The assessment instrument product of macrame technique in textile craft course

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Abstract. The assessment instrument product of macrame technique in textile craft courses is an instrument that is arranged systematically to determine product accuracy based on established criteria and indicators. The purpose of this study was to make an assessment instrument for evaluating macrame technique products in textile craft courses that can be used as a reference by educators in assessing student work in the form of macrame technique. Quantitative research methods with research and development (R&D) models through preliminary study stages, the design products of macrame technique, production and manufacturing of macrame product valuation tools, validation, revision, and analysis. The results of the validation stage products of macrame technique valuation the assessment instrument show that the "Very Eligible" is used, judging by the evaluation given by the evaluation experts and material experts with an average percentage given of 100% of the evaluation experts and 98.21% of material experts include six indicators, namely types of macrame motifs, function of macrame products, design elements, design principles, use of materials, and completion techniques. The assessment instrument product of macrame technique that have been made can be used as a reference in assessing student work in the form product of macrame technique.

1. Introduction
The assessment is the process of gathering various data that can provide a description of student learning development, explain and interpret the results of measurements (quantification of an object, nature, behavior, etc.), describe information about the extent of student learning outcomes or achievement of competencies (series of abilities) of students [1]. The level of achievement of instructional competencies or objectives of the learning activities that have been carried out can be expressed by value.

A good assessment system is able to provide a description of the quality of learning so that it can help teachers plan learning strategies [2]. For students, a good grading system will be able to provide motivation to always improve their abilities. Macrame technique product assessment tool in textile craft courses is an instrument that is arranged systematically to determine product accuracy based on established criteria and indicators.

The assessment tool is in the form of a non-test technique that is a checklist and product assessment in the form of an assessment rubric, which is expected to be a standard reference in assessing student work in the form of macrame engineering products [3,4]. Macrame comes from the word mekremei which means the art / craft of stringing a rope into such a way that it becomes a useful and versatile form. Macrame is the art of knitting together one, two, three, even more ropes or threads to make a
handiwork. Called handiwork, because macrame requires hand skills when braiding a rigging. Not prioritizing functional principles, macraxes are also beautiful when used as decorative elements.

In the process of making macraxes, there are known basic techniques. This basic technique is an easy node to do for any macrame work, including the anchor knot, base, propeller, lasso, and pole. There are no known standard patterns or calculations that make it difficult to make macraxes, because everything depends on the desired results. The use of ropes for macrame is adjusted to the work to be made, in general a strap that is made from soft, strong, and not too elastic is chosen. Some types of rope that are commonly used to knit macrame are cotton rope, kur rope, linen rope, acrylic rope, jute rope, and nylon rope. But what is commonly used is the kur rope which is more easily found, shaped, and affordable. The use of macrame today is like being used as wall decor, pot hangers, and hammocks [5].

Above description becomes the author's rationale for making the "Macrame Technique Product Assessment Tool in Textile Craft Courses" with clearer and more detailed assessment indicators, and it is hoped that this assessment tool will become a standard reference or standard in assessing student work in the form of macrame engineering products, because assessment tool can be said to be good if it is able to judge something in accordance with the criteria and indicators that have been set as a whole and can be accounted for by all parties, especially in education.

Research purposes are making a design tool assessment tool for macrame techniques in the form of an assessment rubric, Conduct verification and validation of macrame technique product assessment tools to material experts and evaluation experts. Analyzing the results of verification and validation of the macrame technique product valuation tool.

2. Method
This study uses quantitative research with research and development (R&D) research and development methods. According to Sugiyono, it states that research and development methods are research methods used to produce certain products and test these products [6]. Research and development research methods are carried out to make product assessment tools in the form of an assessment rubric on learning Craft Textile Product Macrame Engineering.

Participants in this study involved a validator from an evaluation expert and a validator from a material expert, each consisting of two people. The validator of the evaluation expert is tasked to assess the feasibility of the assessment rubric, while the validator of the material expert is tasked with assessing the appropriateness of the material contained in the format of the macrame product valuation rubric which includes the assessment indicators.

Location of the research place used in conducting research. The location chosen by the author is the Fashion Study Education Program, Department of Family Welfare Education, Faculty of Technology and Vocational Education, Universitas Pendidikan Indonesia

The instrument used in research on the macrame product valuation tool is a validation instrument using a check list. The instrument was arranged systematically and curriculum-standard in the form of an assessment rubric to determine the feasibility of the validation results that have been tested with material experts on macraxes and tested on evaluation experts to find out the effectiveness and efficiency of macrame product assessment tools.

Reference criteria for product valuation using macrame techniques check list in the opinion of Sudaryono, assessors only have two absolute choices, namely yes- no, do-not-do, right-wrong, right-not right, can be observed-no can be observed, good and bad and so on [7]. Macrame technique product valuation tool uses appraisal reference-not right.

