

Development and Implementation of The Bilingual "Ulos Weaving" Textbook in The Fine Arts Studies Program as Implementation of An Outcomes-Based Curriculum

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ABSTRACT

The aim of research is to develop and apply teaching materials for the Ulos Weaving course in two languages. This is considered important and urgent to address curriculum implementation as per the requirements for ASIIN, ABET and AUN QA accreditation or certification. The problem studied is the validity, effectiveness and practicality of the product being developed. This applied research uses the ADDIE development model developed by Dick and Carry with five stages: analysis, design, development, implementation and evaluation. The objects of product testing were students from the fifth semester fine arts education study program in 1 class (21 people) from 4 classes and 6 lecturers. This research creates innovation and development of teaching materials that are oriented towards textbook products which have an impact on improving the quality of graduates. After the product was validated by 4 experts, material validity was found to be 88% in the very effective category, validation of the layout or appearance of the book was 90%, and validation in Indonesian was 89% and English was 85% in the good category. The results of the student questionnaire were 86.57% and 100% of the lecturers said it was very useful. With the implementation of this textbook, it is hoped that the Ulos Weaving course will become an idol because it is a typical course of the Unimed Fine Arts Department. With this textbook, it will attract the interest of students from other universities and foreign students to study in the FBS Unimed Fine Arts Education Study Program with the Independent Campus Learning Curriculum which is oriented towards results.

KEYWORDS

applied; teaching materials; ulos weaving; achievement based

INTRODUCTION

Universities must always innovate to anticipate market changes. One of the efforts made is a change in the curriculum that refers to the relevance of graduates to the needs of the world of education, business and industry. One of the efforts made by the Directorate General of Higher Education in order to prepare human resources to face industrial, cultural and technological developments is the innovation policy of improving the KKNi curriculum into the "Free Learning Independent Campus" (MBKM) curriculum.

It is hoped that improving the curriculum will be the answer to these demands because it is not restrictive and is always adapted to the needs of students who are autonomous and flexible, thereby creating an innovative learning culture. To bridge the relationship gap, an

approach was carried out through Outcome Based Education (OBE). An approach with a clear focus regulates everything in the education system so that student competency skills can be implemented at the end of the learning experience.

Ulos Weaving is one of the courses in the Fine Arts Education Study Program, Faculty of Languages and Arts, Medan State University. This course has unique characteristics that do not exist in other universities. As a university in North Sumatra which is rich in ikat weaving, this study program is expected to become a center for the study and development of one of the local wisdoms of the region.

To achieve a maximum learning experience, good learning tools are needed. In line with this, the Fine Arts Education Study Program must improve its learning tools so that the final achievements of each course are in line with market needs. As the only major and study program in North Sumatra, its alumni not only fulfill fine arts teachers but are also needed as craftsmen in various creative industries. In connection with the implementation of the concept of achievement-based education (OBE) and MBKM, the Fine Arts Study Program needs to upgrade its curriculum and teaching materials to a bilingual basis (Indonesian and English).

The problem that will be solved in this research is: what is the process of developing and validating teaching materials up to the application of the product to students? Are the teaching materials developed suitable for use and in accordance with the implementation of the OBE curriculum? How can the effectiveness and practicality of the teaching materials developed increase student interest and learning outcomes? What are the responses and results of product trials for developing teaching materials for the Ulos Weaving course from students and lecturers?

The aim of the research is to determine the process of developing and implementing teaching materials so that they are suitable for testing according to 4 validators, whether the teaching materials developed and implemented are in accordance with the implementation of the OBE-based curriculum. Then to find out the effectiveness and responses of lecturers about the products being developed can increase student interest and achievement.

The research output that will be achieved is a textbook product for the Ulos Weaving course in accordance with the curriculum which refers to Minister of Education and Culture Regulation No. 3 of 2020 concerning SN-DIKTI. Textbooks in bilingual form which contain the completeness that a higher education level teaching material should have, adapted to the profile of the Fine Arts Education study program. And designed to adapt the implementation of the achievement-based curriculum (OBE) based on Graduate Competency Standards (SKL).

