Developing a Digital Animation for Teaching Narrative Text at Ninth Grade Students of SMP Negeri 2 Kota Serang

Mentari Viona
Faculty of Teacher Training and Education, University of Sultan Ageng Tirtayasa, **mentariviona16@gmail.com**
Dina Rachmawati
Faculty of Teacher Training and Education, University of Sultan Ageng Tirtayasa, **dina@untirta.ac.id**

Abstract

The objectives of this research were: (1) to find out students' needs in learning narrative text at ninth grade students of SMP Negeri 2 Kota Serang, (2) to find out how to develop an animation of narrative text (ANTEX), (3) to find out appropriateness of digital animation for teaching narrative text at ninth grade students of SMP Negeri 2 Kota Serang. This research adapted the Research and Development (R&D) design from Borg and Gall (1983). It consists of (1) research and information collecting, (2) planning, (3) develop preliminary form of product, (4) preliminary field testing, (5) main product revision, (6) main field testing, (7) operational product revision. Research instruments used students' open-ended questionnaires, semi-structured interview, students' assessment sheets, material, and media experts' validation forms. Data were analyzed qualitatively and quantitatively. Data analysis showed that students and English teacher needed a digital animation. Additionally, animation of narrative text (ANTEX) obtained scores 78% and 80% in preliminary field from material and media expert, 90% and 100% in main field from material and media expert. Moreover, ANTEX obtained scores 87.5% and 88.5% in preliminary and main field from students. Those results showed that ANTEX was appropriate to be used for teaching-learning narrative text.

Keywords : Digital Animation; Narrative Text; Research and Development

INTRODUCTION

The rapid progression in technology makes learning media become very important in the teaching learning process. It is true that by using media, the materials in the teaching learning process will be understood easily by the students. It can also decrease the monotonous learning because media is facilitated by some completed features inside. It is in the line with Smith (2015) who said that "learning media is one of the class equipments which can improve the learners' involvement; attract them to participate in the teaching and learning activities".

Digital animation as one of ICT based media for learning source plays an important role for teachers and students to integrate it in their teaching learning process. The term "animation" is not used to describe drawn figures, but rather to describe movements of either text or graphics on the computer screen (Berg, 1955: 67). It proves that the use of digital animation helped the students to learn the materials.

Moreover, in 2013 curiculum, one of the learning materials which is learnt by the ninth grade students is narrative text. Most of the students regarded narrative text as one of the most difficult text materials. They found the difficulties in understanding narrative text materials because they had to understand the vocabulary in the text, found out the specific information in the text, and identified the generic structures and language features of the narrative text.

Therefore, the use of digital animation expected to help the students and teachers' problems in teaching-learning narrative text materials. According to Berg (1955: 67), "the application of using digital animation as one of learning media could help the students to build logically think, establishing mood, and increasing a sense of identification in learning narrative text material". So, it meant that the use of digital animation built an interesting learning atmosphere and helped students understood easily in teaching-learning narrative text.

THEORETICAL FRAMEWORKS

General Concept of Narrative Text

Based on 2013 curriculum, one of major type of texts that should be learned by Junior High School students is narrative text. According to Anderson (1998: 3) "a narrative is a text that tells a story and, in doing so, entertains the audience". Narrative can be imaginary or factual (fairy tales, mysteries, fables, romances and adventure stories, myths and legends). There are five generic structures of narrative text consists of: First, orientation which tells where and when the story happened and introduces the participants of the story, who and what is involved in the story; Second, complication which tells the beginning of the problems which leads to the crisis (climax) of the main participants; Third, sequences of events which tells how the characters react to the complication; Fourth, resolution which tells the resolution of the problem, Fifth, re-orientation/coda which tells a moral lesson, advice or teaching from the writer. Moreover, Anderson (1998) added that "there are also the language features which usually found in a narrative. Such as; first, specific characters; second, time words that connect events to tell when they occur; third, verbs to show the actions that occur in the story; fourth, descriptive words to portray the characters and settings. In conclusion,

narrative text is a story which occurred in past and has a social function to amuse or entertain the readers.

