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Development of Traditional Bun Arrangement Module for 11th Grade Students in State Vocational High School

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Abstract: *The problem in this study is the completeness of student learning in traditional bun arrangement subjects is still unsatisfactory, students lack the initiative to find information about traditional bun arrangement to support learning, students lack understanding of the basic topic oftraditional bun arrangement, students are less skilled in making traditional bun arrangement techniques and the limitations time and resources for learning during learning activities in the delivery of traditional bun arrangement.Based on these problems, this study aims to develop a valid, practical and effective discovery learning module based on subjects in traditional bun arrangement. This development model plompis applied. There are three phase, namely initial investigation, prototyping and assessment. The evaluation method used is formative evaluation consisting of self evaluation, expert review, individual evaluation, and small group evaluation. The research instruments used were interview sheets, questionnaires in the form of validity in practicality sheet and objective. Validation results obtained as very high criteria. The practical results by students in small group and on field test obtained as high criteria, while the level of practicality by teachers obtained as very high. The result of hypothesis test show that there was a significant difference between the studentslearning outcomes of the experimental and the control class in the school. The result shows that the traditional bun arrangement module based on discovery learning has fulfilled the valid, practical and effective criteria.*
Keywords: *development; module; traditional sanggul arrangement; discovery learning; plomp*

I. Introduction

The formal education school in vocational education is vocational school. State Vocational High School 10 Medan is one of Vocational Schools in Medan. This vocational high school (SMK) consists of various majors including culinary, fashion, beauty and multimedia fields. State Vocational High School 10 Medan has the determination to make students who are creative, innovative and able to compete nationally and internationally through the competencies possessed by students.

One of the hairstyling programs for students of State Vocational High School 10 Medan is to study material and practice about traditional bun arrangement. The type of traditional bun arrangementstudents will learn consists of 12 types of traditional bun arrangementthat have been standardized. In traditional bun arrangementsubjects students are required to explain the history of traditional bun

Arrangement, describe the shape and design of traditional bun arrangement, and explain the functions and purposes of using traditional bun arrangementornaments and accessories, and are able to carry out traditional bun arrangement.

Learning this traditional bun arrangementfor some students is considered difficult learning. Student difficulties due to limited learning time, learning resources, most learning resources in the form of *jobsheet hand outs* and *power point slides* from the teacher. Lack of mastery of the material described , when the practice of traditional bun arrangementstudents

must know all types and ornaments that will be used. But in reality, there are still many students who cannot remember correctly all types and ornaments that will be used.

This is evidenced by the total student total of 53 students consisting of two classes. 11thA grade students strength is 27 and 11thB is 28. There were 28 students who had not reached the Minimum Completion Criteria (KKM) students who found it difficult to achieve mastery learning at State Vocational High School 10 Medan, which was 75 for traditional bun arrangement. (Sriwidiawaty, 2018)

It is unfortunate if students do not get satisfactory grades because they remember the proficiency in forming traditional bun arrangementas one of the requirements in the final competency exam and also very much needed in the world of work in hairdressing especially in traditional and national bridal make-up. To achieve this, all students must be able to remember and know the diversity of traditional bun arrangement types , describe the shape and design of traditional bun arrangement, as well as the functions and purposes of using ornaments, traditional bun arrangementaccessories.

After it was observed that some students were not active in learning. They only accept whatever is given and explained by the teacher so learning becomes teacher contered, namely the teacher still explains and the student receives an explanation from the teacher. The fact that there are a number of things regarding traditional bun arrangementlearning above has been revealed that the achievement of traditional bun arrangementcompetence indicators has not been achieved as expected.

According to the results of interviews with researchers and teachers and some students that they need modules as easy-to-understand, complete and interesting teaching materials accompanied by pictures with historical material, forms, designs, ornaments and traditional bun arrangementaccessories, and end with evaluation questions and observations, interviews and observations to specialized traditional bun arrangement training institutions to gain in-depth knowledge so students can remember correctly abouttraditional bun arrangement. With the procurement or development of this module it is very helpful for students in the learning process. So that module development is one step to assist the traditional bun arrangement learning process.

