



# Development of Learning Media Through Traditional Rimau Langkat Games Based on Macromedia Flash to Improve Cultural Literacy

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Article Info	Abstract
<b>Article History</b> Received: 2022-08-11 Revised: 2022-09-22 Published: 2022-10-01	The research aims to develop learning media through traditional Rimau Langkat games. Nowadays, character education and cultural literacy are needed to create a generation that has cooperation, togetherness, and nationalism for each other and thus local wisdom has values that can be used to teach character education. This research is research and development (R&D) with the 4 D design proposed by Sivasailam Thiagarajan. 4 D design consists of define, design, development, and dissemination. The research involved experts in learning media, Langkat culture, and Rimau Langkat Games to assess the digital storytelling. The sample is fourth-semester students in English Department Study Program, STKIP Al Maksum. The research used one group pre-test post-test to know the influence of the electronic module in teaching character education to the students. Based on the discussion, the expert in learning media, Langkat culture, and language was assessed electronically in the two stages. In the first stage, the electronic module was invalid the score range was 58%. In the second stage, the electronic module was valid the score range was 90%. Furthermore, based on the t-test, the electronic module was effective to teach character education to the students.
<b>Keywords:</b> Video; Local Culture; Cultural literacy.	

Artikel Info	Abstrak
<b>Sejarah Artikel</b> Diterima: 2022-08-11 Direvisi: 2022-09-22 Dipublikasi: 2022-10-01	Penelitian ini bertujuan untuk mengembangkan media pembelajaran melalui permainan tradisional Rimau Langkat. Saat ini pendidikan karakter dan literasi budaya diperlukan untuk menciptakan generasi yang memiliki kerjasama, kebersamaan, dan nasionalisme satu sama lain sehingga kearifan lokal memiliki nilai-nilai yang dapat digunakan untuk mengajarkan pendidikan karakter. Penelitian ini merupakan penelitian dan pengembangan (R&D) dengan desain 4 D yang diajukan oleh Sivasailam Thiagarajan. Desain 4 D terdiri dari define, design, development, dan disseminasi. Penelitian ini melibatkan pakar media pembelajaran, budaya Langkat, dan Rimau Langkat Games untuk menilai digital storytelling. Sampel penelitian ini adalah mahasiswa semester IV Program Studi Jurusan Bahasa Inggris STKIP Al Maksum. Penelitian ini menggunakan one group pre-test post-test untuk mengetahui pengaruh modul elektronik dalam pengajaran pendidikan karakter pada siswa. Berdasarkan diskusi, ahli media pembelajaran, budaya Langkat, dan bahasa dinilai secara elektronik dalam dua tahap. Pada tahap pertama, modul elektronik tidak valid dengan rentang skor 58%. Pada tahap kedua, modul elektronik dinyatakan valid dengan rentang skor 90%. Selanjutnya berdasarkan uji-t, modul elektronik efektif untuk mengajarkan pendidikan karakter kepada siswa.
<b>Kata kunci:</b> Video; Kearifan Lokal; Literasi Kebudayaan.	

## I. INTRODUCTION

The development of science and technology has an effect on every line of human life, both in economic, social, cultural, and educational. One of the adjustment factors related to teaching is learning media that need to be studied and mastered by teachers so that they can deliver subject matter to students and teachers must also have the ability to foster students. develop the competence of students, both personal, professional, social and managerial. As one of the learning tools, learning media must be packaged as attractively as possible to attract the attention of students. The learning media must also be able

to insert learning materials in this point of learning English at the elementary and middle levels. In addition to inserting lesson materials, learning media It is also expected to be able to increase awareness of cultural literacy.