The Concept of Digital Animation

Animation is described as the movement of pictures and text in graphic used to help the user's become more enjoy to understand one thing. In the educational field, the digital animation media play an important role in teaching learning process. The digital animation media can help both the students and teachers to understand in teaching and learning materials. According to Berg (1955) "the term "animation" is not used to describe drawn figures, but rather to describe movements of either text or graphics on the computer screen".

General Concept of Adobe Flash Macromedia 8

Macromedia Flash 8 is a software program to create animated and professional web applications. It is used to make up games, cartoon animation, and applications such as an interactive multimedia which can be used in the teaching learning process. It is also a combination of learning concept with the audiovisual technology capable of generating new features that can be used in the education field. "The animation that is produced by macromedia flash 8 is an animation movie file shaped" (Tiarina, 2013). This movie can be graphic and texts, voice file imported, video, and even pictures file from other application. Macromedia flash 8 animations are able to make website layout and its presentation to be unique and interested, with video creative pictures.

In addition, as animation software, adobe flash macromedia has some advantages which can give the benefits to their user. Mike (2000) state that Macromedia flash 8 has some excellences technology, such as: First, the graphic images compress down extremely well and making for streamlined animation; Second, flash front-ends can be hooked into a database through Generator and can serve dynamically-generated images and text; Third, flash gives designers new control over the display and size of typographic elements on the web; Fourth, flash allows for designers to create custom drop-down menus and other innovative interface elements that better organize information.

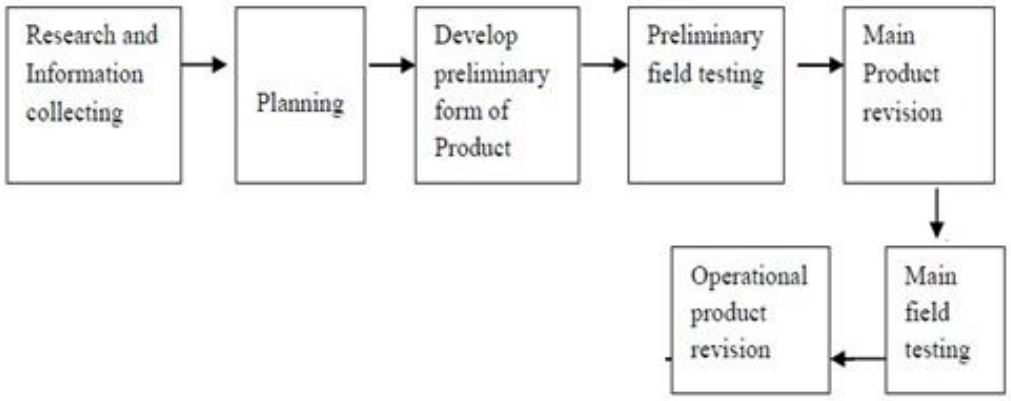
RESEARCH METHODOLOGY

This research applied Research and Development (R&D) from Gall & Borg (1983) design. Educational research and development (R & D) is a process used to develop and validate educational products (Gall & Borg, 1983: 774). This research was conducted at ninth grade students of SMP Negeri 2 Kota Serang as the participants. Open-ended Questionnaires, Semi- structured Interview, and Close-ended Questionnaires were used as the research instruments of this research.

Model Development Procedures

Based on the needs, only seven Borg & Gall's procedures (1983) which were used as follow :

Illustration 1: The Cycles of Research and Development (R&D) Model



1. **Research and Information Collecting**
   The data was collected in two ways. The first, review some related literatures as a basic of research. From that literature, the researcher studied about some theories, including educational research, a digital animation, the concept of reading material, and the core and basic competency of reading skill in the narrative text material for the ninth grade students. Second, the researcher distributed 40 open-ended questionnaires to ninth grade students in order to know the information about their needs in learning narrative text material and conducted the semi-structured interviewed with a ninth grade English teacher.
2. **Planning**
   The researcher selected and arranged the media content based on the students' needs analysis and semi-structured interview in the research and information collecting and core and basic competency of reading skill in the narrative text materials.
3. **Develop Preliminary Form of Product**
   The researcher developed an appropriate digital animation. The researcher used Adobe Flash Macromedia 8 software. It was free software which can be downloaded by teacher to create and develop the digital animation. That developed product then was used in the preliminary field testing.