Modules are teaching materials that are arranged systematically so that users can learn independently with or without a teacher (Prastowo, 2013). Whereas according to (Poerwanti, 2017) that the module is teaching material prepared with the aim of providing material for learning in accordance with the demands of the applicable curriculum.

The module you want to develop is a print module. This print module has a positive aspect of its use, that is, modules are easy to obtain, more simple and practical to learn. In addition, the print module can be directly accessed and easily read by users. Unlike the e-module that uses the internet network in opening and using it (Belawati, 2007). In accordance with the objectives of the researchers that the development of this print module can be used in schools - schools that do not have adequate internet facilities. State Vocational High School 10 includes schools that do not have adequate internet and computer facilities .

With the module, students not only can learn in the classroom in the traditional bun arrangementlearning process takes place, but also outside the classroom independently or in groups. One learning model that is suitable for use in traditional bun arrangementis discovery learning.Discovery learningrequires teachers to be more creative in creating situations that can make active learning learners find their own knowledge (Sani, 2013). Learners must learn actively to develop concepts and principles. Event discoverythrough experimentation activities

to increase the knowledge and skills of learners. According to (Hosnan, 2014: 282) discovery learningis a learning method that trains students to learn actively find their own concepts.

The discovery learningmodel emphasizes the experience that exists in the field without always relying on the existing learning theory in the guide to learning books. Discovery learning procedure which generally consists of six steps, namely (1) stimulation, (2) problem statement, (3) data collection, (4) data processing, (5) verification, and (6) generalization(Illahi, 2012). Based on the problems encountered in the traditional bun arrangementlearning, the researcher wants to develop a learning moduleentitled "Development of Traditional Bun Arrangement Module for Students of Class XI In State Vocational School". Furthermore, the formulation of the problem of this study were (1) How to develop a learning module of the traditional bun arrangement Model Discovery Learning (2) how level to the validity, practicality and effectiveness, of early learning module of the traditional bun arrangement Model Discovery Learning.

The purpose of this study was (1) to develop a learning module for traditional bun arrangement with the Discovery Learning Model (2) to measure the effectiveness of the learning module for traditional bun arrangement with the Discovery LearningModel . Modules are a unit of teaching material that is specifically designed systematically that refers to learning objectives as teaching materials independently (Amri, 2013: 98). Understanding modules is also expressed by Munadi(2008: 99) states, modules are learning materials that can be used by students to study independently with the help of as little as possible from others.

Learning models that require students to be more active in discovering their own knowledge are discoverylearning (Sani, 2014: 97). According to Hosnan(2014: 282) discovery learning learningis a learning model that helps students develop thoughts to find, investigate and understand their own concepts so students will be much faster to remember things with the long term.The Discovery Learning Strategy Application Procedure is: a). The first stage is the stimulation of students faced and given to a problem that makes students want to investigate, find out and find out information themselves. b.) Problem identification , From a problem that will be investigated students can find material that is relevant to the learning material. c) Data Collection, Students will conduct an experiment, the teacher provides as many opportunities as possible in finding relevant material. d). Data processing, this activity can be obtained from interviews, observations and so on, then in the final stage it can be interpreted on its own. e). Students must find out the truth of the hypothesis made through data processing. f.) Generalization, the last stage is that students must draw conclusions from a hypothesis made by paying attention to the results of verification.

This research is relevant to the research conducted by Septiana (2015) conducting a study entitled "The development of a traditional bun arrangement teaching module as well as sempolongtattong on the his research are that the traditional bun arrangement module is sempolongtattong on the basic competencies in arranging regional bun for students of proper hairstyling to use. The benefits of learning using modules are able to have a good influence on student activities and have a good influence on student learning outcomes.

Furthermore, the results of the study from Kurnia Meifeta Sari (2014) entitled "Application of Teaching Module Competency to Arrange bun (Up Style) Modification of Headaches in 12th Grade Students of State Vocational Schools 3 Jember". The results of his research are that the use of the Up Style modification module in the traditional bun arrangement PusungTagel modification can improve students' knowledge and skills. The teacher's activities in learning using modules get the percentage of success and activity of students in learning using modules to get a good percentage of achievement.

