
ANALYSIS OF CONCEPTUAL UNDERSTANDING OF FASHION DESIGN EDUCATION STUDENTS IN THE LEARNING OUTCOME EVALUATION COURSE

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Abstract

This study aims to describe the conceptual understanding of fashion design education students in the learning outcome evaluation course. The sample of this research were 30 fashion design education students from the 2023 intake. The method used in this research was descriptive. Data collection was carried out using test techniques in essay form. The results of the research showed that the average test related to the conceptual understanding of fashion design education students in the learning outcome evaluation course was 13.57, which is included in the moderate category. The results of the analysis per indicator of conceptual understanding were that students were lacking in repeating concepts, classifying types of objects based on certain characteristics according to the concept, determining examples and non-examples of the concept, and obtaining information on sufficient and necessary conditions for a concept.

Keywords: conceptual understanding, learning outcome evaluation course

INTRODUCTION

Evaluation of learning outcomes is an integral part of the educational process which functions to determine the level of achievement of learning objectives (Emeliazola et al., 2024; Laila Laila et al., 2024). Through evaluation, educators can measure the extent to which students have mastered the knowledge, skills, and attitudes taught (Rasyid, M. N. A. et al., 2024). Evaluation of learning outcomes is one of the compulsory courses for students of the Fashion Design Education study program at

Medan State University with a weight of 3 credits. For prospective vocational educators, including Fashion Design Education students, understanding the concept of evaluation of learning outcomes is very fundamental.

The indicators of conceptual understanding are (1) presenting concepts that have been studied again (2) classifying types of objects based on certain characteristics according to the concept; (3) determining examples and non-examples of the concept; (4) stating the concept from a

different point of view with mathematical representation. (5) obtaining information on sufficient and necessary conditions for a concept; (6) choosing certain steps in using and utilizing an operation; (7) applying the concept according to the problem-solving algorithm (Limbong, 2024).

Understanding the concept of evaluating learning outcomes serves as a foundation for students in designing and implementing evaluation activities in the vocational field. However, the reality on the ground shows that many Fashion Design Education students still struggle to understand and apply basic concepts. They often place more emphasis on technical skills than on the conceptual foundations underlying each learning activity.

This lack of conceptual understanding directly impacts students' ability to develop and implement effective learning evaluations. Students tend to assess learning outcomes solely based on the final product (clothing), without considering the process, work attitudes, or student creativity. However, vocational learning requires a comprehensive assessment of the affective, cognitive, and psychomotor domains.

Therefore, this study aims to analyze students' conceptual understanding in the learning outcome evaluation course using test

questions as a measure of conceptual ability. This study is expected to provide an overview of students' level of understanding.

METHOD

The method used in this study was descriptive. The sample consisted of 30 fashion design students at Medan State University. The research instrument used five essay questions.

The tests completed by students are first analyzed to determine their scores. These scores are used to determine their level of understanding.

Table 1. Concept Understanding Category Intervals

Interval	Category
$x > (\bar{x} + SD)$	High
$(\bar{x} - SD) \leq x \leq (\bar{x} + SD)$	Moderate
$x < (\bar{x} - SD)$	Low

Categorizing student scores can be done by finding the mean and standard deviation. Students who have conceptual understanding are categorized as high if their score is more than the average plus the standard deviation, categorized as medium if their score is between high and low, and categorized as low if their score is less than the difference between the average and the standard deviation (Arikunto, 2021).

RESULTS AND DISCUSSION

This descriptive study aims to analyze students' conceptual understanding in the learning outcome evaluation course. An essay test was used to measure students' understanding, which is demonstrated by their ability to organize ideas, analyze information, and present written arguments (Wachidah et al., 2021).

The research conducted obtained results in the form of test scores for students' conceptual understanding in the learning outcome evaluation course (Table 2). The maximum score obtained by students was 25. The highest score obtained by students was 25 and the highest score obtained by students was 25 and the lowest is 5. From the results of the analysis of the students' written test answers, the students' understanding can be seen in Table 1.

Table 2. Student Concept Understanding Test Results

Σ Students	Max Score	Min Score	Mean	SD
30	25	5	13.57	5.65

The average score was calculated as 13.57 and the standard deviation was 5.65. The scores obtained from the students' answers were then analyzed and categorized (Table 3).

