The Development of Digital Comics Based Teaching Material of North Sumatran Folklore for X Grade of SMA in Medan City

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Abstract

This study has purposes to develop the teaching materials for 3.7 and 4.7 basic competencies to identify and retell the values and the content in folklore through digital comics based of North Sumatran folklore and for X grade students at SMA Negeri (senior high school) 4 Medan. Research & Development (R&D) method is used in this study, meanwhile the development model used is Four D with the stages of 1) Defining, 2) Designing, 3) Developing and 4) Disseminating. The final results showed that after passing a feasibility test through a validation assessment by material experts, the average score of 2 experts was 91.38%, the average score of the media expert for validation assessment was 85.22%, the result of the small group trial was 89.58% and the result of the large group trial was 90.21%. The effectiveness test of digital teaching materials usage based on the evaluation of learning outcomes reached an average of 80 in which 24.3% obtained the interval score of 90 TPS \leq 100, 63.6% obtained the interval score of 75 TPS < 90, and 8.1 % obtained the interval score of 60 TPS < 75. Based on the research findings, the digital comic based teaching material of North Sumatra Folklore was suitable to be disseminated to help teachers and students in comprehending the Indonesian language lessons in identifying and retelling the values in the folklore.

Keywords Teaching Materials, North Sumatra Folklore, Digital



Comics

I. Introduction

North Sumatra is very rich in various cultural heritages. This province is also considered as a miniature of Indonesia since almost all ethnic groups live side by side peacefully in this region. Out of the cultural diversity, North Sumatra has 8 indigenous ethnicities that consists of: Toba Batak, Karo, Malay, Nias, Mandailing, Simalungun, Pak-Pak and Dairi. Surely, the 8 ethnic groups have cultural heritages, including folklore that contains moral values and local wisdom of North Sumatra.

Unfortunately the cultural richness as mentioned above has not been explored in learning Indonesian language at senior high schools in North Sumatra. The interviews results with the Chairperson of AGBSI (Association of Indonesian Language and Literature Teachers) of North Sumatra, showed that there were still many teachers at the MGMP Indonesian Language in each district in North Sumatra have difficulties in exploring and introducing the North Sumatra folklore to the millennial generation (senior high school students) today through quality visuals and attract the students' attention. The interview results recommend that it is necessary to organize an interesting learning media with good visual quality that can be accessed via Android offline so that it can save the students' internet data packages.

In the view of KD Indonesian subjects in junior high and senior high school, it was found that the local folklore materials were always present in every semester at every level of

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the education unit. The X grade of SMA, for example, is found in KD 3.7 and 4.7: Identifying and retelling the values and content in the folklores. Therefore, an in-depth documentation study towards the regional folklore is essential in order not to be disappeared, because there is no more informants retell it. Consequently, the transformation of folklore into digital form needs to be carried out optimally. In carrying out the teaching and learning process, Indonesian teachers are required to plan and determine effective and systematic steps. They are also required to be able to create learning through various online learning platforms during this pandemic.

Several writings which are considered relevant to this research include: Studies on the transformation of folklore or folklore into digital formats have been widely published, such as: Aditama (2020), Anugerah (2018), Ayu (2019), Damayanti (2020), Dewi, NPS (2020), Hadi (2018), Hasyim (2015), Husna (2017), Mukaromah (2020), Purwandari (2019), Veronica (2015), and Windari (2019). Unfortunately, none of the 12 articles that have been published by them discusses the North Sumatran folklore. Thus, this research will further develop the folklores into digital in the form of digital comics. This effort is carried out to optimize Indonesian language learning during the Covid -10 Pandemic or the new normal era with a blended learning pattern.

The competence of 21st century teachers as described by Rusman (2012:28) that there are 9 competencies or skills that must be possessed by the 21st century teachers, they are: 1) accountability and adaptability; 2) communication skill; 3) creativity and intellectual curiosity; 4) thinking critically and systemically; 5) skill in information and media literacy; 6) personal skills and cooperative relationships; 7) identification of the problems, elaboration and solutions; 8) personal direction; 9) social responsibility. Hosnan (2014:26) describes that there are 7 key competencies, they are: 1) collecting, organizing and analyzing information; 2) conveying ideas and information; 3) planning and organizing activities; 4) working together in a team; 5) using mathematical ideas and techniques; 6) solving the problem; and 7) using technology. It can be concluded that the competence of 21st century teachers consists of several things, they are: 1) following technological developments; 2) being able to work with a team; 3) doing adaptability; 4) identifying problems, descriptions 5) having communication skills; 6) having ability to think critically, and solutions: creatively and 7) having ability to be responsible.

