

CHAPTER IV

RESEARCH FINDING AND ANALYSIS

A. Developing Adobe Flash-Based Interactive Learning Multimedia to Teach Narrative Texts

This research was intended to meet the development of procedures of Adobe Flash-based interactive learning multimedia. There were six steps in the procedure of development based on Brog and Gall modified model which the research took in this research. They were need analysis, planning, developing preliminary form of product, preliminary field testing, main product revision, and main field testing. Meanwhile, the developing of Adobe Flash as software was based on the standard of international software development which used waterfall life cycle model. This model involved five steps. They were need analysis, design, implementation, testing, and also operation and maintenance. So, the result of Adobe Flash-based interactive learning multimedia prototype was based on both of them. It was based on Brog and Gall modified model and it was matched with waterfall software model.

1. Need Analysis

The needs analysis was conducted to get the data of the students and the description of their learning needs. It was conducted on 28 November 2015 by distributing the needs

analysis questionnaire. There were 10 multiple-choice questions for students and 22 multiple-choice questions for the English teacher. The students and teacher could choose one of the available choices or they could write down their own answer in the blank space. Based on the data from the needs analysis, there were 24 respondents who filled in the questionnaire. They were students in class VIII G of SMP Negeri 1 Brati. 14 of them were male and 10 were female.

The result of need analysis questionnaire was shown as follow: a) the teacher only used student's worksheet (LKS) in learning English and needed a new medium to convey material. b) 87.5% students needed to use audio visual in their learning. c) All of students needed a new variation of medium in learning narrative text.

From the data of questionnaires, the researcher got conclusion that the students needed a new variation of medium in teaching English and the English teacher did not employ interactive learning multimedia effectively, whereas there were facilities and support from the Headmaster for the teachers in the school.

2. Planning

After the data of need analysis were obtained, the next step was planning to develop the product. The steps of the planning included the formulating of learning material of

narrative texts, lesson plan and validation instruments of media and material experts (See appendix 1 and 2).

3. Developing Preliminary Adobe Flash-Based Interactive Learning Multimedia

The steps of software development were designing and implementing Adobe Flash-based interactive learning multimedia. It could be explained in some interface slides of Adobe Flash-based interactive learning multimedia as follow; the font slide of Adobe Flash-based interactive learning multimedia was the main point to provide the general information for the users and enter into the program. After entered in the front slide, the users would go to main course slide (See the appendix for more figures).

a. Interface Design

In this step the researcher designed flowchart and storyboard (See appendix 5 and 6 for more figures). The main storyboard can be seen as follow:

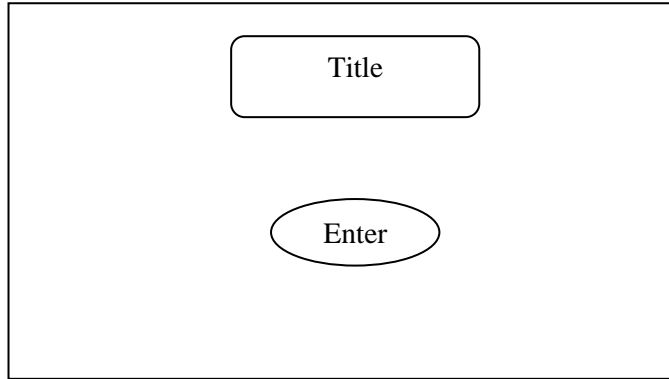


Figure 4.1 Front slide – introduction

The slide was divided into two sections. The top was the title of the program. The center was the button to enter and start the program. After the users entered the program, it would be delivered as follow:

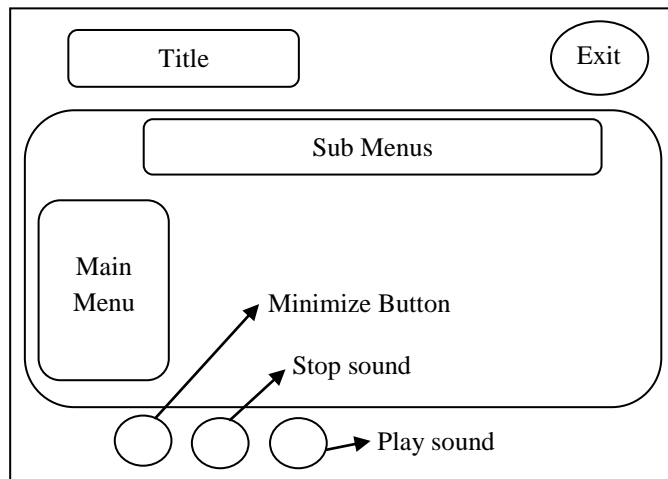


Figure 4.2 Slide 2-main menus

The slide was divided into three sections. The top was header. It consisted of title and exit button. The center was body, consisted of sub menus and main menu such as competence, material, exercise, profile, references and help. The bottom was footer, consisted of minimize screen button, stop sound and play sound.