LITERATURE REVIEW

Applied Research

Applied research is in line with development research which is aimed at developing a product and is applied as the main source in improving the quality of a course's achievements. Research and Development, or Research and Development abbreviated as R & D, focuses studies on the design of teaching materials in the form of media and the product process of a learning media design. The development model according to Dick and Carry (Sugiyono, 2017) uses 5 stages, abbreviated as ADDIE, (Analysis, Design, Development, Implementation, Evaluation).

Applied research is aimed at finding solutions to existing problems in education, society, industry as a continuation of basic research. This research is more directed at creating innovation and developing science and technology that has been validated by experts in the field (Direktorat Riset dan pengabdian Masyarakat Kemristek dan PT, 2020).

Teaching materials are learning tools that are intended to discuss a subject to achieve learning outcomes. Various types of equipment prepared include: printed and electronic books, audio video, articles in journals, experimental gardens, each of which is designed in accordance with learning objectives and outcomes.

Teaching materials are also called teaching media, media from the word "medius"/median which means middle, intermediary or introduction. Arsyad (2016) states that more fully learning media can be used as an intermediary between students and lecturers in understanding learning material to make it more effective and efficient. The word learning is defined as a condition created to make someone carry out a learning activity. Learning media emphasizes the position of the media as an introduction to learning messages or information to condition someone to learn.

Ulos Weaving Course and Understanding Ulos

One of the typical courses in the Fine Arts Education study program which is characterized by the local wisdom of North Sumatra is "Ulos Weaving". This course was included to anticipate the independent learning curriculum, namely courses chosen by students from both on campus and outside campus and even abroad. In accordance with the concept of achievement-based education at the study program level, the outcomes are "graduates with abilities/fulfillment of values, knowledge and skills that are relevant to users and able to demonstrate their abilities according to expectations" and the impact is "graduates contribute to improving organizations and society".

Ulos is the name for the typical weave of the Batak Toba tribe in North Sumatra, the same weave is also owned by other ethnic groups such as the Karo tribe called Uis, the Simalungun tribe called Hiou, the Malay tribe in the Batubara area called Songket. The term ulos also applies to the Mandailing, Pakpak and Sipirok tribes. Ulos has a very important function and symbolic meaning for each tribe and is always related to traditional activities. Various traditional ceremonies such as birth, marriage, death and other rituals are never separated from the role of ulos. Ulos is full of meaning starting from the name, color, pattern and way of conveying it (Sitompul, 2009)

According to the method of processing, ulos is also called ikat weaving, because the dyeing process is first tied and dyed with natural colors (Grata and Achjadi, 2016). The work on ulos is woven manually in a traditional way so that the work on a piece of woven ulos can take up to 2-3 months with a size of 90x200 cm (Siregar, 1985).

Ulos weaving is a characteristic subject of the FBS Unimed Fine Arts Education Study Program which is not available in other fine arts departments in Indonesia. The inclusion of this course in the curriculum is offered to off-campus students from outside Sumatra as an elective course in the Merdeka Belajar curriculum. This course is also expected to become a student choice in the foreign student exchange program in collaboration with Unimed with partner campuses abroad such as Malaysia, Thailand and Brunei Darussalam. With foreign students studying in fine arts study programs that have A accreditation, it is hoped that this study program will have a FIBAA (Foundation for International Business Administration Accreditation) certificate for social sciences, humanities and AUN QA (Asean University Network-Quality Assurance), namely international certification. ASEAN level in each study program that is a member.

Ulos, Symbol of Life of the Batak People

Ulos has a philosophical meaning in the life of the Batak people. Every traditional activity is always marked by the giving of ulos which differentiates between who gives and who receives. The quality of the civilization of the Batak tribe has also been determined by the

creation of ulos and the practice of ulos values. The Batak tribe as a national civilization has 3 elements of cultural life, namely: blood, heat and heat. Blood, as an element of clan kinship culture (*ius sanguinis*). Breath, as an element of concern for the dignity of fellow human beings, and heat, which consists of 3 elements or cultural elements of warmth, namely: sun, fire and ulos. The sun is the source of warmth in the life of the physical body. Fire, the source of warmth in the life of the physical body. Ulos, a source of warmth in Batak spiritual kinship relations called *Dalihan na Tolu* (DNT) (Saragi, 2018).