4. **Preliminary Field Testing**
   After the preliminary product finished, the researcher concerned with the test by using the developed product to small group which consisted of 20 students, the students' assessment, and the material

and media expert's validation to obtain the qualified evaluation of the developed product. Then, the result of students' assessment forms and suggestion from material and media experts were used by the researcher to revise the product in the main product revision step.

5. **Main Product Revision**
   The researcher revised the product after the treatment based on the suggestions and comments from students' assessment forms and the material and media expert's validation sheets in the preliminary field testing. It was used to revise the product which was digital animation after the treatment to the small group students. Then, the revised product was prepared to be used by the researcher for the main field testing.
6. **Main Field Testing**
   The researcher tested again the revised product in a large group which consists of 40 students. Here, the researcher gave the assessment forms to the students in the large group and the validation sheets to the media expert and material expert in order to give the validation of the revised product. Then, the validation from both material and media expert were used to improve the developed media in the next step.
7. **Operational Product Revision**
   It was the last step in this research procedures. In this step, the researcher completed the developed product. It was used to perfect the quality of the digital animation product.

Data Collection Techniques

There were two different data collection techniques which were used to answer the research questions based on the formulation of problems. Students' open-ended questionnaires and semi-structured interview with a ninth grade English teacher were used to find out the students' learning needs based on the first research question. Students' open-ended questionnaires was conducted in the research to obtain the information about the students' needs in learning narrative text. In addition, semi-structured interview was used in this research to obtain teacher's point of view about the teacher's difficulties and the students' needs in learning narrative text.

The students' assessment forms, material, and media experts' validation sheets through close-ended questionnaires were used to collect the data based on the second and the third research questions about how to develop the media and the appropriateness of learning media. It was used to give the validation about the appropriateness of the developed product. The material expert gave the validation for the content quality of the developed product in narrative text material.

However, the media expert gave the validation about the technical quality of the developed product. Meanwhile, the students gave the assessment in order to know whether the developed product was acceptable and made them understand in learning narrative text. It was aimed to obtain suggestions and validations for the final product.

Research Instruments

The research instruments of this research consisted of students' open-ended questionnaires, semi-structured interview, material expert's validation sheets, media expert's validation sheets, and students' assessment forms.

First, the students' open-ended questionnaires were used to find out the students' learning needs of the ninth grade students of SMP Negeri 2 Kota Serang. In developing the needs analysis questionnaire, this research referred to the theory of needs assessment proposed by Hutchinson and Waters (1987) and Nunan (2004). The result of the questionnaire was used to develop the reading materials. Second, the semi-structured interview was given to the ninth grade English teacher. The aim of this interview was to obtain the students' needs based on the teacher's perspective and teacher's difficulties in teaching learning materials of narrative text. "Semi-structured is used to refer to qualitative approaches, typically involving interviews and observations, that have some explicit structure to them, in terms of theory or method, but are not completely structured" (Ann Blandford, 2013).

Meanwhile, to answer research question number two and three about the process how to develop the media and the appropriateness of the learning media, the researcher used the material expert's validation sheets, media expert validation sheets, and students' asessment forms.