II. Research Method

This study uses the Plomp model development model. This model was chosen by the researchers because of several advantages, firstly, more appropriate and suitable for the development of learning devices, secondly complete , directed and systematic descriptions and lastly before being tested, the developed learning module was revised itself and consulted first by some experts.

Model Plomp consists of three stages (Plomp, 2013 : 19) , namely:

A. Preliminary research or preliminary research , is the preparation stage consisting of needs analysis, student analysis, curriculum analysis and concept analysis.
B. Prototyping phase or development stage ,is the process of designing and developing learning devices in stages through the formative evaluation stage to evaluate andimprove the prototype developed. Formative evaluation is carried out to obtain information needed by researchers to determine the level of development of the activities being studied.
C. A assessment stage *or* stage of evaluation in the form of semi-summative evaluation to test whether the final prototype or product is in accordance with the criteria of effectiveness.

The design of the study is the provision of treatment to the experimental class and does not provide treatment of the control class. Data collection was carried out with the help of instruments in the form of portfolios used to assess the practice / performance of students after using the traditional bun arrangement module.Product validity is in the form of validation results from modules by experts or experts. Practicality of the product obtained from the results of field trials in the module concerns the practicality and feasibility of the product being developed.

The data sources in this study come from the primary data obtained directly from students taken through the effectiveness of the traditional bun arrangement module developed. Analysis of the effectiveness of the learning data of the traditional bun arrangement module was carried out by the t test, before the analysis prerequisite test was carried out, namely the normality and homogeneity test.

III. Discussion

3.1 Validity Results

The problem in this study is the completeness of student learning in traditional bun arrangement subjects is still unsatisfactory, students lack the initiative to find information about traditional bun arrangement to support learning, students lack understanding of the basic topic of traditional bun arrangement, students are less skilled in making traditional bun arrangement techniques and the limitations time and resources for learning during learning activities in the delivery of traditional bun arrangement.

The results of the validator's assessment provided by five validators were then analyzed with Aiken’s V validity.is divided into four components: content, contruction, languange, graphic design. The design cover is designed using attractive colors so students feel drawn to reading and tudying the module.

Figure 1. *Cover module*

The module cover uses blue, pink and white. The module is designed using Times New Roman writing type. Supporting images used are traditional bun arrangement pictures. The identity of the writer and the name of the supervisor gives information about the author and the supervisor to the module user

Figure 2. *Twelve traditional bun arrangement*

Stimulation phase 1 on activity sheet 1, students are asked to observe the picture. After students can know several forms of bun, students are given text and pictures which are instructions on the form of each traditional bunarrangement in each region with several questions that provide stimulation so that students more easily understand and arouse students' motivation in learning.

Data description of each indicator are given in tables below:

Table 1. The overall results of the module validation aspects

No	Components	Average	Average overall	Category
1	Content	0,95	0,93	Valid
2	Contruction	0,99		
3	Languange	0,89		
4	graphic design	0,90		

Based on the analysis results obtained the average module validation as a whole is 0.93. These results indicate that thetraditional bun arrangementmodule developed is valid. The results of this prototype revision are called prototype II.In general, errors contained in the module are typos. The error is then corrected and the resulting prototype I.

3.2 The Results of the Practicality of Small Group Students (Small Group Evaluation)

Small group evaluation. This small group evaluation was carried out by teaching the traditional bun arrangement material to nine students of class XI of SMK Negeri 10 Medan with high, medium and low abilities. Data description of each indicator are given in tables below:

Table 2. The overall results of the module validation aspects

No	Aspect	Moment cappa	Category
1	Ease of use	0,84	Very high
2	Efficiency of learning time	0,66	High
3	The benefits and attractiveness of teaching materials to students' interests	0,79	High
Overall Average		0,80	High

The results of the student practicality questionnaire showed that the aspect of ease of use has a very high level of practicality, the aspect of efficiency of learning time has a high level of practicality and the aspect of benefits, the attractiveness of teaching materials with student interest has a high level of practicality. Overall results of practicality questionnaire students obtained an average moment kappa of 0.80 with a high level of practicality. The results of the small group evaluation are prototype IV.After an individual evaluation (one to one evaluation) a revision of the module design was carried out, prototype III was obtained.