Of the three elements of cultural life above, ulos always appear in traditional events with ulos being embedded as a symbol of brotherhood and a spiritual symbol from the group giving the ulos to the recipient (Wesninan, 2022). The three descriptions above embody the meaning/benefits of ulos for every member of the Batak traditional community. The wider community in the archipelago has widely recognized the cultural values of the Batak ethnic civilization, through the rite of pinning the ulos in various official ceremonies in the North Sumatra region and the Batak tribe overseas.

Achievement-Based Curriculum

The curriculum is a learning tool that is a mandatory guideline for study programs to achieve certain competencies for their graduates. The curriculum also regulates teaching staff, students, learning methods and regulates the facilities and infrastructure to achieve certain achievements for graduates.

An achievement-based curriculum or Outcome Based Education (OBE) is an approach to the education system with a clear focus and regulates everything in the education system so that what abilities are important for students can be carried out at the end of their learning experience. The principles of OBE are the basis for achieving quality higher education, including: (1) previously planned education (curriculum, learning system, assessment) is linked to program objectives and graduate outcomes (knowledge, abilities, attitudes/behavior) to be achieved (2) the approach is not based on what is taught but what is provided is ensuring that Human Resource development is carried out (3) success is based on indicators of abilities mastered by students, not structural assessment, namely assessing student work results based only on cognitive mastery.

Implementing systematic and focused curriculum preparation requires benchmarking as a role model and benchmark. Benchmarking activities are carried out with universities because they are considered better and capable of being a role model in curriculum preparation. With benchmarking activities, the preparation of the OBE curriculum has a benchmark as a benchmark to be achieved. With the preparation of an OBE-based curriculum produced by universities, it will be reduced to study programs by adjusting teaching materials or Ulos Weaving textbooks in accordance with Graduate Competency Standards (SKL) and Learning Achievements (CP).

RESEARCH METHODS

Research Model

The research model implemented is applied research. This research model is in line with Research and Development (R and D). This research is to develop teaching materials in the form of textbooks that will be used by students in the Ulos Weaving course (2 credits). The textbook was designed and implemented based on an analysis of student needs regarding teaching materials for the Ulos Weaving course, which are limited in number and difficult to obtain. The title of the textbook developed and implemented is entitled North Sumatra Ulos Weaving with a dual language display (English and Indonesian).

Location, Research Subjects, Population and Sample

The research location was carried out at the Fine Arts Education Department, FBS Unimed. The research subjects were Fine Arts students who were taking the Ulos Weaving course in 1 class (21 people) from 4 classes in the fifth semester, totaling 81 people.

Development Model

This research uses the ADDIE development model developed by Dick and Carry. This learning system design model shows the basic stages of learning system design that are simple and easy to learn, as well as a systematic structure. The model is structured systematically from the first stage to the fifth stage and is applied systematically and sequentially so that it is easier to carry out (Sugiyono, 2017).

The ADDIE model learning design is an interactive learning process with basic stages of effective, dynamic and efficient learning. This model can be a guide in building tools and infrastructure for training or learning programs that are effective, dynamic and support the performance of the training itself with several stages. The following is an example of the ADDIE model.