First, the material expert's validation sheets were given to the material expert after the first draft material was developed and the second draft developed product revision. The aim of this validation sheets were to know the expert's opinion and suggestions about the materials. In addition, it was used to get the validation for revising the product. The kind of the validation sheets which was used for the material expert was a close-ended questionnaire. In developing the material expert's validation sheets, this research referred to the theory proposed by BSNP No. 0041/P/BSNP/VIII/2016. Second, the media expert's validation sheets were given to the media expert after the first draft and second draft media was developed. The aim of this validation sheets were to obtain the validation, opinion, suggestion from the media expert about the technical quality of the product. The kind of the validation sheets which were used for the media expert was a close-ended questionnaire. In developing the media expert's validation sheets, this research referred to the theory proposed by

Mishra and Sharma (2005) and Gery A. Berg (1955). Third, the students' assessment forms were given to the students' both small group and large group after the trial of the developed product. The aim of this assessment forms were to obtain the assessment about the developed product in learning narrative text. The kind of the assessment forms which were used for the students' assessment was a close-ended questionnaire. In developing the students' assessment forms, this research referred to the theory proposed by Syah and Kariadinata (2009), Hvannberg (2008), and Uno (2012).

Data Analysis Technique

Based on the data collection techniques, the data was analyzed with the following ways. First, in analyzing the data based on the formulation of problems number one, the semi-structured interview and the students' open-ended questionnaires were analyzed qualitatively by using descriptive qualitative. Meanwhile, for the semi-structured interview, it was transcribed into the textual form. Then, those data were analyzed qualitatively. According to Miles and Huberman (2014: 12-14), "the steps of data analysis in the qualitative consist of data condensation, data display, and drawing or verifying conclusions". Data condensation was the first stage to analyze the data. Data condensation itself refers to the process of selecting, focusing, simplifying, abstracting, and/or transforming the data that appear in the full corpus (body) of written-up field notes, interview transcripts, documents, and other empirical materials (Miles and Huberman (2014: 12)). However, data display was the second stage to analyze the data. A data display is an organized, compressed assembly of information that allows conslusion drawing and action (Miles and Huberman (2014: 12-13)). Meanwhile, drawing and verifying conclusion were the last stage to analyze the data. According to Miles and Huberman (2014: 13) Conclusions are also verified as the analyst proceeds. Verification may be as brief as a fleeting second thought crossing the analyst's mind during writing, with a short excursion back to the field notes; or it may be through and elaborate, with lengthy argumentation and review among colleagues to develop "intersubjective consensus" or with extensive efforts to replicate a finding in another data set.

Second, in analyzing the data based on the formulation of problems number two and three, the descriptive statistics was used to analyze the students' assessment sheets and the material and media experts' validation forms. Those data will be analyzed by using descriptive statistics. According to Brown (2007), "descriptive statistics is a set of procedures that are used to describe or characterize the answers of a group of respondents to code questions numerically". The calculation of

product validity was categorized using the validation criteria which shown in the following table.

Table 1: Validation Criteria for Students' Assessment Forms and Material and Media Experts' Validation Sheets

Percentage (%)	Criteria
76 – 100	Valid
56 – 75	Valid Enough
40 – 55	Less Valid
0 – 39	Invalid

FINDINGS AND INTERPRETATION

Data analysis of this research revealed that there were three things that should be concerned in this research. First, student's learning needs; Second, the product development process; Third, the appropriateness of the product.

Students' Learning Needs

The data analysis of students' open-ended questionnaires showed that the students needed an ICT based learning media in the form of digital animation for learning narrative text. Berg (1955: 67) stated that "the application of using digital animation as one of learning media could help the students to build logically think, establishing mood, and increasing a sense of identification in learning narrative text material". Therefore, it proved that the use of digital animation could build an interesting learning atmosphere and could increase the students' learning motivation so that it was needed by the students in learning narrative text.

Moreover, the data analysis of English teacher's interview showed that the English teacher needed to use a digital animation for teaching narrative text at ninth grade students. It occurred because an English teacher considered that the use of learning media was very important to deliver the material easily and made the students be more enthusiastic and enjoyable in the teaching learning process. As an English teacher stated that "*Digital animation is appropriate and needed. It also support with 2013 curriculum and I hope that by using the digital animation meadia, the students can be more enthusiastic and enjoy in learning narrative text. So, the learning atmosphere can be more fun*".

