

# Development of Parameters for Assessment of Dwimatra Fine Art Works in the Fine Arts Department

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**Abstract.** Assessment parameters are very important, especially in art education. Without assessment parameters, bad things can happen. Therefore, there is a need for teaching materials on the assessment parameters of Dwimatra fine art works. The expected objectives in this research; 1). Produce teaching materials on the standard assessment of two-dimensional works of art, and 2). Reveal the validation test, practicality test, and effectiveness test of teaching materials on the standard assessment of two-dimensional fine art works. Based on these research objectives, the results obtained in the form of teaching materials, with the acquisition of a valid category with an average score of 87.8%, then practical use by students with a score of 84.16, and effective teaching materials with student learning outcomes of 85.41%. Therefore, the teaching materials are valid, practical, and effective to be applied in learning in the Fine Arts Department, Faculty of Language and Arts, Universitas Negeri Medan.

**Keywords:** Parameters, Assessment, Dwimatra Fine Art.

## 1. Introduction

In our daily lives, we often engage in evaluation activities and utilize the principles of measurement and assessment. However, many people do not fully understand the difference between the three terms and often assume they have the same meaning. People generally tend to equate evaluation with assessment, as the measurement process is usually included. However, measurement, assessment, and evaluation are three interrelated activities that must be done in stages [1]. Measurement is the process of measuring or collecting data about an object or phenomenon using certain measuring instruments or methods [2]. For example, measuring the length, weight, or temperature of an object. Assessment, on the other hand, is the process of assessing or evaluating an object or phenomenon based on predetermined criteria or standards. Assessment includes data collection, analysis, and value assessment of

the object being assessed. For example, assessing the quality of an artwork, the performance of an employee, or the learning outcomes of a student [3]. Evaluation, in this context, is an activity that aims to thoroughly assess an object or phenomenon, including its process, results, and impact. Evaluation involves in-depth analysis and provides constructive feedback for future improvement or development. An example of evaluation is the assessment of a program, policy, or project [4].

In practice, measurement, assessment, and evaluation are three interrelated and inseparable components. Measurement provides the data used in assessment, and assessment serves as the basis for evaluation. These three activities are important to help us understand, measure, and assess various aspects of everyday life, such as in education, business, and other fields [5] [6]. In the world of education, whether in formal, informal, or higher education, evaluation is an aspect that cannot be ignored. Evaluation is closely related to assessment and affects what will be given to learners after they complete learning [7]. If this evaluation process is ignored, there will be various discrepancies in the assessment itself [8]. Given the importance of assessment mentioned above, in art education, both performing and fine arts, evaluation is something that cannot be ignored. The main focus of this section is an assessment of the world of art, especially in fine arts education and higher education. Without clear assessment parameters in art education, there can be several negative consequences. One of them is that the assessment of artworks has the potential to be subjective and inconsistent. This will certainly harm other students who have skills that deserve good grades [9]. However, in the absence of standardized grading standards, subjectivity can dominate, and grading may be based on proximity rather than the quality of the work itself, which will certainly disadvantage other students [10].

In addition to the previously mentioned problems, another thing that can happen is the emergence of debates among teachers, especially lecturers who teach courses. Inconsistent differences of opinion in assessment between different individuals or groups can cause one lecturer to give a very different grade to another. Even though both artworks are of equal quality, the absence of a standardized assessment standard can lead to striking differences in assessment. This situation has the potential to create new and unhealthy arguments among students, as well as complaints against the lecturer.

Assessment in fine art cannot be separated from aesthetics, which is a crucial aspect that is integrated with fine art itself. Aesthetics not only serves as a measurement of beauty but also as a reflection of the cultural and emotional values contained in the work. Without a standardized standard of assessment, aesthetic considerations can be overlooked, resulting in subjective and sometimes unfair judgments. Clear assessment parameters are helpful in measuring the beauty and aesthetic value of a work of art. For example, criteria such as composition, use of color, technique, and innovation can be used as references to assess the work. Without such parameters, there is a risk that works that actually have high beauty will get lower scores compared to less beautiful works. This can certainly lead to dissatisfaction and anxiety among students, who feel that their work is not being judged fairly [11].