Universitas Negeri Medan (Unimed), as the best LPTK in North Sumatra Province is one of the institutions who is responsible for the efforts to realize the education quality in North Sumatra. Therefore, this research was proposed to be carried out in an effort to fulfill the Unimed's responsibility.

Derived from the description of the background above, it is found that the implementation of Indonesian language learning in Medan City has not been fully in accordance with the demands of the curriculum, and has not used innovative learning media. Therefore, the researchers formulated three problems in questions as follows: How to prepare digital folklore for learning at KD 3.7 and 4.7, and appropriate textbooks for KD 3.7 and 4.7. for X grade students. Regarding the formulation of the problem above, the assumptions in this study are: (1) the use of digital folklore, as well as the North Sumatran Folklore textbook can ensure that PBM is carried out efficiently according to KD 3.7 and 4.7. (2) Digital folklore comics are tools that can realize the students' character based on the local norms, as an effort to form the Pancasila Student Profile, as mentioned in the current policy of the Ministry of Education and Culture.

II. Review of Literatures

The word folklore is derived from two syllables, namely folk and lore. The word folk means a group of people who have physical, social and cultural identification characteristics so that they can be distinguished from other social groups. The identifying characteristics include: skin color, hair shape, livelihood, and so on. The word lore is a tradition from folk, which is a part of culture that is passed down orally or through one example, accompanied by gestures or reminder aids. Danandjaja (Syuhada, 2018: 190) states that folklore is part of the culture collectively that is spread and passed down from generation to generation, among any kind of collective, traditionally in different versions both in oral form and examples accompanied by gestures or assistive reminder aids. Folklore is closely related to the people's lives.

Folklore is a popular belief that is often called superstition. Ethnic folklore is the identity of an ethnic group in line with the opinion of Dundes (1965: 2) folklore is a collective culture, which is spread and passed down from generation to generation in different versions. Folklore is a reflection of the collective human self and habits, so by revealing folklore it is like searching for human identity. (Marsellaa, E dan Putri, D, 2020)

Bascom (in Syuhada, 2018: 190) states that there are four functions of folklore, they are: (a) as a projective system, that is as a means of reflecting the imagination collectively; (b) as a means of ratifying cultural institutions; (c) as a pedagogical device; and (d) as a means of coercion and monitoring so that the society norms will always be obeyed by its collective members. Brunvand (as adapted from Danandjaja, 1986:21-22) suggests that folklore can be classified into three major groups based on its type: (1) verbal folklore, (2) partially verbal folklore, and (3) non-verbal folklore (Syuhada, 2018: 190).

Folk tale is a form of folklore found in Indonesia. At first, folklore was conveyed through oral culture in the form of parts of heroic stories depicted through wayang, and the others are in the form of performances. Folklore is spread through oral, not written culture. These folk tales are usually found in areas in Indonesia. The essence of folklore is in accordance with Hagar's statement (in Rahmat, 2019: 86) who states that folklore is equated in meaning with folklore which is the Indonesianization of the English word folklore which comes from the words folk and lore. Folk means community which is a group of people who have physical, social, and cultural identification characteristics so that they can be distinguished from other groups, while lore is a folk tradition, namely culture. Folk tale is part of folklore, which has a broader meaning. Folklore is a term adapted to mention the term folklore.

Comics have long been parts of Indonesian popular culture which experienced ups and downs in their development. Comics according to Scott McCloud is juxtaposed pictorial and other images in deliberating sequences which are intended to convey information and or produce an aesthetic response to the readers. McCloud emphasizes that comics are images that are lined up in a deliberate sequence which is intended to convey information or produce an aesthetic response from the readers. MS. Gumelar also explains in his book that comics are sequences of images that are arranged according to the purpose and philosophy of the creator until the message of the story is conveyed.

Comic books provide simple stories that are easy to catch and comprehend so that they are very popular with both children and adults. Comic is defined as a form of cartoon that reveals characters and applies a story in a sequence that is closely related to the image and is designed to provide entertainment to the readers. It is generally depicts cartoons so that its existence cannot be separated from the role of the cartoon itself. Noerhadi in I Dewa Putu Wijana defines cartoon as a form of humorous response in a visual image. Cartoon characters are fictitious created to present social comedies and witty visualizations.