b. Implementation

The implementation process was a step to realize the storyboard which had been made before to interactive learning multimedia. Adobe Flash software version that was used was Adobe Flash CS3 Professional. The researcher created the medium by using Flash File (ActionScript 2.0) with dimensions 800x400 pixels and frame rate 24 fps (frame per second).

The captures of the medium can be seen as follow.

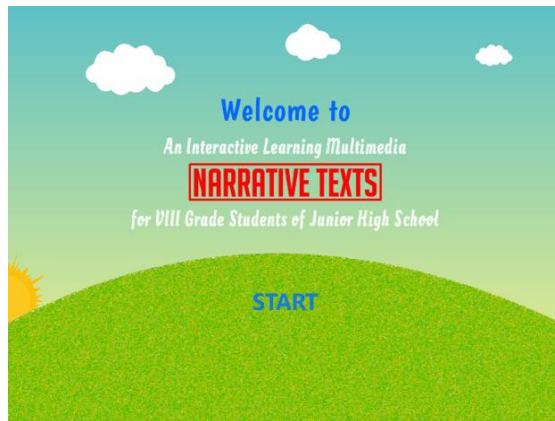


Figure 4.3 Introduction slide



Figure 4.4 Theory slide

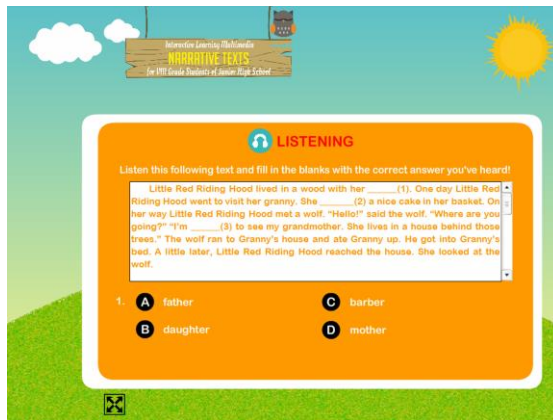


Figure 4.5 Listening exercise slide

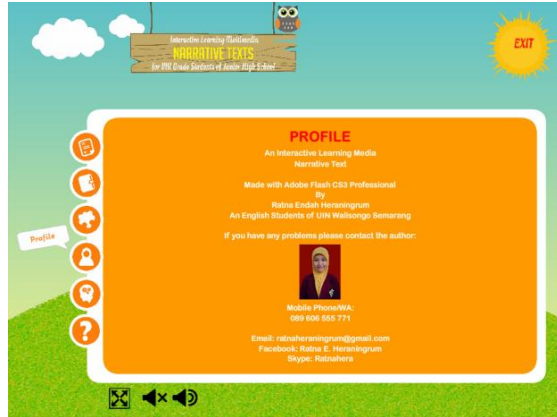


Figure 4.6 Profile slide

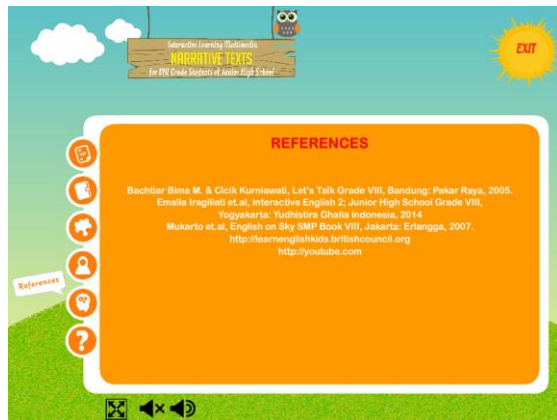


Figure 4.7 References slide



Figure 4.8 Help slide

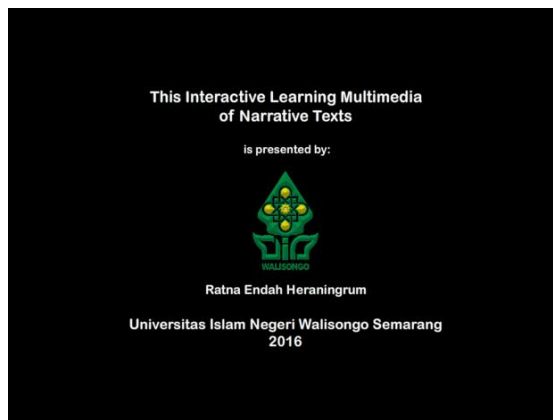


Figure 4.9 Closing slide

c. Testing and Revision

After the Adobe Flash-based interactive learning multimedia was created in complete design, the next step was testing or experts validation. The material experts in

this research were the lecturer of UIN Walisongo Semarang, Mr. Agus Prayogo, M. Pd, and the English teacher of SMP Negeri 1 Brati, Mrs. Naning Kristiani, S.Pd. The interactive learning multimedia experts were the TIK teacher of SMP Negeri 1 Brati, Mr. Budi Wahyudi CP and the multimedia teachers of SMK Negeri 1 Purwodadi, Mrs. Vivi Nur Azizah, S. Sn and Mr. Eko Juliyanto, S. Sn.

The average of the material validation result was 83.3 %. It was valid criteria and it could be used with some revisions. As for the parts that needed revision would be described in the following table:

Table 4.1 Revision of material validation

No.	Component	Revision
1	Make sure that the students have more time to use the medium developed.	Making time management for using the medium developed.
2	There must be some adjustments for the implementation of the lesson plan. Must be ready for any changes happen while teaching.	Revising lesson plan based on lesson plan format that was used in the school. Word “mendengar” changes to “menyimak”.

The test questions that would be used also have been validated by English material experts. The expert was the English teacher of SMP Negeri 1 Brati, Mrs. Naning Kristiani, S.Pd. The average of the result was 88.9 %.

Table 4.2 Revision of test validation

No.	Component	Revision
1	The instruction was not clear. <i>“Fill this story by choosing appropriate words!” (Grammatical Exercise – Exercise 1)</i>	The instruction was revised. <i>“Fill this following story by choosing appropriate past verb!”</i>
