (40%) very disagree category, 3 people (20.0%) strongly agree category, 2 people (13.33%) agree category, 2 people (13.33%) disagree category, 2 people (13.33%)

disagree category. In point 2, 7 people (46.7%) agreed categories, 6 people (40%) strongly agreed categories, 1 person (6.7%) disagree categories, 1 person (6.7%) categories disagreed. In point 3, 8 people (53.3%) agreed categories, 7 people (46.7%) categorized strongly disagree.

Sewing techniques in the study will be seen about sewing techniques in terms of: preparation of tools before sewing, use of pressing, installation of coatings in accordance with the pattern, and installation in accordance with the shape. Based on the analysis of the research findings above, it can be seen that the use of creative group investigation learning model as a whole agrees to be used. This is in accordance with the students' opinions about the understanding of students with the use of the model saying that: "Yes, I am happy to understand because it is not only relying on lecturers but can share with friends." Then proceed with the student statement, saying that: Like what? What kind of form? "Which underlies the cooperation that is the same as having the goal of getting the right tailoring knowledge and spelling out opinions." Then the other students gave their opinions saying that: "After learning through this model I understand enough about the techniques and patterns for making tailoring clothing."

Based on students' understanding of tailoring learning by using the creative group investigation model students are easier to understand the material delivered by lecturer and they are also able to work together in the learning process and continued with whether they are happy with the learning and increased cooperation in the learning process, students say that: "Yes, I am happy to understand because not only relying on lecturers but can share with friends" then connected by friends "I like tailoring courses because I have knowledge newer ones.

Then the researchers asked by increasing the involvement and seriousness of students in learning, students said that: "yes, in tailoring learning because of group assignments made me go directly to the tailoring manufacturing industry" "this model focuses more directly on space than the group" Next student responses with the application of the creative group investigation model, said that: "with the model more creative, more knowledge gained, cooperation is stronger" "yes because we can be responsible for working on tailoring and make learning more creative" Application of the Creative Group Investigation model is average students whose experimental class agrees with the application of the model Because they think learning is more creative and meaningful, can work with friends, and the material is also found by students themselves so students are easier to understand the material they get, so do cents only provide reinforcement of the material they meet. Besides that with the investigation group they can be creative as creative as possible in accordance with the student's own idea so that it will arouse children's creativity.

By doing educational innovation by creating a model in Tailoring learning through Creative Group Investigation models. the students directly involved in learning, thereby reducing the dominant role of the lecturer. In Tailoring learning it was found that the principle of Tailoring learning was the use of the Creative Group Investigation model. As noted The Network of Scientific Inquiry Resources and Connections [5] describes the Group Investigation: "One way

to encourage and guide the student involvement in learning. Students actively influence the characteristics of events that occur in class. By communicating freely and working together to emphasize and carry out investigations on the topics they choose, they can achieve more results than individuals. The success of a group is a manifestation of the contribution of each group member, but the end result is intellectually richer than when done individually by the same student. This principle leads to several effects, namely: supporting cooperation and listening. in the learning process are interdependent requires linking, merging, critical and creative thinking, doing hands-on learning, formulating clear goals, setting high standards perform tasks that are meant for all , respect everyone and use assessment methods that connect learning with the real world. So the practice of interdependence fosters meaningful relationships [6] state the investigation group was: "students gather data, interpreted data through discussion, and synthesize individually contributions into a product group. The teacher presents a general topic to the class, which is divided into groups to study and report on subtopics [7] After subtopics are chosen, groups break their subtopics into tasks for individuals and subgroups to carry out their assignments to prepare group reports [8] The teacher is facilitator and resource. The use of GI can be particularly effective for higher-order thinking skiing and can be very effective methods in classes ". This means that students collect data, interpret through discussion, and synthesize individual contributions into group products. Lecturers present general topics for the class, which are divided into groups to investigate and report on sub-topics. After the subtopic is selected, the group solves the subtopics as a task for individuals, and the subgroup carries out assignments to prepare group reports [9] Lecturers are facilitators and resources. The use of investigation groups can be very effective for high-level thinking skills and can make a very effective method in class ". Students are invited to think creatively based on their academic knowledge in order to seek to interpret and synthesize individual contributions into products [10].

The main target of the investigation group is to encourage students to think high, gain career skills, and develop their creativity. group investigation helps students find meaning that is self-regulated, work together, think critically and creatively, respect others, and achieve high standards [11].

IV. CONCLUSION

Implementing the creative group investigation learning model, assessing the implementation of creative group investigation learning model. The development of Creative Group Investigation learning model is declared effective after an effectiveness test is conducted by looking at the aspects of activeness, attitudes and student learning outcomes. With the application of the creative group investigation model, df 38 for the 0.05 level was obtained p-value = 0.008 <0.05. shows that there is a significant difference between the value of learning outcomes and the experimental class with the control class.

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