III. Research Methods

This research uses a research development (R&D) approach which is transforming folklore into digital comics. The steps are as follows: a) Documenting folklore through interviews and literature review, b) Packaging folklore as Indonesian language teaching materials, c) Transforming folklore into digital comics, and d) Compiling descriptions teaching materials. The development model that was used in this research is the Four D development model through 4 stages, they are: defining, planning, developing and disseminating.

The instruments in the study used observation sheets, interview sheets, questionnaires and evaluation tests of learning outcomes. The observation sheets are used to obtain the data when carrying out the observations which include learning activities, learning attitudes, the use of teaching materials and internet facilities for each student during online study. The interviews are used to collect information directly from the information sources. interviews were conducted with the teachers of Indonesian language subjects. The interview technique was used to collect the data in the preliminary study. The questionnaires were used to obtain the initial data and the data on the feasibility of the developed teaching materials. The data collection tool is in the form of a questionnaire as a validation tester by material and media experts as well as the effectiveness of the teaching materials usage. collection tool for material experts is in the form of a questionnaire with the following aspects: (a) Self-instruction, (b) Self-contained, (c) Standalone, (d) Adaptive, and (e) User The data collection tool for media experts is in the form of an assessment questionnaire with the following criteria: format, organization, attractiveness, shape and size fonts, space, and consistency. The validation by students includes the following criteria: material presentation, display, learning, and benefits. The following criteria are used to analyze the questionnaire of the material expert, media expert and user responses:

Table 1. Criteria for Scoring the Validation of Digital Teaching Materials

Assessment	Score
Very appropriate (SS)	5
appropriate (S)	4
Failry appropriate (CS)	3
inappropriate (TS)	2
Very in appropriate (STS)	1
(Sugivono: 2011)	

(Sugiyono: 2011)

The following equation is used to score the expert feasibility test questionnaires of the material experts, media and the responses of the users (students).

$$NP = \frac{R}{SM} \times 100\%$$

Note:

NP : Percentage value obtained

R : Score obtained SM : Maximum score From the questionnaire data, they were used as the basis for the quality and quantity of digital materials. If there is a shortage, it was corrected immediately based on the data. Then, the level of assessment validation was based on the questionnaire uses the eligibility criteria as shown in the following table:

Table 2. Criteria of Eligibility Assessment for Digital Teaching Materials

Percentage	Eligibility Criteria	Description
81%-100%	Very eligible	No need revision
61%-80%	Eligible	No need revision
41%-60%	Fairly eligible	Revision
21%-40%	Not eligible	Revision
0%-20%	Very not eligible	Revision

(Riduwan, 2014: 80

All the data obtained in the field were recorded, then processed and analyzed carefully. The results of the data processing and analysis were then used as a report material. Then, the results of the data analysis are compiled and arranged systematically with a descriptive technique.

IV. Discussion

4.1 The Process of Developing

The Four D development model was used for this research process on developing the digital teaching materials through some steps as follows: 1) defining through the initial analysis, the analysis of the students, concept analysis, task analysis and formulation of learning objectives. 2) designing through the steps of preparing the test instruments, selecting media, selecting formats and making an initial design (draft I). The products of draft I can be seen as follows:



Cover of teaching material Prelim and foreword

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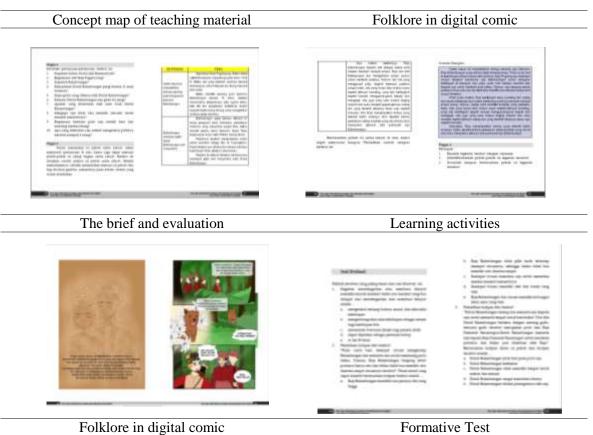