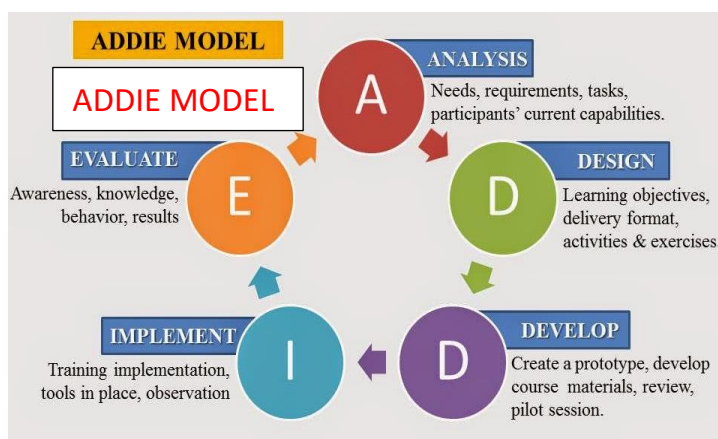


Figure 1. Development of the ADDIE Model

The five stages in the ADDIE model need to be carried out systemically with the following components;

Analysis

The investigation step consists of two stages, to be specific execution investigation and needs investigation. The primary organize is carried out to discover out and clarify whether the implementation issues faced require an arrangement within the frame of implementing a learning program or improving management. Within the moment arranged, it may be a fundamental step to decide the capacities or competencies that understudies got to learn to make strides in their execution or learning accomplishment.

In case the results of the examination of the information that has been collected leads to learning as an arrangement to overcome the learning problems being confronted, the learning program creator must carry out a needs investigation by replying to a few questions about the characteristics of understudies who will take portion within the learning program? (learner examination). What kind of information and abilities do understudies have? (pre-requisite aptitudes). What capacities or competencies do understudies ought to have (assignment or objective investigation).

Then find out what indicators or criteria can be used to determine that students have achieved the specified competencies after carrying out the learning process (evaluation and assessment). And what conditions are needed for students to be able to demonstrate the competencies they have learned (setting or condition analysis).

Design

Design is carried out as the moment step of the ADDIE learning framework demonstrate, this step requires clarification of the learning program being planned so that the program can accomplish the learning destinations as anticipated. This can be the pith of the examination step, to be specific examining the issue and finding elective arrangements that will be taken to overcome the learning issues distinguished through the wants investigation step.

An vital step that has to be taken in plan is deciding the learning experience that understudies ought to have whereas taking an interest in learning exercises. The plan step must be able to reply the address of whether the planned learning program can be utilized to overcome the execution hole issue that happens in understudies. The capacity hole alluded to in this case is the discernible distinction between the capacities that understudies as of now have and the capacities that understudies ought to have.

The key questions that must be replied by a learning program originator when carrying out the plan steps are, what uncommon capacities and competencies must understudies have after completing the learning program? What markers can be utilized to measure understudy victory in taking an interest in a learning program? What gear or conditions are required by understudies to be able to illustrate competence (information, abilities and states of mind) after partaking within the learning program? What kind of educating materials and exercises can be utilized to back the learning program?

Development

The advancement step incorporates exercises to make, buy and adjust teaching materials or learning materials to realize foreordained learning goals. Obtainment of instructing materials ought to be balanced to the particular learning objectives or learning results that have been defined by the originator or learning program architect within the plan step. The advancement step, in other words, incorporates the action of selecting and deciding fitting strategies, media and learning methodologies to be used in conveying the fabric or substance of the learning program.

There are two imperative objectives that have to be accomplished in carrying out advancement steps, to be specific: (a) producing or reexamining educating materials that will be utilized in already defined learning; and (b) choosing the most excellent media or combination of media that will be utilized to realize learning destinations.

Implementation

Implementation or delivery of learning material is the fourth step and is often associated with the implementation of the learning program itself. The main objectives of the implementation phase, which is the realization of design and development, are: a). Guiding students to achieve learning goals or competencies. b). Ensure problem solving/solutions occur to overcome gaps in learning outcomes faced by students. c). Ensure that at the end of the learning program students need to have the necessary competencies (knowledge, skills and attitudes).

The key questions that must be answered by a learning program designer when carrying out implementation steps are: a). What kind of learning method is most effective to use in delivering learning materials or material? b). What kind of efforts or strategies can be made

to attract and maintain student interest so that they are able to focus their attention on the delivery of the material or learning substance being delivered?