Increasing cultural literacy can be included through traditional games that are selected as the local wisdom of the Indonesian nation. In these traditional games can also give students the values of character education. As for the traditional games used in the media, the study is Rimau Langkat. In the process of developing learning media through Rimau Langkat traditional games, an application is needed to

combine the 2 parts. The application that the author uses is macromedia flash. This interactive multimedia application is used because it can interpret text, images, videos, animations and audio in an attractive presentation. This research refers to one of the leading researches that has been determined in the strategic plan of STKIP Al Maksum's research, namely educational innovation with the sub-field of developing IT-based learning media with the hope that the learning media products produced through this research can meet the needs of the Soeaking I course, program Study of English Education, STKIP Al Maksum and can be disseminated to elementary and secondary level teachers as a learning medium that can also improve students' cultural literacy. Local wisdom is a broad phenomenon (Sibarani (2012)). Various traditions implemented by the Langkat Regency, Rimau Langkat games community are a form of local wisdom that contains character values and can be used as teaching materials to teach character education to students so that a generation is expected to be born that is not only cognitively intelligent but has the character of cooperation, courtesy, and love of local culture.

Character education has the same essence and meaning as moral education. The goal is to shape the child's personality to become a good human being and a good citizen. The criteria of a good human being and a good citizen for society and nation are certain social values that are much influenced by the culture of the people and the nation. future. Furthermore, character education is a deliberate effort to help a person he can understand, pay attention to, and perform core ethical values. values derived from the culture of the Indonesian nation itself, to foster the personality of the younger generation Gunawan (2011). Character education based The benefits of implementing local wisdom can also increase the spirit of cooperation, and togetherness, being open to each other, developing a family spirit, building better communication, and responding to the development of the outside world Rasyid (2017). Therefore, the nature of character education in the context of Indonesian education is value education, namely the education of noble on local wisdom also has the purpose of changing the attitude and behavior of existing human resources to increase work productivity to face various challenges in the However, based on the observations of researchers, local wisdom in Langkat is almost unknown to the public at large.

Research on local wisdom has been Research on local wisdom has been carried out by previous researchers, such as: Armawan (2017) research on the development of English for guidance based on local wisdom teaching materials. The results of this study are teaching materials based on local wisdom on the island of Bali and used as English teaching materials for courses English for Guiding, Department of English Education, Undhiksa. However, previous research produced printed teaching materials. The provision of teaching materials in digital format or in the form of digital story telling video has not been done by previous researchers. Therefore, in this study will produce digital storytelling video that can be opened through the youtube without installing an application on a smartphone.

## **II. METHOD**

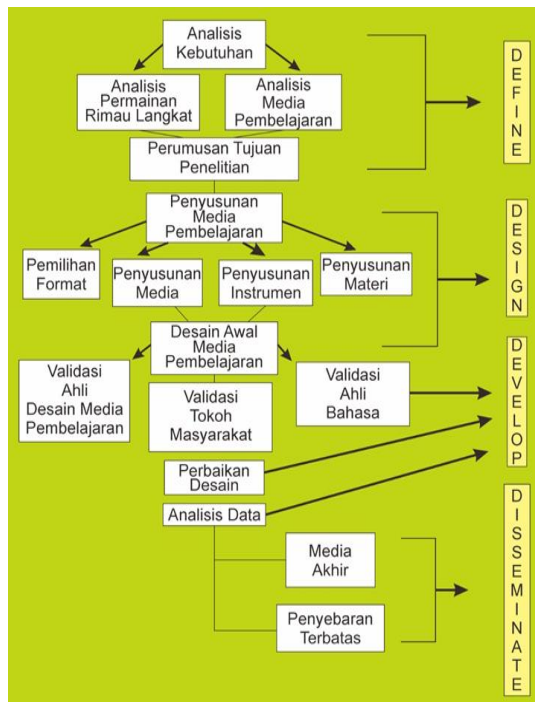
The research approach used is a quantitative this research is a type of R&D research (Research and Development). Research and Development is a research method used to validate and develop a product, Sugiyono (2019). This study was conducted to develop and produce a learning media product with the aim of introducing the local wisdom of Langkat Regency and teaching character education to students. The products that will be produced are digital storytelling video and the content is based on Rimau Langkat games as local wisdom content to teach character education to students. The research Model used is the Four-D models proposed by Sivasailam Thiagarajan consists of four stages, namely: (define), (design), (development) and (dissemination) Mulyatiningsih (2011). The subject of research is the fifth semester student Society of English Education Study Program, STKIP Al Maksum as a testing ground.