2	Use instruction “Listen carefully!” in the final test sheet	Using instruction “Listen carefully!” in the final test sheet.
3	Main idea question was rarely found.	The first question was changed to main idea question.

After all of teaching material imported and organized into the learning media, the next stage was design it in Adobe Flash. Then it was validated by learning multimedia experts. The learning multimedia experts were three people who were competent in the

field of information and computer technology and interactive learning multimedia. The feedback received from the experts to be references to correct the interactive learning multimedia. So, it was ready fit to use it for small group of students. The average of multimedia expert validation result was 93.45%. As for the parts to be revised by the interactive learning multimedia experts are as follow:

Table 4.3 Revision of interactive learning multimedia

No	Component	Revision
1	The interaction between media and the users.	Increasing the interaction between media and the users.
2	Make some variations of exercise types.	Making some variations of exercise of fill in the blanks exercise.
3	Add all of original sources of material and videos.	Adding all of original sources of materials, texts and videos in the bottom of the content.
4	The sound of videos.	Making the video sound louder.

4. Preliminary Field Testing of Adobe Flash-Based Interactive Learning Multimedia

The next step was preliminary field trial. This step was explained after the experts validated all of the components of interactive learning multimedia. The activities of the students in the preliminary field testing were as follow. First, they started to open the program by using “enter” button. In the narrative text program, they discussed the topic, learned the material, did some exercises and did the final examination.

The average of exercise in the interactive learning multimedia was 80.8 and the average of final test score as supporting data was 81.

5. Main Adobe Flash-Based Interactive Learning Multimedia Revision

The revision of the opinions and suggestions was given by the experts and it was given by small group students. It was shown in the following table:

Table 4.4 Revision based on the student’s suggestions

No.	Component	Revision
1	Less animation in main menu	Adding owl animation above of title, clouds, and a sun.
2	Add more exercise	Creating two exercise in

		each skills.
3	Less image in theory slide	Adding some pictures related to the examples.