Figure 1. The Display Design of Digital Comics Based Teaching Materials on he North Sumatran Folkrore

4.2 Expert appraisal followed by revision

The material expert validation was carried out by Dr. Elly Prihasti, S.S., M.Pd.. and Frinawaty L. Barus, S.Pd., M.Pd. Based on the material expert validation assessment sheet, a score of 95 was obtained with a maximum score of 105. The percent value obtained was 91.38% with the eligibility criteria Very Eligible (processing of assessment data). Derived from the processing of the material expert's assessment data, the average score of each aspect of the assessment briefly can be shown as follows:

Table 3. Average Score of Material Expert Validation for Each Aspect

No	Aspect	Score
A	Self Instructional	4,60
В	Self Contained	4,67
С	Stand Alone	4,00
D	Adaptive	5,00
Е	User Friendly	4,75
Average Score		4,60

Based on the above data, a bar chart diagram can be seen as follows:

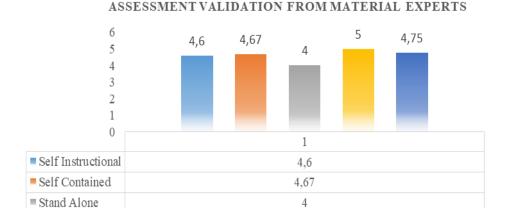


Figure 2. Average Score Diagram of the Assessment Validation from Material Experts

5

4,75

Adaptive

User Friendly

Media Experts Validation was carried out by Mr. Adek Cerah Kurnia Azis, S.Pd., M.Pd. and Dr. Wahyu Tri Atmojo, M. Hum. Based on the media expert validation assessment sheet, a score of 98 was obtained with a maximum score of 115. The value percentage obtained was 85.22% with the eligibility criteria Very Eligible. Derived from the media experts' assessment data processing, the average score for each aspect of the assessment in brief is as follows

Table 4. Average Validation Score of Media Experts for Each Aspect

No	Aspect	Score
A	Format	4,14
В	Material Organization	4,67
С	Attractiveness	4,33
D	Shape and Size Font	4,00
Е	Consistency	4,28
Average Score 4,28		

Based on the above data, a bar chart diagram can be seen as follows:

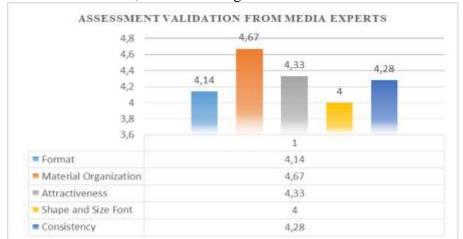


Figure 3. Average Score Diagram of the Assessment Validation from Media Experts
After Draft I was validated and revised, Draft II was produced which then be tested on the students in the field trial phasewhich was limited to 10 students.

4.3 Trial development

Draft II which was used for a trial was limited to a small group that consisted of 10 students and with the criteria of the students' achievement in the high, medium and low, through student responses. Based on the of students' responses in the limited trial, a score of 215 was obtained with a maximum score of 240. So the percent value obtained was 89.58% with the eligibility criteria Very Eligible. Based on the data processing of the users' responses in a limited trial, i the average score for each aspect of the assessment in brief is as follows:

Table 3. The Oscis Assessment in A Linned That of Each Aspec	Table 5. The Users	Assessment in A Limited	d Trial of Each As	pect
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No	Aspect	Score
A	Display of teaching materials	4,2
В	Material presentation	4,13
C Advantages of teaching materials 4,4		
Average Score 4,24		

Based on the above data, a bar chart diagram can be seen as follows:



Figure 4. Average Score Diagram of the Assessment in A Limited Trial

The result of this revision II is then used in a wider field test in the validation testing step, that is in classroom learning activities to determine the effectiveness of the developed teaching materials

4.4 Dissemination Stage

This last stage is carried out in 2 steps, they are: a) Validation testing and b) evaluation measurement. In the validation testing step, the result hat has been revised at the development stage is then implemented on the real target, that is the Indonesian language subject in X Grade of SMA Negeri 4 Medan with 37 students tat consists of 23 males and 14 females. At the time of implementation, the achievement measurement of the objectives is carried out. This measurement is carried out to determine the effectiveness of the developed product. The results of the measurements at the time of implementation were: 1) derived from the assessment sheet responses of the users (students) in the large group trial, the total score was 2328 with the maximum score was 2800 and a percentage of 90.21 with the criteria Very Eligible. Meanwhile the average assessment results of each aspect are as follows: the display aspect was 4.60, the material presentation aspect was 4.36 and the advantages aspect was 4.68 and the overall average score was 4.57 as shown in the following table:

Table 6. User Ratings in the Extensive Trial of Each Aspect

No	Aspect	Score
A	Display of teaching material	4,60
В	Material presentation	4,36
C Advantages of teaching materials 4,68		
Average Score 4,54		4,54

Based on the above data, a bar chart diagram can be seen as follows:

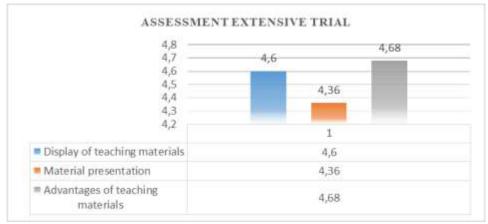


Figure 5. Diagram of the Average Scoring of the Large Trial Score

Based on the average value of the students' learning outcomes in the basic competencies 3.7 and 4.7 by identifying and retelling the values and the content in folklore through North Sumatran folklore comics, it was observed that 80% completeness presentation was obtained which means the interpretation criteria were very effective. The recapitulation and calculation of the evaluation value of the students' learning outcomes on the material by identifying and retelling the values and the content in the folklore is illustrated in the following table:

Table 6. Average Score of Learning Evaluation Results

No	Interval Score	Number of Students
1	$90 \le \text{TPS} \le 100$	9 students (24.3%)
2	75 ≤ TPS< 90	25 students (67.6%)
3	60 ≤ TPS< 75	3 students (8.1%)
4	40 ≤ TPS< 60	
5	$0 \le TPS < 40$	

Based on the scores above, it is noted that the completeness of the learning Indonesian language of KD 3.7 and 4.7 has been achieved. As Yamasari (2010) explains that the mastery of learning using media is 80% of the students who took part in the learning were able to achieve a minimum mastery level of the material or at least 80% of the students who took part in the learning reached a score of 75 (maximum score is 100).

The results of this study were in line with the findings of previous studies such as Yuhdi (2018), Sihombing (2020), Lubis (2021), and Wijya, R. E, et al. (2021). Each of these research results emphasizes the importance of developing the teaching materials or learning media into a digital form as a support for online learning, especially during the implementation of distance learning by the Indonesian government during the Covid-19 pandemic. The advantages of this developed teaching material product are: a) These teaching materials can be used on laptops, notebooks, or PCs offline. b) This digital teaching material

can be used by teachers, students, independently or publicly. d) This digital teaching material attracts attention, because they are packaged in the form of digital comics, easy to understand, help in understanding the material, and help the students' independently. d) This teaching material can make the students easier to understand the values contained in the folklore and make it easier for the students to remember so that they are able to retell the folklore. e) This teaching material is supported by materials that have been adapted to the core competencies and basic competencies of the 2013 curriculum (revised in 2018).

Derived from the research results and discussion above, the final product of this teaching material is considered eligible and has a function as a learning medium for basic competencies 3.7 and 4.7 to identify and retell the values and contents in the folklore, it has even been proven that this teaching material can increase the students' interest and learning outcomes.

V. Conclusion

Based on the study results, it can be concluded that: 1) The process of developing teaching materials by using the Four D development model through the stages of defining, designing, developing and disseminating was categorized as suitable to be used by the students of SMA Negeri 4 Medan of X grade in Indonesian Language subject 2) The final product of teaching materials is obtained after going through testing the feasibility level or quality of teaching materials. The feasibility test through the validation assessment by the material expert obtained an average score of 91.38% (2 experts), the average score of the media expert validation assessment was 85.22%, the small group trial result was 89.58% and the large group trial result was 90,21%. Testing the effectiveness of using the digital teaching materials based on the evaluation of the learning outcomes reached an average of 80, with 24.3% obtained the scores in the interval 90 TPS <100, 63.6% obtained the scores in the interval 75 TPS < 90, and 8.1% scored in the interval 60 TPS < 75. Based on the findings of the research, the North Sumatran Folklore teaching materials based on digital comics was considered to be disseminated to help the teachers and the students in understanding Indonesian language lessons in identifying and retelling the values in the stories.

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