Development of the Student's Worksheets in the Arts and Ethics Course based on Differentiation Learning

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Abstract. The Arts and Ethics course is held every even semester for students in the sixth semester as an elective course with 2 credits. The research was conducted with the aim of developing differentiation-based worksheets where it is expected that worksheets that represent each student's learning style can help them obtain good information in order to achieve learning objectives in Arts and Ethics courses. The development of teaching materials (worksheets) for students in Arts and Ethics courses based on differentiation aims to support successful learning. The research design to be carried out is research and development (R&D), with data collection techniques using questionnaires and validation used to support the development of the worksheets being carried out. This research produced a book of teaching materials based on differentiation in accordance with the needs of students to support effective learning in accordance with the interests and learning styles of students

Keywords: Arts and Ethics, Development, Differentiation Learning, Worksheet

1 Introduction

The Arts and Ethics course is held every semester for students in the sixth semester as an elective course with 2 credits. This course aims to provide prospective teacher students with knowledge and knowledge about the art of good teaching related to strategy, class and time management, and other matters related to class management skills. This course also prepares students' ethics and morals as prospective teachers so that they can adapt to the school environment and students.

Teaching is an art, not assembling a machine using patented factory parts. A teacher must observe, analyze students, select strategies, evaluate, and continue improvising in the teaching process. Every condition, whether students, class, the surrounding environment, or school facilities, has a unique character that demands a teacher's artistic spirit. Likewise, with the formation of ethics that teach good and bad, one is right in the actions that will be carried out by students and prospective teachers in the future.

Then, the existing teaching materials have fourteen units, all discussing Ethics material. The book needs to have visible material about the art of teaching. There is also no worksheet containing 6 KKNI assignments, which are mandatory student assignments. Differentiated learning is an effort to adapt the learning process in the classroom to meet the individual learning needs of each student.[1]

So that differentiated learning can be implemented in the classroom, the teacher, in this case, the lecturer concerned, must know the learning needs of the students (students). Knowing students' learning needs will make it easier for lecturers to provide the right learning experience for their students. Lecturers are expected to have an ever-growing understanding of their student's academic abilities so they can plan appropriate learning.

For that reason, the researchers carried out a development of student teaching materials (worksheets) for the Arts and Ethics course, which included material on the art of teaching and ethics for teacher candidates as well as 6 KKNI assignments that looked at students' needs for the material in the Semester Learning Plan (RPS).

Students are expected to perform better if the tasks follow their previous skills and understanding (readiness to learn/readiness). Then, if the assignments spark curiosity or passion in a student (interest), and if the assignments provide an opportunity for them to work in a way that they enjoy (learning profile).

There are 3 things in the differentiation strategy: content, process and product. In this research, a limitation will be made that student worksheets will be developed based on product differentiation.

Tomlinson suggests that differentiation learning means mixing all the differences to get information, create ideas and express what they learn. In other words, differentiated learning is creating a diverse class by providing opportunities to obtain content, process ideas, and improve each student's results so that students can learn more effectively. Differentiation learning creates an environment that invites students to learn and tries to achieve course learning. Alternatively, differentiation learning includes an eclectic method used by lecturers, where this method adapts to student needs.[2]

2 Method

The research design carried out is research and development (R&D). Research and development (R&D) is a research method for developing products. According to Sugiyono (2009), research and development methods are used to produce and test the product's effectiveness. The data in this research are the results of interviews and the results of filling out questionnaires by students in the form of detailed answers. Then, the data source is students in the 6th (sixth) semester of the English Language Education Study Program who are taking the Arts and Ethics course at the English Language and Literature Department, Medan State University. The data collection techniques used are validation techniques and questionnaires. Questionnaire analysis was done by finding the average percentage of answers to several

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[1] Tomlison, 2001, p. 45
[2] ibid

categories using the percentage formula. In this research, the data analysis was obtained from a student questionnaire regarding ethics and aesthetics-based worksheets in the Arts and Ethics course, distributed to students in the 6th (sixth) semester of the Medan State University English language education study program. The assessment scores used are: (5) strongly agree, (4) agree, (3) disagree, (2) disagree, and (1) strongly disagree[3]. The data analysis technique used by researchers is the qualitative descriptive data analysis technique. Miles and Huberman mention three activities for analyzing data in descriptive qualitative research, namely data reduction, data presentation, and drawing conclusions/verification.[4]

2 Findings

Research conducted to investigate the learning needs of Arts and Ethics course students based on 3 aspects of differentiation and to develop worksheets for Arts and Ethics course students based on product differentiation was carried out through several stages following the steps in the ADDIE 47 development research.