6. Result of Main Field Testing

The subject of main field testing was class VIII H which consisted of 24 students. The average result of student's questionnaire response was 86.25% (valid qualification). The supporting data was taken from their scores. The score could be described as follow. The average score that they got in excercises was 86.5. In the final test of narrative text material, they got the average score 76.9. The average score of exercise and final test was 81.7. It was very good qualification. The student's score after they learned narrative texts by using interactive learning multimedia was increased. They can also pass the minimum score (KKM).

It can be concluded that Adobe Flash-based interactive learning multimedia was valid and suitable for them (See appendix 4 for more detail).

B. The Suitability of Adobe Flash-Based Interactive Learning Multimedia to Teach Narrative Texts in Junior High School

The suitability of Adobe Flash-based interactive learning multimedia to teach narrative text was proven by employing descriptive qualitative and quantitative data. The result of

quantitative data from experts and trial subjects was analyzed using descriptive quantitative method.

The average result of material validation was 83.3% (valid qualification). The lowest percentage of each item was 77.5% (valid qualification), whereas the highest percentage was 87.5% (valid qualification).

The average result of interactive learning multimedia validation was 93.45% (valid qualification). The lowest percentage of each item was 87.5% (valid qualification), whereas the highest percentage was 100% (valid qualification).

The average result of test question validation was 88.9% (valid qualification). The lowest percentage of each item was 83.3% (valid qualification), whereas the highest percentage was 100% (valid qualification).

The average result of student's questionnaires response was 86.25% (valid qualification). The average score that they got in exercises was 86.5. As supporting data, the research conducted the final test of narrative text material. In the final test, the students got the average score 76.9. The average score of their exercise and final test was 81.7.

From all of data above, it can be conclude that Adobe Flash-based interactive learning multimedia was suitable to teach narrative texts for VIII grade students of SMP Negeri 1 Brati (See appendix 4 for more details).

The validation result of the experts and student's response was summarized in the diagram below.

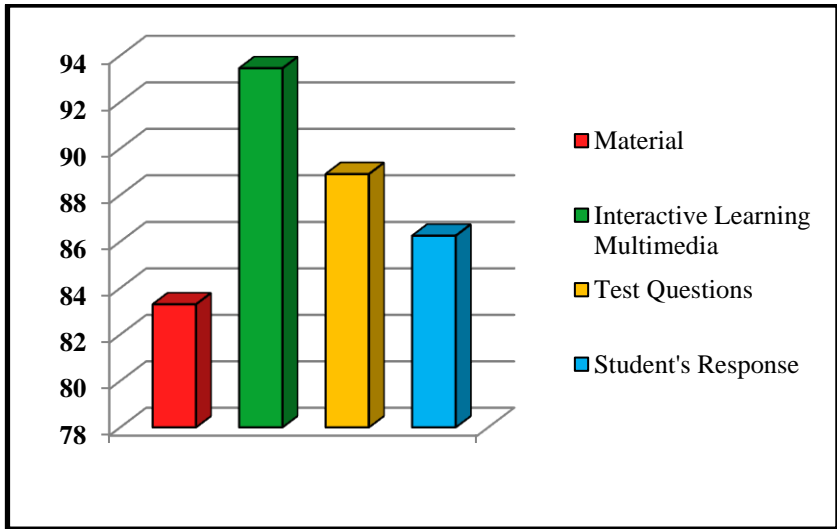


Chart 4.1 Validation results of experts and students

C. Prototype of Developing Result

1. Interface Description of Adobe Flash-Based Interactive Learning Multimedia

The following were some captures of Adobe Flash-based interactive learning multimedia to teach narrative texts (See appendix 9 for more figures).



Figure 4.10 Introduction slide

Introduction slide would show up when the students started to open the multimedia. This introduction slide was important because the program checks whether the multimedia was running properly and ready to use. It presented the title “An Interactive Learning Multimedia to Teach Narrative Text for VIII Grade Students of Junior High School” and the “Start” button. When the students clicked “Start” button, it would go to the main menu.