That statement was in line with Berg (1955) who said that "animation can be very effective in establishing mood, in increasing a sense of identification in the user, for persuasion, and for explication". Therefore, a

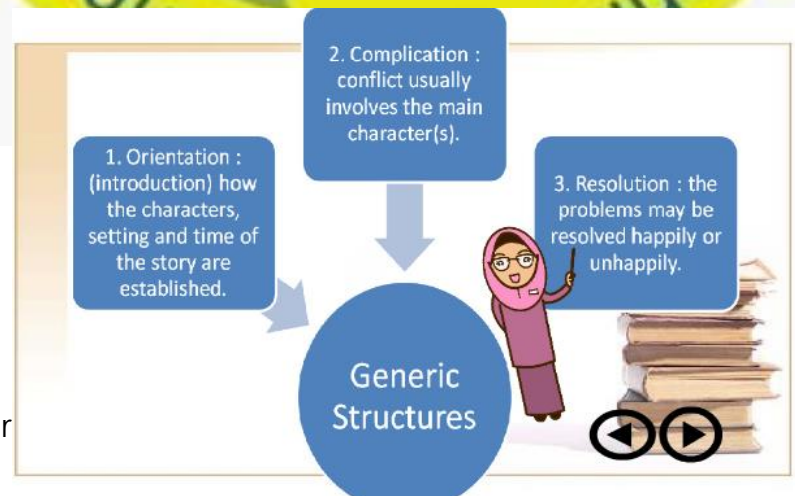
digital animation could be used by not only the students but also the teachers.

In conclusion, both the ninth grade english teacher and the students needed a digital animation. It was used to make the learning activity more fun and interesting. Thus, it could make the students easily understand the narrative text materials and it could make the English teacher easily to deliver the narrative text material.

Product Development Process

Based on the results of the research findings and discussions of the second research questions, ANTEX was created through seven steps of Research and Development cycles proposed by Borg & Gall (1983). ANTEX was developed based on the results from the students' open-ended questionnaires, the semi-structured interview, and 2013 curriculum. To develop the preliminary form of this product, the researcher used the Adobe Flash Macromedia 8 and saved it into a movie player form. A developed product (ANTEX) was validated by the material, media experts, and tested by half of the students (small group class) in the preliminary field testing. After getting the results in the step of preliminary field testing, a developed product was revised based on the suggestions from the experts and the students. The results of the students' assessment forms and the experts' validation sheets in the previous step were used as the feedbacks in revising and improving a developed product.
Based on a material expert validation form, there were 3 criteria of form items which should be revised. The first revision was in the scene of generic structures of narrative text should be revised. The generic structures which were consists of three parts should be revised to be four parts. In addition, the part which should be added as a revised was "Coda". The result of the revisions from the first part was shown in the figure as follow:

Figure 1: The Generic Structure of Narrative Text (Before Revision)



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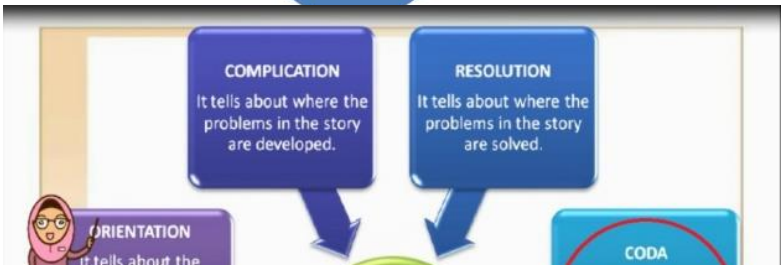


In addition, the second revision was in the scene of the title of the story should be revised. The title which was "The Legend of Tangkuban Perahu" should be revised into "Sangkuriang". The result of the revisions from the second part was shown in the figure as follow:

Figure 3: The Title of Story (Before Revision)

Figure 4: The Title of Story (After Revision)