In the preliminary stage, a questionnaire on student learning style analysis was distributed as a first step in developing differentiation-based worksheets. This stage aims to find out what learning styles students are interested in when studying so that the development product is expected to be in accordance with the learning needs to be carried out. The results of distributing a needs analysis questionnaire, which was carried out as an initial stage in developing a differentiation-based Arts and Ethics worksheet, found that students have different learning styles, where the visual learning style is the most dominant learning style in the Arts and Ethics course.

The answer item given in point (A) refers to the visual learning style, point (B) refers to the auditory learning style, and point (C) refers to the kinesthetic learning style. This questionnaire is an adaptation of Wiedarti (2019) in the GLS Manual Series book The Importance of Understanding Learning Styles.
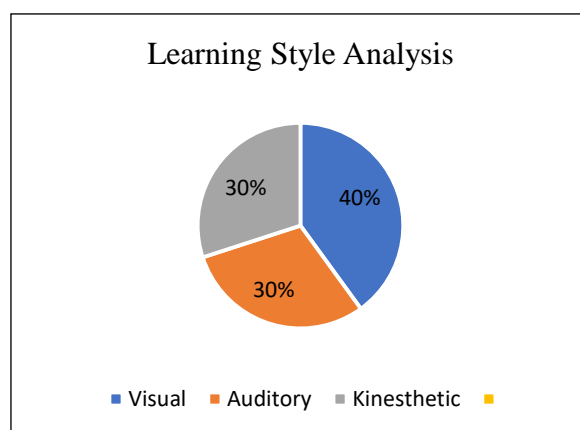

Fig. 1 Students Learning Style

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[3] Mardapi, 2008
[4] Miles & Huberman, 1994, p: 10

Based on the results of the analysis, it can be seen that the majority of students, namely 40%, have a visual learning style, then 30% have a kinesthetic learning style, and 30% have an auditory learning style.

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In the next stage, the questionnaire was distributed again to find out what type of worksheet students were most interested in according to their preferred learning style. The questionnaire was then distributed in order to obtain student answers regarding the form of worksheets or activities that could attract their attention. The results of distributing the questionnaire showed that (1) visual worksheets, students were more interested in worksheets that used pictures compared to worksheets that used tables, diagrams and videos, (2) audio worksheets, students were more interested in worksheets that were done using discussing and listening to each other compared to worksheets that use audio recordings and explanations carried out by lecturers, (3) kinesthetic worksheets, the majority of students prefer to carry out observation activities in the field compared to role-playing activities or activities that use props.

The next stage is the development stage. At this stage, worksheets are developed with the results of learning style analysis and analysis of the types of worksheets that are most popular as a reference in development. At this stage, a differentiation-based worksheet was developed for the Arts and Ethics course in accordance with the learning objectives, followed by validation of the worksheet that had been developed by the researcher.

After the development stage, a validation stage was carried out by experts regarding the development product, namely a differentiation-based worksheet in the arts and ethics course. At the validation stage by experts, at this stage, validation is carried out by experts which includes linguistic, process, product and content aspects, and appearance/layout. Following are the validation results in the form of numbers which will then be categorized based on the eligibility percentage rubric. There are 29 statements in the validation questionnaire, namely 8 statements for the linguistic dimension, 6 statements for the process dimension, 8 statements for the content and contents dimension, and 7 statements for the facial dimension. The assessment is carried out using a scale of very good (5), good (4), fair (3), not good (2), and very bad (1).

Table 1. Lingustic Dimension Validation

A. Linguistic Dimension			
No.	**Statement**	**Score**	**Percentage**
1	Standardize the use of grammar in general	**5**	**100%**
2	Standardize sentence length in general	**5**	**100%**
3	Accuracy and user appropriateness of vocabulary choices in General	**4**	**80%**
4	The accuracy or suitability of the user's choice of vocabularies for material based on the surrounding environment (Local Content) specifically	**5**	**100%**
5	Accuracy or appropriateness of punctuation	**4**	**80%**

6	Accuracy or appropriateness of the use of capital letters in Paragraphs	4	80%
7	Clarity or straightforwardness of meaning	4	80%
8	The effectiveness or efficiency of language use in general	5	100%
	Total		**90%**

From the table above, it can be concluded that the learning tools that have been developed by the research team are suitable for use in Arts and Ethics courses with an average percentage for the linguistic dimension of 90%. According to Sugiyono, this percentage falls into the interval 81%- 100% and is categorized as very good[5]

Table 2. Process Dimension Validation

B. Process Dimension			
No.	**Statement**	**Score**	**Percentage**
1	Teaching materials and worksheets provide brainstorming opportunities for students	5	100%
2	Teaching materials and worksheets allow and give students space and time to study independently	5	100%
3	Teaching materials and worksheets provide opportunities for students to use a wide variety of language functions	5	100%
4	Teaching materials and worksheets encourage students to discuss or collaborate in learning	5	100%
5	Teaching materials and worksheets are able to create a relaxed and enjoyable learning atmosphere and environment	5	100%
6	Teaching materials and worksheets use precise and effective instructions in each exercise	5	100%
	Total		**100%**