Table 3. Level of student conceptual understanding

Scoring Criteria	Σ Students
$x > 19,22$	4
$7,91 \leq x \leq 19,22$	19
$x < 7,91$	7

Students' conceptual understanding of the learning outcome evaluation course is categorized as high if they score more than 19.22, with only 4 students. The moderate category is between 7.91 and 19.22, with 19 students. The low category is if the test score is less than 7.91, with 7 students.

The indicator for question number 1 aims to assess students' ability to restate concepts. Question number 1 asks students to state the definition of measurement, assessment, and evaluation. Based on the results of data analysis, out of 30 students, only 6 students were able to answer the question correctly, indicating a good understanding of the concepts of measurement, assessment, and evaluation. Furthermore, 14 students were unable to provide correct answers to the questions given, indicating difficulties in understanding the concepts of measurement, assessment, and evaluation.

The correct answer to question number 1 is as follows. Measurement is the process of assigning numbers (quantification)

to an object, phenomenon, or ability based on certain rules (Ekayanti & Mahmudah, 2024). Assessment is the process of providing meaning or interpretation to measurement results, either in the form of numbers or descriptions (Zainal, 2020). Evaluation is the process of making decisions based on assessment data to determine follow-up learning (Huda et al., 2023).

The indicator for question number 2 aims to assess students' ability to classify types of objects based on certain characteristics according to the concept. Question number 2 asks students to determine the subject and object of evaluation from a given case. Based on the results of data analysis, out of 30 students, only 10 students were able to provide the correct answer. They were able to determine who the subject of evaluation is and what the object of evaluation is. Meanwhile, there were 20 students who were unable to provide the correct answer to the question given, which indicates difficulty in understanding the concept of the subject and object of evaluation.

The correct answer to question number 2 is as follows. The subject of the evaluation is the student because they are the ones whose learning outcomes are being evaluated (Arikunto, 2021). Meanwhile, the

object of the evaluation is the learning outcomes of the basic sewing techniques course.

The indicator for question number 3 aims to assess students' ability to identify examples and non-examples of the concept. Question number 3 asks students to explain whether the given case meets the validity requirements or not. Based on the results of data analysis, out of 30 students, 19 were able to provide the correct answer. They were able to explain the concept of validity and relate it to the case in question. Meanwhile, 11 students were unable to provide the correct answer to the question, indicating difficulty in understanding the concept of validity.

The correct answer to question number 3 is invalid because the essay test is an instrument used to measure cognitive aspects. Validity is the accuracy of the assessment tool in relation to the concept being assessed, so that it truly assesses what it is supposed to assess (Ramadhan et al., 2024). Since the teacher will be measuring sewing skills, she must use a non-test instrument, such as an observation checklist, rating scale or performance checklist.

The indicator for question number 4 aims to obtain information on sufficient and necessary conditions for a concept. Question number 4 asks students to explain which test

requirements are not met in the given case. Based on the results of data analysis, out of 30 students, only 10 were able to provide a correct answer. They were able to explain the concept of reliability and relate it to the given case. Meanwhile, 20 students were unable to provide a correct answer to the question given, indicating difficulty in understanding the concept of reliability.

The correct answer to question number 4 is that the test requirement that is not met is reliability. A test is considered reliable if it consistently produces the same results when administered to the same group at different times or on different occasions (Ramadhan et al., 2024).

The indicator for question number 5 aims to assess students' ability to classify types of objects based on certain characteristics according to the concept. Question number 5 asks students to explain the type of test based on the given case. Based on the results of data analysis, out of 30 students, only 18 were able to provide a correct answer. They were able to explain the type of test and relate it to the given case. Meanwhile, 12 students were unable to provide a correct answer to the question given, indicating difficulty in understanding the concept of the type of test.

The correct answer to question 5 is a diagnostic test. Diagnostic tests aim to map the level of learning comprehension (Aprilla & Fitriani, 2024).

CLOSING

Conclusion

From the research results, it was found that the level of students' understanding of the concepts in the learning outcome evaluation course was still varied and not yet fully optimal. There are students who do not understand some indicators well and there are also students who actually understand the concept but cannot apply it to cases.

Suggestion

1. Lecturers need to strengthen the teaching of concepts through the integration of theory and practice in learning outcome evaluation course.
2. Students should increase their literacy and reflective awareness of the importance of evaluating learning outcomes.

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