Moreover, se part should be revised. The exercise which was in the form of multiple choices should

be revised into essay form. In addition, the instructions which were "Let's Try the Exercise!" should be revised into clear instructions "Answer these Following Questions!". The result of the revisions from the third part was shown in the figure as follow:

Figure 5: The Exercises (Before Revision)

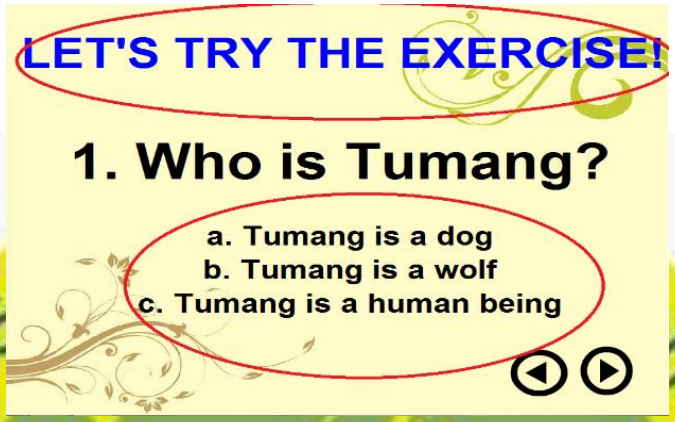
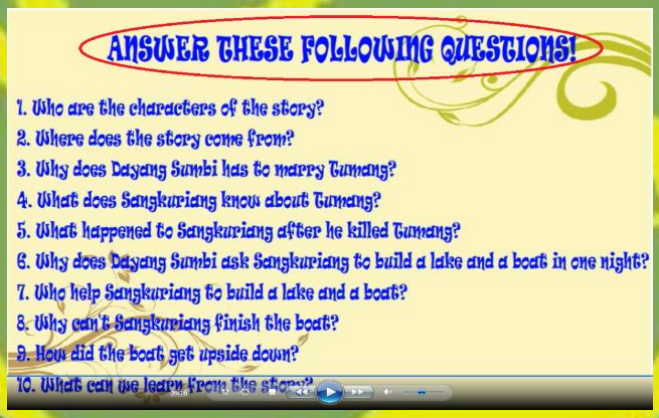


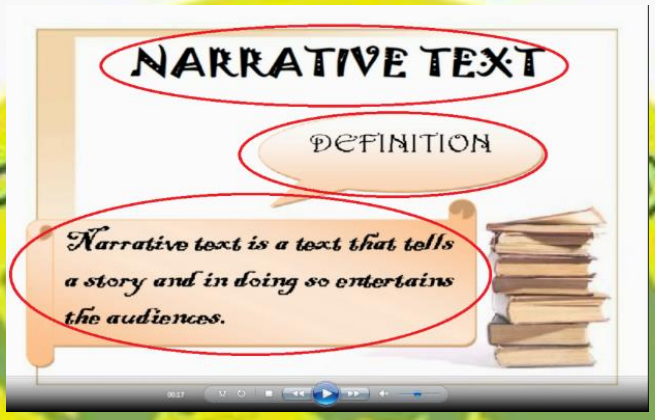
Figure 6: The Exercises (After Revision)



The next revision from a media expert was about 4 criteria of form items which should be revised. The first revision was the font style in ANTEX should be revised. The font type which was "Times New Roman" dominantly should be revised into several font types such as "Comic Sans MS", "Jokerman", etc. The result of the revisions from the first part were represented and shown in the figure as follow:

Figure 7: The Definition of Narrative Text (Before Revision)

Figure 8: The Definition of Narrative Text (After Revision)



The second revision was the use of bottom in ANTEX should be revised. The use of bottom to move from one scene to another scene should be deleted. In addition, the use of bottom made the sound crashed if the users click it before the sound had finished yet. The result of the revisions from the second part were represented and shown in the figure as follow:

Figure 9: The Narrative Text Story (Before Revision)

Figure 10: The Narrative Text Story (After Revision)