3.3 The Results of the Practicality of Large Group Student Trials

Questionnaire practicality of student responses filled by 29 students who have learned to use modules. There are several aspects assessed from practicality, namely ease of use, efficiency of learning, the benefits of the attractiveness of teaching materials. Data description of each indicator are given in tables below:

Table 3. The Results of the Practicality of Large Group Student Trials

No	Aspect	Moment cappa	Category
1	Ease of use	0,80	High
2	Efficiency of learning time	0,74	High
3	The benefits and attractiveness of teaching materials to students' interests	0,79	High
overall average		0,79	High

The average acquisition of cappa moments for practicality from student responses was 0.79 with a high level of practicality.

3.4 Practicality Results from Teacher Response Questionnaire

The practicalities of the teacher's response questionnaire were filled by three traditional bun arrangementteachers after learning to use modules. Aspects assessed by the teacher include ease of use, efficiency of learning time, attractiveness of teaching materials, and benefits Data description of each indicator are given in tables below:

Table 4. The results of the practicality of large group student trials

No	Aspect	Moment cappa	Category
1	Ease of use	0,92	Very High
2	Efficiency of learning time	0,85	Very High
3	The benefits and attractiveness of teaching materials to students' interests	0,90	Very High
Overall Average		0,90	Very High

The average acquisition of moment kappa for practicality is 0.90 with a very high level of practicality. The results of the practicality data analysis show that the discovery learning traditional bun arrangementmodule developed is practically used in the learning process.

3.5 Hypothesis test

At the stage of hypothesis testing is done to find out whether there are differences in student learning outcomes between the experimental class and the control class at the pretest-posttest stage.Based on the hypothesis testing, the pretest data obtained t value of 0,000 with t table of 2.004, because t count <t table (0,000 <2.004), and supported by sig value of 1,000> 0.05.While in the posttest data, the value of t count is 8.670 with t table of 2.004, because t_{count}> t_{table} (8.670> 2.004). Then it can be stated that there is a difference between the grades of the experimental class and the control class students through the development of the traditional bun arrangementthe discovery learning module.With the differences in the grades of the experimental and control class students, it can be concluded that the traditional bun

arrangementlearning module developed has been effectively applied to 11th Grade Students State Vocational High School 10 Medan.

IV. Conclusion

This research is a development research that produces a discovery learning module based on traditional bun arrangement for 11th Grade Students State Vocational High School 10 Medan. Based on the results of the study, the following conclusions are obtained:

- This research has produced a product that is in the form of a discovery learning traditional bun arrangementmodule for learning 11th Grade Students State Vocational High School. The module development process was adapted from the Plomp model, this model consists of three stages, namely: (1) preliminary research or preliminary analysis, (2) prototyping phase or design phase, and (3) assessment stage or assessment stage.
- The traditional bun arrangement module developed has been declared valid after being validated by 5 people for material validation, 1 person for language validation and 1 person for graphic design validation. The results of the assessment for material validation, language, and graphic design are declared valid by the validator.
- The traditional bun arrangementmodule that has been developed has gone through the stages of effectiveness testing through tests of student learning outcomes in the form of pretest and posttest. The effectiveness test results state that the traditional sanggul structuring module in the effective category is evidenced by the student learning outcomes that have increased.

The traditional bun arrangement module based on discovery learning for 11th Grade Students Senior High School that have been developed meets valid, practical and effective criteria so that this module can be used as teaching material for teachers and students in the learning process. This research can provide an overview on education providers to improve the quality of learning. The development of this module can be done by other teachers that can add to the teacher's experience in the learning process. The development of the traditional bun arrangementmodule based on discovery learning can help teachers in the learning process that is in accordance with the 2013 curriculum. With this module students can learn independently and find their own concepts.

Based on the development limitations obtained when conducting field trials, it can be suggested that teachers it is recommended that the traditional bun arrangementmodule based on discovery learning can be an alternative teaching material for traditional bun arrangementsubjects. And also for teachers or other researchers who want to use the teaching material for the traditional bun arrangementbased on discovery learning developed, it can be re-analyzed in its application, especially in terms of time allocation and student characteristics.

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