**Fig. 1.** Dwi Matra Fine Art Works in Fine Art Exhibition in Galeri Seni Rupa Universitas Negeri Medan

Based on the description above, to overcome this problem, there needs to be an effective solution so that it does not drag on. One of the steps that can be taken is to find or create a standardized standard in the form of a book. This book should contain various parameters and clear assessment criteria regarding two-dimensional artworks. With this book, it is expected that every teacher or lecturer can use the same reference in conducting assessments, thus reducing gaps and subjectivity in the assessment process. This research will produce a book that will serve as a guideline for teachers and will not only focus on teachers but will also enlighten students on what aspects need to be considered in creating quality artwork. Thus, it is hoped that two-dimensional works of art can be appreciated according to their aesthetic value, and students can be more motivated to create knowing that their works will be assessed fairly and transparently.

## 2 Method

This research is systematic developmental research that focuses on the design, development and evaluation of learning programs, processes and outcomes. All these elements must meet the criteria for consistency and be effective internally and psychologically in development. This research uses the 4-D development model (Models Four-D), which is part of the research and development (RandD) sector. The RandD method is used to create a specific product and test the product's effectiveness. The design of this study follows the 4-dimensional model, which includes the four stages of definition, design, development and interpretation, described by Thiagarajan in 1974 [12] [13][14][15].

## 3 Result and Discussion

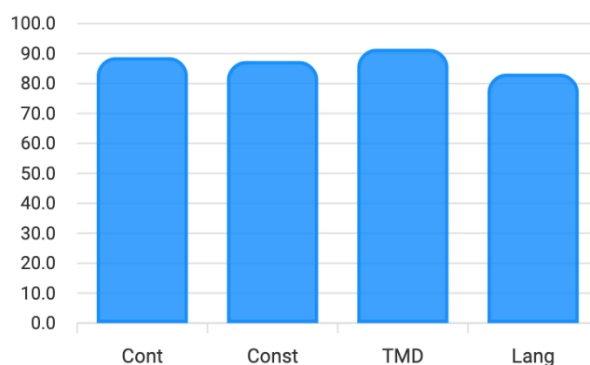
### 3.1 Validation

**Table 1.** Validator Assessment Results

No	Variable	Degree of Achievement (%)	Category
1.	Contents	88.8	Valid
2.	Construct	87.5	Valid
3.	Teaching Material Display	91.6	Valid
4.	Language	83.3	Valid
Average		87.8	Valid

Obtaining the analysis of the valid evaluation score in Table 1 includes 4 variables, namely: 1) the content with a success rate of 88.8% is selected as valid, 2) the structure with a success

rate of 87.5% are classified as valid. 3) The style of the teaching materials is classified at 91.6% of the valid progress rating and 4) The language is classified at 83.3% of the valid progress rating. In general, the accuracy of the teaching materials is 87.8%, and the teaching materials can be classified as valid. The comparison of the degree of achievement of the results of the validation of the teaching materials for each variable in the validation can be seen in Figure 2 below for more information:



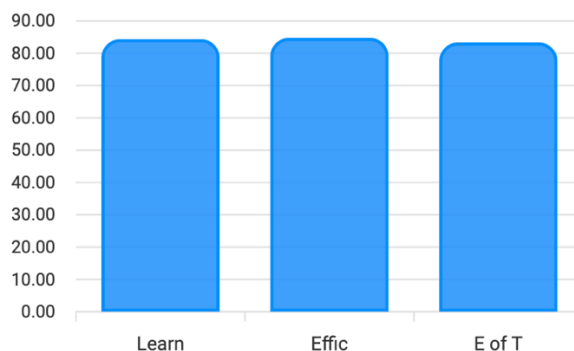
**Fig. 2.** Validator Assessment Results