Evaluation

The final or fifth step is evaluation, a process carried out to provide value to the learning program. Basically, evaluation can be carried out throughout the implementation of the five steps in the ADDIE model. In the analysis step, for example, the evaluation process is carried out by clarifying the competencies (knowledge, skills and attitudes) that students must have after participating in the learning program. In addition, evaluation can also be carried out by comparing the learning outcomes that have been achieved by students with the learning objectives that have been previously formulated.

Evaluation of the learning program aims to find out several things, namely: student attitudes towards learning activities as a whole; increasing competence in students which is the impact of participation in learning programs; and the benefits felt by the campus due to increased student competency after participating in the learning program.

Data Type

The information gotten in this investigate comes from approval comes about from four specialists, specifically fabric approval, item show plan or format and Indonesian and English dialect approval. The information gotten is balanced to the goals and advancement plan utilized. The information collected in this advancement is quantitative graphic information as essential information, which is collected through a survey with a rating scale of 1 to 4. The sort of information collected is subjective information within the frame of depictions of recommendations and input. composed from the validator.

Data Collection Techniques and Instruments

The information collection instrument is within the shape of an evaluation instrument to evaluate items that have been created (Saragi, D., Sinaga, O., & Tarigan, N., 2022). The most instrument utilized was an master group approval survey sheet. The approval sheet is utilized to get appraisal information from the validator with respect to the course reading item being created. At that point the comes about of the survey are understudy reactions to the course reading to decide the common sense and adequacy of the item.

The approval sheet instrument network by fabric specialists evaluated 20 things, each of which was given a score of 1 to 4 with categories extending from exceptionally great (4), great (3), very great (2) and not great (1) (Setyosari, 2015). The substance possibility component is 13 questions and the phonetic possibility component is 7 questions.

The plan or appearance of the introduction comprises of 30 questions comprising of 7 questions with respect to the evaluation marker component for composing appearance, 9 questions for picture appearance, 10 questions for engaging quality and 4 questions for the combination of composing, picture and color components. The instrument for understudy and lecturer responses to instructing materials was carried out employing a survey for 21 understudies and 6 teachers. Understudy and teacher reaction survey instrument framework with substance pointers of 8 questions, dialect and introduction of 5 questions each with a add up to of 18 questions.

Data Analysis Techniques

The information gotten is around the condition of the North Sumatra Ulos Weaving course reading. This information was collected through master approval,

questionnaires/questionnaires conveyed to understudies. Investigate instrument for validators with reply criteria as in table 1.

Table 1. Criteria for Answering Validation Instrument Items With a Likert Scale

No.	Answer	Score
1.	Very good	4
2.	Good	3
3.	Not Bad	2
4.	Not good	1

Sugiyono(2017)

The assessment results were analyzed descriptively quantitatively, namely calculating the percentage of indicators for each category in the teaching materials developed.

$$\%Score = \frac{\text{Number of indicators per category}}{\text{Number of total category indicators}} \times 100\%$$

The results of the calculations according to the formula above produce numbers. The score classification is then converted into a classification in percentage form (Sugiyono, 2017; Yusuf, 2014), then interpreted using qualitative sentences listed in table 2.

Table 2. Criteria for the Percentage of Occurrence of Teaching Material Indicators for Ulos Weaving Textbooks That Have Been Developed

No	Answer	Score
A	Very good	$85\% \leq X < 100\%$
B	Good	$71\% \leq X < 84\%$
C	Currently	$51\% \leq X < 69\%$
D	Not good	$31\% \leq X < 49\%$
E	Very Not Good	$0\% \leq X < 29\%$

RESULTS AND DISCUSSION

Textbook Development Process

The first stage in developing textbook products starts from analysis. At this stage, an analysis of needs, characteristics of students, lecturers and teaching materials is carried out. The results are used as considerations or reasons for product development. Analysis was carried out by observation and interviews with students and course lecturers.