3. Results and discussion
The results of the macrame technique product product assessment tool in the textile craft course in the form of research findings are based on the results of data analysis processing and discussion of the research findings described in steps according to the Research and Development research method as follows:
3.1. Preliminary study

Preliminary study stage is the initial stage in conducting research to find information or data needed to determine the potential and the problem being investigated so that its position is clearer. In the preliminary study stage, first determine the selection of research sites. The research locations chosen were the Fashion Study Education Program, Faculty of Technology and Vocational Education, Indonesian Education University in the Textile Craft course. In the Textile Craft course there are competencies that must be achieved by students, one of them is making macrame engineering products.

In textile craft courses, 2 credits are 30% for theory learning and 70% for practical learning. Based on the results of a preliminary study, information was obtained regarding the assessment guidelines for educators in evaluating the results of the final course of the Textile Handicraft lectures, especially Macrame Engineering Products, ie until now there has been a written assessment tool regarding the manufacture of textile handicraft products, but there is no specific product for macrame engineering products. The researcher further analyzed the results of good quality macrame technique products to get an overview of the assessment format to be arranged in more detail and systematically.

The analysis conducted as a first step of research is to learn more about the learning objectives to design an assessment tool that will be used. Analysis of the learning of macrame techniques obtained information that product assessment using a checklist in the form of assessment criteria compiled into an assessment rubric is an appropriate assessment tool used to assess the results of the macrame technique product assignments. An assessment tool made in the form of a product assessment format to assess the results of student work in the form of macrame engineering products Macrame technique product evaluation format in the form of an assessment rubric contains an assessment indicator including Types of macrame, Product Functions Macrame Technique Products Macrame Engineering Products in accordance with the Elements and Principles of Design, Use of Materials, and Completion Techniques. Based on the assessment indicators, the rating scale and scoring formula will be obtained. The use of the macrame technique product assessment rubric is not only as a guideline for assessing lecturers, but can be used as a motivation for students to make the results of macrame engineering products better.

3.2. The validation

The validation phase is carried out by providing instruments to the evaluation experts and material experts. The validation results are then analyzed and a percentage of eligibility is obtained by referring to the percentage scale. The validation of the appraisal tool is carried out by experts in the field of evaluation, obtaining a percentage of 100% so that the assessment rubric can be categorized as "Very Eligible" to be used. The aspect seen in the validation of the material is the assessment indicator for Macrame Engineering Products obtaining the assessment results with a percentage of 98.21% so that the valuation tool for Macrame Engineering Products can be categorized as "Very Eligible" to be used.

3.3. Product assessment

Product assessment is an assessment of students' mastery of skills in making a product and knowing the quality of a product produced by students. Assessment of the type of checklist helps the assessor or educator in carrying out practical assessments which has the advantage of useful to help teachers remember what should be observed, and can provide information to stakeholders [8]. The design of the assessment tool in the form of a checklist is arranged in the form of an assessment rubric table containing assessment indicators, including types of macrames, product functions, macrame engineering products, macrame engineering products, in accordance with design elements and principles, use of materials, and completion techniques.

The results of the assessment on the macrame technique product assessment rubric, are calculated using a feasibility presentation, namely the total cumulative score divided by the maximum score multiplied by 100. The macrame technique product assessment rubric has different assessment indicators with the level of precise and incorrect assessment results. Reference criteria for product valuation using macrame techniques check list in the opinion of Sudaryono assessors only have two
absolute choices, namely yes-no, do-not-do, right-wrong, right-not right, can be observed-no can be observed, good and bad and so on [7].

An assessment tool is also called an assessment instrument. Arikunto argues that An instrument is something that can be used to facilitate a person doing a task or achieving goals effectively and efficiently [9].

The findings from the preliminary study stage to the assessment phase aim to see the feasibility of the Macrame Technique Product Assessment Tool. The assessment is carried out after the validity test which aims to show the level of validity of an instrument, in this research in the form of a Macrame Technique Product Assessment Tool, in the Textile Craft Course. Validation is carried out by two people from the evaluation expert and 2 people from the material expert to assess the appropriateness of the assessment tool in the form of an assessment rubric made. The verification and validation that was carried out received some input and suggestions, so that there were some changes in the format of the assessment that had been prepared. These changes are as explained in the revision stage. The interpretation of the feasibility score is interpreted using the eligibility score criteria according to Riduwan that is, very feasible, feasible, decent enough, less feasible, very less feasible [10].

4. Conclusion
A good and appropriate assessment tool can measure the ability of students. The appraisal tool in the form of a checklist is arranged in the form of an appraisal rubric containing appraisal indicators, including Types of Macrames, Macrame Technique Product Functions, Macrame Technique Products, in accordance with Design Elements and Principles, Use of Materials, and Completion Techniques.

Macrame technique product valuation tool, after validation to the evaluation experts and material experts, it was found that the appraisal tool made "Very Eligible" was used, judging by the average percentage of assessments given, 100% of the evaluation experts and 98.21% from material experts.

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