The research procedure consists of four stages, namely:

1. At the stage define, researchers collect various information based on the analysis of needs and the information is used as material for product planning teaching materials that are expected to meet the needs sourced from the research site.
2. At the stage design, researchers design and develop an initial draft (prototype) electronic module. Information obtained at the stage define used to develop the initial design.
3. Further, at the stage of development initial draft of the product that has been designed at the stage design furthermore, it will be validated by educational technologists, cul-

tural figures and linguists. Stage development implemented in order to analyze, evaluate and revise the electronic module products.

4. After the product design is validated by the validator, the weakness will be known and the next stage is the researcher to improve the electronic module design on the input provided by the validator. After revising the design, the researchers tested the product to measure the effectiveness of digital storytelling video in learning, especially in speaking and teaching character education to students. Findings in the trial phase will be the basis for revising digital storytelling products. After the design revision has been completed and declared effective and feasible, then the next stage dissemination namely the distribution of digital storytelling video to lecturers as teaching materials in teaching speaking.



**Figure 1.** Research Flowcharts

The questionnaire of expert was analyzed by using the percentage score of learning media. The formula used to calculate the percentage validation questionnaire of experts and community leaders, namely:

$$\text{Score presentation} = \frac{\text{Total Score}}{\text{Maximal Score}} \times 100$$

Akbar (2013) media validity qualification basedon the table below:

**Table 1.** Media validity qualification

Media validity qualification	
Achievement level	Qualification validity
85,01 % - 100%	Valid
70,01 % - 85,00 %	Quite valid
50,01% - 70,00%	Less valid
01,00% - 50,00%	Invalid

After the digital storytelling video design is improved, the next step is tested to determine the effectiveness of video in learning, especially in teaching speaking and character education to students.

### III. RESULT AND DISCUSSION

#### A. Result

The digital storytelling video, Rimau Games, it contains the local wisdom in Langkat Regency developed by following stages in R&D 4 D models consists of four stages, namely: At the define stages, the author did analysis to get the idea that used to develop the initial learning media. The analysis is conducted from observation while teaching and learning process. The author found that in the Speaking I course, there is no learning media which help students to learn about local wisdom which the local wisdom is one of prominent content in learning Speaking I. In addition, the author also interviewed with the local citizens in Langkat Regency to know the description of Rimau Langkat Games. The result of observation and interview were used as to formulate the aim of the research and making the media. After gathering need analysis, the next steps prepared the media. In the define stage, the author prepared to make the media by following these steps. The first step is the author selects the design of the media which the design of the media is digital storytelling video. Next, the digital storytelling video arranged which the local wisdom in Langkat Regency is the main content. The video was uploaded to youtube. The aim is to make students may easyspeaking in English and the and the students are easy to watch the to youtube anywhere and anytime.



**Figure 2.** The Display of Digital Video



**Figure 3.** Rimau Games

The electronic module can be accessed in this following link:

<https://www.youtube.com/watch?v=C78QXhFvCpQ>

In the development stage, the media was examined the expert in design, Rimau Games and language. The assessment did by using the questionnaire to assess the prototype of learning media. The result of expert in media is displayed in the table 2.

**Table 2.** Assessment of Learning Media Prototype

Expert Validation	Score percentage	
	First stage	Second stage
Expert in learning media	57%	87%
Expert in Karo culture	56%	89%
Expert in Language	59%	92%
Criteria	Less valid	Valid

In the first stage, the expert in learning media assess the product by using the three criteria of assessment, there are display, design, and programming. In the first stage, an expert in learning media gave score with percentage 57% and therefore, the score can be categorized as less valid. The author revised the media based on the suggestion and recommendation in the first stage, in the second stage, the expert in learning media category is valid. Expert in, Rimau Games also assessed the media. In the first stage, the expert assessed and gave score 56% or less

valid. The expert gave suggestion to add more detail about local wisdom in Langkat Regency, especially local wisdom involved in the food and traditional house. Based on the suggestion, the author revised the media and submit the electronic module to the expert. In the second stage, the expert gave score 89% and can be categorized is valid. Language expert assessed the media by using indicator in language used. The indicator consist of: straightforward, communicative, dialogical and Interactive, conformity with students' development and grammar. In the first stage, the language expert gave score 59% percentor can be categorized is less valid. The recommendation and suggestion in the first stage used to revise the electronic module. Next, theauthor revised the electronic module and submit to the expert in language. In the second stage, the expert in language gave score 92% percent or can be categorized as valid media.