Second, the product design stage that was developed was a textbook for the Ulos Weaving course entitled "Ulos Weaving, North Sumatra". The initial design starts from the cover, material in the form of typical weaving from each tribe in North Sumatra along with pictures and explanations. The front cover is a part that is no less important, this part is designed to meet the criteria in accordance with the science of good visual communication design. The material is designed according to the indigenous tribal groups of North Sumatra who have distinctive weaves.

Third, the textbook development stage which has been prepared at the design stage, is then assessed by validators according to their field of expertise. In developing a product, validation is a very important part of correcting errors and weaknesses in the product being developed. Validators consist of material experts, language experts and layout design experts who are lecturers at Medan State University. The product that has been designed is then given for validation. Each validator carried out the assessment twice so that they obtained a score that was very suitable for use as a textbook for the Ulos Weaving course.

The first validation of the textbook material received several suggestions and input to improve the suitability of the material in accordance with the basic competencies and course achievements. From the 4 assessment aspects of 30 indicators with 4 assessment categories, the stage I assessment was obtained at 80% and after revisions were made based on validator input, the assessment was increased to 88% in the "very good" category, with an increase of 8%.

Validation of Indonesian and English was carried out twice each, in the first stage of validation Indonesian received a score of 82% in the good category with several notes for improvement, especially regarding non-standard terms. After the revision was carried out, a second validation was carried out with results of 89% in the "very good" category and it could be tested without improvement, there was an increase of 7%. English validation was also carried out twice with the first result being 79%. The second validation was carried out after improvements were made according to input and suggestions from the validator so that it could reach a value of 85%, there was an increase of 6%. with categories suitable for use.

The layout and cover validation was carried out twice, the first presentation was designed in such a way as to appear attractive, but the validator provided input in the form of notes to place greater emphasis on a balanced and attractive image display. It is recommended that the captions for each image be more communicative so that readers can understand the image more deeply. From the first presentation, it obtained an average score of 82%, but after undergoing improvements and second validation, it was able to obtain an assessment of 90% and "very good" to be applied as a textbook for the Ulos Weaving course. There was an 8% increase in valuation.

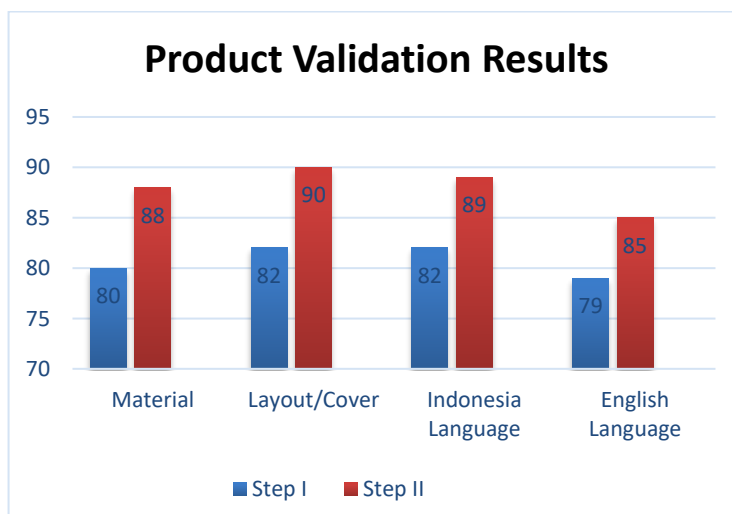


Figure 2. Assessment Results of 4 Validators

The fourth stage of implementation, after the product was developed and validated by experts, the product was tested on students, and to determine the practicality and effectiveness of the product, a response questionnaire was carried out by 21 students as shown in table 3. Likewise, to determine the suitability of the textbook for applied as a mandatory book for ulos weaving courses, a questionnaire was submitted with 10 questions and assessed by 6 lecturers.