The third revision was in the objects creation should be revised. The cropping objects which were in the square shape should be revised into more smoothly. The result of the revisions from the third part were represented and shown in the figure as follow:

Figure 11: The Narrative Text Pictures (Before Revision)

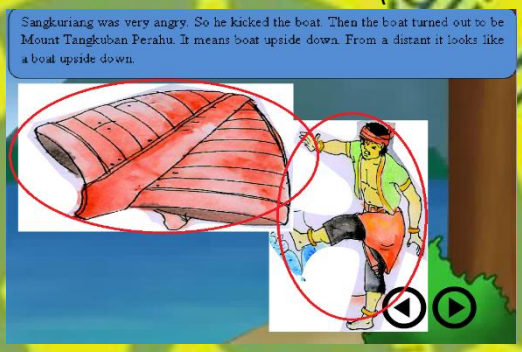
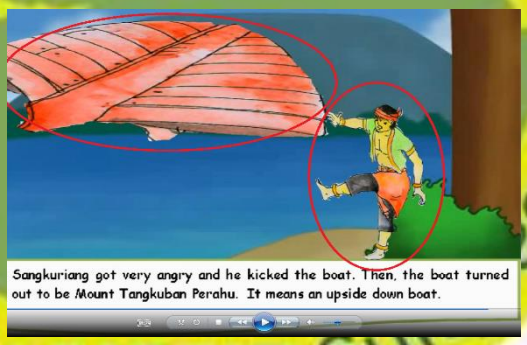


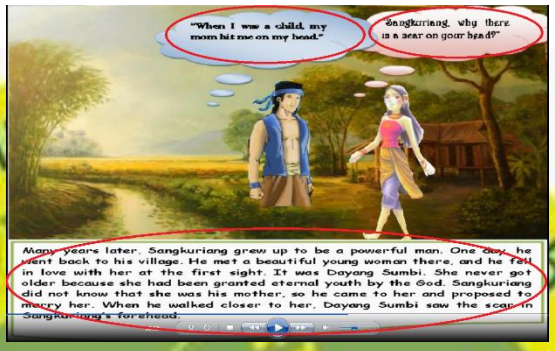
Figure 12: The Narrative Text Pictures (After Revision)



The fourth revision was transcription area should be revised. The transcriptions which were on the top of each story scene should be revised at the bottom of each story scene. In addition, the dialogue callouts which blocked the transcription area should be revised in order not to block the transcription area. The result of the revisions from the fourth part were represented and shown in the figure as follow:

Figure 13: The Narrative Text Transcriptions (Before Revision)

Figure 14: The Narrative Text Transcriptions (After Revision)



Then, in the main field testing, it was validated and tested again by the large group class which involved 40 students. In this research, there has no revisions from the material and media experts' validation forms in the previous step. Thus, it meant that the developed media (ANTEX) was prepared for the next procedure. Finally, in the last step of operational product revision, ANTEX was completed based on the final experts' suggestions in the previous step as a final product.

Based on a material expert's validation, a developed media appropriate to be used for teaching narrative text. It was supported by material expert's statement who stated that "*No need a revision and it was appropriate to be used for ninth grade students in teaching learning narrative text*". From that statement, it can be inferred that the narrative text material for ninth grade students in developed ANTEX did not need the revision and it was appropriate to be used for teaching narrative text at ninth grade students of SMP Negeri 2 Kota Serang. Moreover, the second validation was obtained from a media expert. Based on a media expert's validation, it showed that there has no revision for a developed product (ANTEX). It was supported by media expert's statement who stated that "*No need a revision and it was approprite to be used for ninth grade students*". Thus, it can be inferred that ANTEX was appropriate to be applied for teaching narrative text at ninth grade students of SMP Negeri 2 Kota Serang.