### 3.2 Practicality

**Table 2.** Results of Practicality Assessment by Students

No	Variable	Degree of Achievement (%)	Category
1.	Learnability	84.37	Practical
2.	Efficiency	84.79	Practical
3.	Effectiveness of Time	83.33	Practical
	Average	84.16	Practical

The results of the analysis of the evaluation data of the students of the art department and the test programs in the teaching materials are three variables: 1) learning and progress of 84.37% in the application section of users, 2) effectiveness and a success rate of 84.79 % as a task Classified in the learning process, 3) time intensity and a progress rate of 83.33% can be classified by resources learn to make the most of the time in the learning process. The average value for the use of learning materials by students with advanced degrees is 84.16% and learning materials can be included in the practical section. For more information, a comparison of the practical items to the teaching materials can be found in Figure 3 below:



**Fig. 3.** Practicality Assessment Results

### 3.3 Effectiveness

**Table 3.** Student Activities

No	Student Activities	Active Students	Total number of students	Score Achievement Level (%)	Category
1.	Read teaching materials and do exercises				
	Meeting 1	12 persons	12 persons	100	Very Active
	Meeting 2	12 persons	12 persons	100	Very Active
	Meeting 3	12 persons	12 persons	100	Very Active
	Meeting 4	12 persons	12 persons	100	Very Active
	Average			100	Very Active
2.	Students ask questions during the lesson				
	Meeting 1	7 persons	12 persons	58.33	Active Enough
	Meeting 2	7 persons	12 persons	58.33	Active Enough
	Meeting 3	10 persons	12 persons	83.33	Very Active
	Meeting 4	10 persons	12 persons	83.33	Very Active
	Average			70.83	Active
3.	Answering questions from the lecturer or from other students, and				
	Meeting 1	6 persons	12 persons	50	Active Enough
	Meeting 2	7 persons	12 persons	58.33	Active Enough
	Meeting 3	10 persons	12 persons	83.33	Very Active
	Meeting 4	11 persons	12 persons	91.66	Very Active
	Average			70.83	Active
4.	Complete assignments given by the lecturer				
1.	Meeting 1	12 persons	12 persons	100	Very Active
2.	Meeting 2	12 persons	12 persons	100	Very Active
3.	Meeting 3	12 persons	12 persons	100	Very Active
4.	Meeting 4	12 persons	12 persons	100	Very Active
	Average			100	Very Active

The first step is to read the teaching materials and do the exercises given by the teacher. The percentage of students' performance in learning the teaching materials and doing exercises

from the first term to the fourth term is 100%, 100%, 100%, 100% and the average of 100% is grouped to the most powerful group.

The second step is to ask questions from the students as they follow the learning process. The percentage of students' work from the first term to the fourth term is 58.33%, 58.33%, 83.33%, 83.33%, and the average of the student's work is 70.83%, which is classified as a strong example.

The third task is to answer questions from the teacher or other students. The percentage of the four sections is 50%, 58.33%, 83.33%, 91.66%, and with an average of 70.83% the students can be classified as strong students.

The final task on the agenda is executing assignments. Each of the four gatherings maintains a perfect attendance rate of 100%, indicating a high level of participation. Given the consistent 100% average engagement rate among students, they can be identified as exceptionally active individuals. It is imperative to highlight that wrapping up assignments after every session falls under the individual obligation of each learner.



**Fig. 4.** Student Activity Score Results

## 4 Conclusion

Based on the research findings discussed, the validation scores for the presentation, content, construct, appearance, and grammar of teaching materials fall within the valid category, with scores ranging from 83.3% to 91.6%. The overall average validation score for the teaching materials is 87.8%, signifying their validity. These teaching materials are systematically structured to ensure easy comprehension by users. The practicality level of the teaching materials is rated at 84.16%, indicating that they are practical. The materials are designed as clear learning units encompassing material presentation, instructions, and evaluation tools, tailored to match the students' abilities.