Table 3. Results of Student Response Questionnaire on textbook products

Indicator	No Item	Score	P(%)	Average	Criteria
Content	1	63	87%	86,80%	Worth implementing
	2	63	87%		
	3	62	86%		
	4	62	86%		
	5	64	88%		
Presentation	6	61	84%	86%	Worth implementing
	7	64	88%		
Language	8	63	87%	86,5%	Worth implementing
	9	62	86%		
Chart	10	63	87%	87%	Worth implementing
Average				86,57%	
Criteria					Worth implementing

On average, students agree but it must be revised because there is use of ambiguous language and double meaning. Student responses become input for researchers to improve the presentation of the quality of the resulting textbook so that it can then be applied.

The fifth stage, evaluation, is carried out on the results of product feasibility tests and product effectiveness. The evaluation results are used as the final conclusion regarding the results of the analysis of the product being developed, and are used as a benchmark for the researcher's success in answering the questions in this research. The results of this research state that: The average assessment from 4 validatories is 90.33% with the valid category so it can be said that the North Sumatra Ulos Weaving textbook is suitable for use because in terms of material, language and layout design it is in accordance with its function. textbooks. The average percentage of student response questionnaires after using the textbook was 86.57% with the category very suitable for application, so from this data it can be said that the textbook product is very suitable for application as a mandatory book for the Ulos Weaving course.

The results of the questionnaire from 6 lecturers who teach Ulos Weaving courses and which intersect with other courses such as Tourist Souvenir Design and Decorative Drawing really support the development of this Ulos Weaving teaching material so that it can broaden the insight of lecturers and students in developing product-based lecture outcomes. Thus, based on the five stages of research development (ADDIE) in this research, it was found that the product developed had fulfilled the elements of feasibility and effectiveness of using the product for the Ulos Weaving course. It also support with other research from Nainggolan, M., Halking, H., Hidayat, H., & Setiawan, D. (2023) said that the textbook design with ADDIE method is declared valid and suitable for use as a guide for students in multicultural learning

CONCLUSION

Based on the research results that have been analyzed and discussed in this research, the following conclusions can be obtained:

1. The development of the Ulos Weaving textbook refers to the Research and Development (R&D) research design using the ADDIE development model. The stages of this research are organized into a more detailed procedural guide, namely: analyze, design, development, implementation, and evaluation. The analyze stage is the initial stage, namely analyzing the needs of students and lecturers regarding the

suitability of teaching materials and learning objectives. The next stage is design. At this stage, researchers design products by referring to achievement-based curriculum standards which are arranged based on material characteristics and learning objectives. Create an initial design according to the chosen format and then the next stage is the development of the textbook product which undergoes revisions based on suggestions and input from 3 validators. The next stage of product implementation consists of product trials with questionnaires filled out by students and lecturers.

2. The feasibility of the textbooks that have been developed is determined based on feasibility assessments from expert validators and student response questionnaires. Validators consist of material, language and layout design experts. The results of material expert validation of the North Sumatra Ulos Weaving textbook were 90% in the very appropriate category. This figure shows that the material contained in the textbook is in accordance with the basic competencies that students want to achieve. The results of textbook validation by language experts were 89% with the very appropriate category. Furthermore, the validation results from layout design experts reached 92% with a very feasible category. This means that the teaching materials developed meet the requirements of the achievement-based curriculum well. The results of the student response questionnaire after testing the textbook were 86.57% in the very appropriate category. Based on this data, it can be concluded that the achievement-based Ulos Weaving teaching materials are very suitable for use.
3. With this percentage achievement, the Ulos Weaving teaching materials developed are very effective and practical to be applied as the main teaching materials for the Ulos Weaving course because they meet the quality standards of the achievement-based curriculum.

From the research results and conclusions, it is necessary to suggest to several parties, including students and lecturers, to make this research product into a mandatory textbook for the Ulos Weaving course in the Fine Arts Education Study Program. To the leadership of the Faculty of Language and Arts, Medan State University, to determine the Ulos Weaving course as one of the courses in the Independent Campus Learning (MBKM) curriculum which can be the choice of students from various university study programs throughout Indonesia and universities in the Asean environment. Thus, the Ulos Weaving Course needs to be improved, developed in accordance with the Implementation of the Achievement-Based Curriculum.

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