The table of process dimension validation results above shows that the teaching materials and worksheets are suitable for use in Arts and Ethics courses. The average percentage of process dimension validation results is 100%. According to Sugiyono, this percentage is categorized as very good.[6]

Table 3. Product and Content Dimension Validation

C. Product and Content Dimension			
No.	**Statement**	**Score**	**Percentage**
1	Teaching materials and development worksheets are designed according to student needs	4	80%
2	Teaching materials and development worksheets contain topics that provide competency values in the field of local content material.	5	100%
3	The type of vocabulary used refers to the application of knowledge according to the surrounding environment.	4	80%
4	Vocabulary that is still unknown is interpreted well	5	100%
5	Teaching materials and development worksheets are designed in accordance with the basic competencies and indicators in	5	100%

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[5] Sugiyono, 2010, pp. 12
[6] Ibid.

	the Learning Plan		
6	The material provided tends to direct students to improve their competencies quickly and effectively	**5**	**100%**
7	Assessment or evaluation is designed for each topic comprehensively	**4**	**80%**
8	The sections in teaching materials and worksheets are developed optimally and are relevant to the essence of these sections	**5**	**100%**
	Total		**92.5%**

From the table above, it can be concluded that teaching materials and worksheets are suitable for use in Arts and Ethics courses according to content and content dimensions. The validation results are the average percentage of this dimension, namely 92.5%, meaning very good with an interval of 81%-100%.

Table 4. Appearance Dimension Validation

D. Appearance Dimensions			
No.	**Statement**	**Score**	**Percentage**
1	In general, teaching materials and worksheets for students are developed to be relevant	**5**	**100%**
2	Presentation of images/tables/charts/graphs according to the existing chapter/topic	**5**	**100%**
3	The arrangement or layout of images is developed optimally and attractively	**5**	**100%**
4	The spacing of teaching materials and development worksheets is designed to be optimal and adequate	**5**	**100%**
5	Use of font types and sizes for teaching materials and worksheets	**4**	**80%**
6	The visualization or beauty of the letters of teaching materials and worksheets is generally good and interesting	**4**	**80%**
7	The quality of printed teaching materials and worksheets is well-designed	**5**	**100%**
	Total		**94.2%**

The validation results of the facial dimensions show that the teaching materials and worksheets developed are suitable for use. This is proven by obtaining an average percentage of 94.2%, which according to Sugiyono, this percentage is part of the interval 81%-100%, which means very good.[7]

Researchers developed teaching materials for the Arts and Ethics course by creating differentiation-based teaching materials where researchers focused on student learning styles as a need for developing learning tools. There are 6 stages in making teaching materials, collecting data and information, designing the product, validating the design, revising the product, and trying the product. To create an effective learning process, lecturers as educators must be able to develop, design,

or create learning media that can support the optimization of learning and can also shape students' abilities to think critically, and creatively, and form independent student personalities. One example is making Student Worksheets (LKM). Student worksheets (LKM)

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[7] Sugiyono, 2010, pp. 10-11

are printed media in the form of sheets designed briefly, concisely, and clearly, which include instructions, and steps, that must be completed by students, in order to help students or students in maximizing understanding and formation. basic abilities according to predetermined course learning outcomes (CPMK).

4 Conclusion

To create an effective learning process, lecturers as educators must be able to develop, design, or create learning media that can support the optimization of learning and shape students' abilities to think critically, and creatively, and form independent student personalities. One example is making Student Worksheets (LKM). Student worksheets (LKM) are printed media in the form of sheets designed briefly, concisely, and clearly, which include instructions, and steps that must be completed by students in order to help students understand and formation of basic abilities according to predetermined course learning outcomes (CPMK).

This research aims to produce a differentiation-based Student Worksheet (LKM) by investigating the learning needs of Arts and Ethics course students based on 3 aspects of differentiation to develop a differentiation-based Arts and Ethics student worksheet.

In the preliminary stage, find out the analysis of problems and needs related to worksheets in the Arts and Ethics course in semester 6. The development stage is where information is gathered, and product development is carried out, including developing worksheets according to students' interests regarding the form of worksheets that suit the style of learning and validation stages. The evaluation stage is a stage that aims to find out whether the results of the worksheet development are suitable for use. The evaluation stage consists of limited trials, distribution of questionnaires, analysis of questionnaire data, and initial conclusions regarding the quality of the worksheets developed based on differentiation.

Some suggestions from this research include: a) To get maximum learning results, it is hoped that lecturers and students can work together to create learning that can involve many learning styles simultaneously; b) after knowing their learning style tendencies, each student is expected to be able to utilize their learning style in studying/understanding information, especially in Arts and Ethics courses.

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