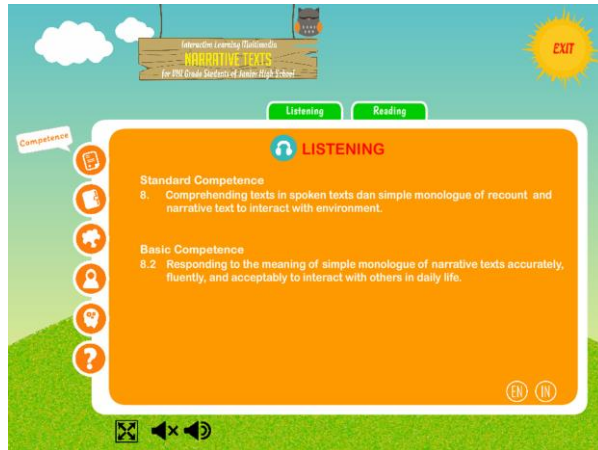


Figure 4.11 Competence Menu

Competence menu provided the Standard Competences and Basic Competences of narrative text material of the eighth grade students in the second semester. It was supported by EN and IN version. In the bottom of left side there were three navigations. They were minimize button, stop sound and play sound.



Figure 4.12 Material Menu

Material menu presented the title of the medium, main menus, sub menus, exit button, full screen button, volume controller, language navigations (EN and IN versions), some videos and pictures that related to the narrative text material. On the top of left side there were a title of the medium is “An Interactive Learning Multimedia to Teach Narrative Text for VIII Grade Students of Junior High School” and a bird animation. While on the right side of the title, there was exit button. When the students clicked the full screen button, the medium would change to the full screen mode. But, when the students pressed esc button on the keyboard, the screen would back to normal mode.

This menu contained of five sub menus; theory, generic structure, language features, tense, and example. In

theory, the researcher added some picture related to the material and it supported by EN and IN version. Example menu presented four short stories. They were Cinderella, The Princess and Dragon, Jack and the Beanstalk, and The Wolf in the Sheep's Clothing. The researcher also added four pictures and two videos in the example. It helped the students to understand the material and feel interested with the medium.

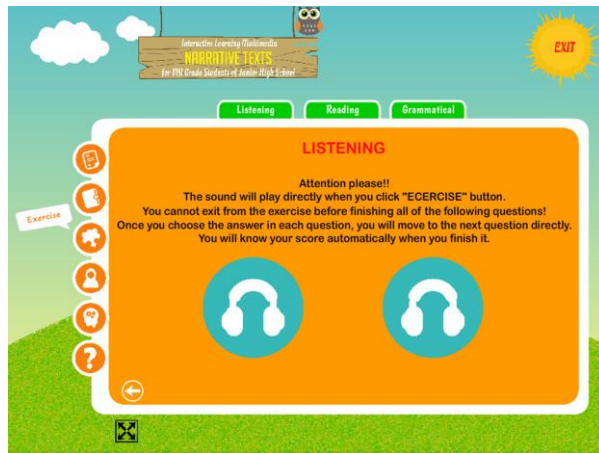


Figure 4.13 Exercise Menu

The exercise menu covered listening skill, reading skill, and grammatical of narrative texts in the second semester. In listening skill, the back sound would stop automatically and the sound of exercise would play directly. The students could not exit from the exercise before finishing all of the questions in each exercise. After finishing their

exercise, they would know their score. If they were unsatisfied with their work they could click “Try Again” button to do the exercise against.

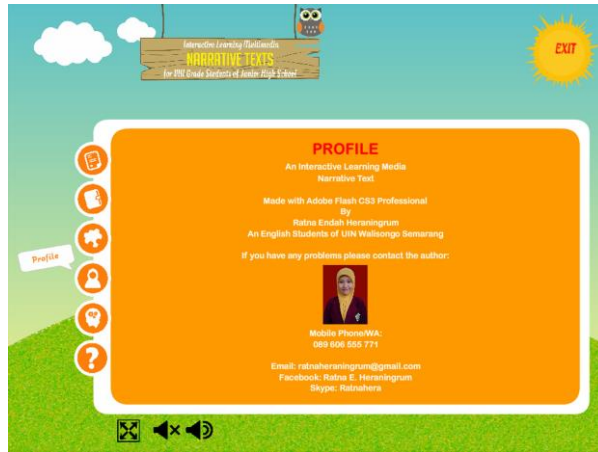


Figure 4.14 Profile Menu

In this menu, the students could read the identity of the researcher. It also informed the user about software (Adobe Flash CS3 Professional) which was used to create this medium.



Figure 4.15 References Menu

References menu consisted of the sources from books or websites that are used by researcher in creating the medium. The researcher mentioned the sources in the bottom of texts and videos. It was very important for the software developer because when the developer did not mention the sources she had taken in the medium, it could be plagiarism. If the developer wants to sell his product, he has to make the animation and stories by his self.