Furthermore, the learnability score for the teaching materials is 84.37%, affirming their practicality for users. The language used in the materials aligns with students' characteristics, facilitating individual use and aiding in students' comprehension of concepts. The efficiency score stands at 84.79%, classifying the teaching materials as practical. The materials

effectively assist students in understanding concepts and aid lecturers in guiding the learning process efficiently.

The effectiveness of time spent using the teaching materials, with a score of 83.33%, emphasizes their practicality. These materials enable lecturers to efficiently guide students through the learning process within minimal time while achieving maximum results. Notably, all 12 students who utilized the teaching materials successfully passed, reflecting a 100% passing rate and highlighting the practicality and effectiveness of the materials.

Overall, the validation, practicality, efficiency, and effectiveness of the teaching materials have been rigorously assessed and proven to be of high quality, aiding both students and lecturers in the learning process.

## References

- [1] Ling, J., Feng, K., Wang, T., Liao, M., Yang, C., & Liu, Z.: Data Modeling Techniques for Pipeline Integrity Assessment: A State-of-the-Art Survey. *IEEE Transactions on Instrumentation and Measurement*. pp. 1-17 (2023).
- [2] Budiaji, W.: Skala Pengukuran dan Jumlah Respon Skala Likert. *Jurnal Ilmu Pertanian dan Perikanan*. pp. 127-133 (2013).
- [3] Seybert, J. A.: Assessing Student Learning Outcomes. *New Directions for Community Colleges*. pp. 55-66 (2002).
- [4] Muryadi, A. D.: Model Evaluasi Program dalam Penelitian Evaluasi. *Jurnal Ilmiah Penjas (Penelitian, Pendidikan Dan Pengajaran)*. pp. 1-16 (2017).
- [5] Retnowati, T. H.: Pengembangan Instrumen Penilaian Karya Seni Lukis Anak di Sekolah Dasar. *Jurnal Penelitian dan Evaluasi Pendidikan*. pp. 130-149 (2009).
- [6] Hasnawati, H., & Yunus, P. P.: Pentingnya Instrumen Penilaian untuk Karya Seni Rupa. In *Prosiding Seminar Nasional Dies Natalis UNM Ke 57*. pp. 117-123 (2018).
- [7] Haji, F., Morin, M. P., & Parker, K.: Rethinking Programme Evaluation in Health Professions Education: Beyond 'Did It Work?'. *Medical Education*. pp. 342-351 (2013).
- [8] Kreber, C., Brook, P., & Policy, E.: Impact Evaluation of Educational Development Programmes. *International Journal for Academic Development*. pp. 96-108 (2001).
- [9] Schmid, D. W.: Authentic Assessment in the Arts: Empowering Students and Teachers. *Journal of Dance Education*. pp. 65-73 (2003).
- [10] Bawias, E. S.: Pelaksanaan Pembelajaran Seni Rupa oleh Guru Seni Budaya pada Tiga SMA di Kecamatan Pamona Puselemba Kabupaten Poso (Doctoral Dissertation, Pascasarjana). pp. 2-5 (2016).
- [11] Clarke, A., Hulbert, S., & Summers, F.: Towards a Fair, Rigorous and Transparent Fine Art Curriculum and Assessment Framework. In *Arts*. pp. 81 (2018).
- [12] Setyosari, P.: Metode Penelitian Penelitian dan Pengembangan. Vol. 1, pp. 10-11. Kencana, Yogyakarta (2010).
- [13] Sugiyono, S.: Metode Penelitian Kuantitatif, Kualitatif, dan R&D. Vol. 1, pp. 16-17. Alfabeta, Bandung (2012).
- [14] Zakariah, M. A., Afriani, V., & Zakariah, K. M.: Metodologi Penelitian Kualitatif, Kuantitatif, Action Research, Research and Development (R n D). Yayasan Pondok Pesantren Al Mawaddah Warrahmah Kolaka. pp. 10-15 (2020).
- [15] Okpatrioka, O.: Research and development (R&D) Penelitian yang Inovatif dalam Pendidikan. *Dharma Acariya Nusantara: Jurnal Pendidikan, Bahasa dan Budaya*. pp. 86-100 (2023).