In conclusion, ANTEX was created through seven steps of R&D cycles proposed by Borg & Gall (1983). IMPORT was developed based on the results from the students' open-ended questionnaires, the semi-structured interview, and 2013 curriculum. A final product (ANTEX) which

had been revised and completed consists of the thumbnail, the material's explanation about narrative text, the story of "Sangkuriang", and the exercise sections. From the result of final product, the researcher completed the developed media to be used for teaching narrative text.

The Appropriateness of Product

Data analysis of research question number three showed that a digital animation was appropriate for teaching narrative text at ninth grade students of SMP Negeri 2 Kota Serang.

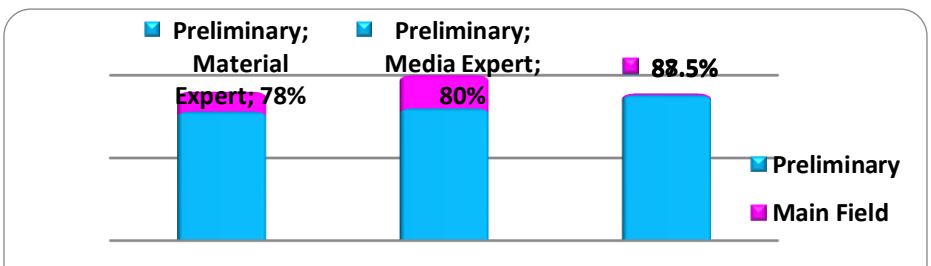
The percentage score of material expert's validation form was presented in the following formula:

$$Percentage\ Score = \frac{Sum\ of\ validation\ score\ (\sum X)}{Sum\ of\ the\ highest\ score\ (\sum Xi)}\ x\ 100\%$$

Based on the data analysis of percentage, the result of material expert's validation sheets, media expert's validation sheets, and the student assessmet forms in the preliminary field and main field testing on a developed product (ANTEX) was "Valid". It was proved by the quality of presented materials and the quality of developed media (ANTEX) from the material expert obtained the percentage score of 78% and media expert obtained the percentage score of 80% in the preliminary field testing. In addition, the the quality of ANTEX based on the students' assessments obtained the percentage scores of 87.5%.

Based on the data analysis of percentage in the main field testing, the result of material expert's validation form showed that a presented material on ANTEX and the quality of developed product (ANTEX) was "Valid". It was proved by the quality of presented materials and the quality of ANTEX from the material expert obtained the percentage score of 90% and media expert obtained the percentage score of 100%. In addition, the the quality of ANTEX based on the students' assessments obtained the percentage scores of 88.5%. Those results were shown as follow :

Graphic 1: The Result of Material Expert, Media Expert, and Students' Assessment



CONCLUSIONS AND SUGGESTIONS

Based on the findings and discussions, it can be concluded that the use of animation digital of narrative text (ANTEX) as an ICT based learning media can be applied as an alternative learning media in the teaching learning narrative text materials. Some features inside an animation of narrative text (ANTEX) learning media support the narrative text materials such as animation, sound, pictures, and exercises which can help the teachers in delivering the materials clearly and avoid the students' boredom in the classroom. Besides, an animation of narrative text (ANTEX) as a developed learning media can make the students understand, enjoy and happy while learning narrative text in the classroom. Moreover, a developed learning media also must meet and fulfill the requirements of students' learning needs in the teaching learning process.

It is suggested for the teachers to apply an animation of narrative text (ANTEX) to teach narrative text materials in the teaching learning process. It can raise the students' interest and avoid the students boredom while learning narrative text in the classroom. For the students, it is suggested to pay attention to every scene in the ANTEX learning media in the teaching learning process. It can gain more the students' understanding for learning narrative text materials. Moreover, for the further researcher, who wanted to conduct in similar topic, there are some aspects which should be prepared before developing a digital animation product. First is the ability to use the software. The further researcher who wants to conduct the same topic must be able to operate the software for creating a better digital animation product. Second is the time consideration. The further researcher who wants to conduct the same topic must consider and organize the time correctly because it take a long time to create a digital animation media. So, the further researcher must organize the time in order to finish creating a digital animation on time.

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