The electronic module was already assessed by the expert in media, Rimau Games and language. Based on assessment from each expert, the media was valid and ready to be used in the classroom. To know the effec- tiveness of electronic module in teaching character education to the students, the author used one-group pretest-posttest design. The subject is the fourth students consisting of fifteen students who followed Speaking I course, English Department Study Program, STKIP Al Maksum. In the pre-test, the author teaches the material about character education using local wisdom in Langkat Regency. In this stage, the author did not use any learning media in the classroom. In the end of course, the author gave 25 questions to the students. In the post test, the author taught character education by using electronic module as the media in teaching character education by using local wisdom in Langkat Regency. In the end of course, the author gave 25 questions to the students.

**Table 3.** Paired Samples Statistics

Paired Samples Statistics					
		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	PRE-TEST	53.67	15	7.825	2.021
	POST-TEST	76.40	15	3.291	.850

Based on the above table, the mean score of pre-tests is 53.67. Furthermore, the mean score of post-tests is 76.40. There is improvement from mean score between pre-tests and posttest.

**Table 4.** Paired Samples Correlations

Paired Samples Correlations				
		N	Correlation	Sig.
Pair 1	PRE-TEST & POST-TEST	15	-.150	.594

The above table depicted the correlation between pre-tests and post-tests. The sig value is 0.594 compared with level of significant 0.05 and thus, the values of sig is bigger than level of significant 0.05. Therefore, based on the testing criteria stated that there is no correlation between pre-tests and post-tests. The table above showed the result of t-test from the data pre-test and post-test. The criteria of t-test are the value of sig (2-tailed) < 0,05, it can be categorized there is effect of the electronic module in teaching character education to the students. Meanwhile, if the value of sig (2-tailed) > 0,05, it can be categorized there is no effect of electronic module in teaching character education to the students. Based on the level of criteria, the value of sig (2. Tailed is 0.000 compared with level of significant 0,05 and thus, it can be stated that the value of sig 2 tailed is lower than 0,05. Therefore, based on the criteria, the electronic module was effective to teach character education to the fourth students in the Speaking I Course. After the electronic module was valid and effective to teach character education, the last stage is dissemination. The dissemination is limited only in the scope of English Department Study Program, STKIP Al Maksum. The future, the electronic module is needed to be tested with the large subject so that the electronic module can be used by the teacher in Indonesia to teach character education to the students.

## B. Discussion

Based on the results of the analysis of The result showed that the electronic module was valid after assessed by the expert in media, Rimau Games, Langkat and language. In addition, based on t-test, the electronic module was effective to teach character education the

the students who follow Speaking I course.

## IV. CONCLUSION AND SUGGESTION

### A. Conclusion

Based on the result, the digital storytelling video was assessed by the expert in learning media, culture and language. In the first stage, the expert in learning media gave score with percentage 57% percent. Next, expert in Langkat Regency also assessed the media and gave score 56% percent. In the first stage, the expert in language gave score 59% percent. Based on result in first stage, the digital storytelling video was invalid. After revising the electronic module, in the second stage, expert in learning media assessed and gave score 87% percent. Next, the expert in culture gave score 89% percent. The expert in language gave score 92% percent. The score of each expert in the second stage can be categorized is valid. The electronic module was examined to know the effectiveness to teach character education. To know the effectiveness, the author used one- group pretest-posttest design. Based on pre- test and post test testing, there is improvement of mean score between pre-test and post-test. Furthermore, based on t-test result, the value of sig (2. Tailed is 0.000 which compared with 0,05 as the level of significant.

### B. Suggestion

The suggestions of the research are: (1) The lecturer in English Department has to create a learning media in digital format so that the students were interested in the process of teaching and learning, especialling in Speaking class, (2) Local wisdom has to be maintained and teach to the students so that the local wisdom will be known by the every people.

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