Figure 4.16 Help Menu

The sixth menu was Help Menu. In this menu, the students could read some directions of how to use the medium. It presented the picture of the buttons along with its explanation. It helped the students to operate the multimedia easily.

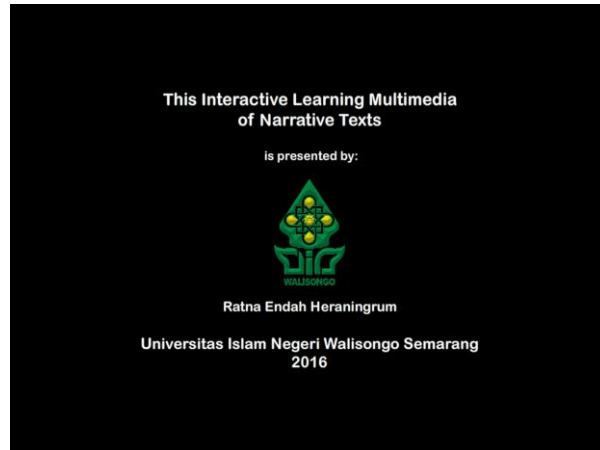


Figure 4.17 Closing Slide

After the users clicked “Exit” button, the closing slide would appear. This menu presented the title of the medium and logo of Walisongo State Islamic University.

2. Manual of Adobe Flash-Based Interactive Learning Multimedia

a. For Teacher

This adobe flash-based interactive learning multimedia can be utilized by the teachers in their learning process as a medium to convey narrative texts material in the class. The teachers can utilize this medium in elaboration step of KTSP curriculum. There are steps to utilize this product in the class.

- 1) The teachers start to open adobe flash-based interactive learning multimedia in their PC by clicked start button. Make it sure that it was connected with LCD and sound system.
- 2) The teachers start to explain about standard of competency and basic competences related to the narrative texts material in Competences menu.
- 3) The teachers explain about definition, kinds of narrative texts, generic structure, language feature, the use of past tense and examples of narrative texts. In “Examples Menu”, there are four short stories completed by two short videos. Click “Story” to read the story and click “Video” to watch the short video. The back sound will turn off automatically when the teachers click “Video” button.
- 4) The teachers give exercise in the interactive learning multimedia to the students. There are three types of exercise; listening skill, reading skill, and grammatical (structure). The teachers choose one skill, i.e. listening skill, then click exercise. The teachers have to read the instruction first in order to make students understand the instruction. The teachers click exercise 1, the students read and listen carefully then they read down their answer in their

paper. Teachers repeat the exercise two times. If the teachers want to choose reading skill or grammatical, they have to use timer to limited time in doing each exercise.

- 5) The students exchange their works to their friends then correct the right answer together with the teacher.
- 6) The students collect their works or the teachers ask their score by calling their name one by one.

b. For Students

This adobe flash-based interactive learning multimedia can be utilized by the students as Student Access Centre outside the class. This medium is developed by using format .exe thus it is portable and the students do not need to install flash player first to open this program. They can copy it into their own personal computer (PC) or laptop to utilize it. There are steps to utilize this product in the class.

- 1) The students copy folder adobe flash-based interactive learning multimedia. They have to copy all files in that folder. If they do not copy all files, the adobe flash based interactive learning multimedia will corrupt and cannot be opened.

- 2) After copying all files, the students start to open the medium by clicking “Start” button.
- 3) The students read the standard of competence and basic competence related to narrative texts material.
- 4) Click “Help” menu to help the users utilize navigations in this medium.
- 5) The students start to learn about definition, kinds of narrative texts, generic structure, language feature, the use of past tense and examples of narrative texts in “Material Menu”. This menu is completed with IN and EN version except “Example” menu. In “Examples” menu, there are four short stories completed by two short videos. Click “Story” to read the story and click “Video” to watch the short video. The back sound will turn off automatically when they click “Video” button.
- 6) After learn about narrative material, the students do exercise in “Exercise” menu. There are three types of exercise; listening skill, reading skill, and grammatical (structure). The students choose one skill, i.e. listening skill, then click exercise. The students have to read the instruction of each exercise first. Click exercise 1, the students read and listen carefully then they click the right answers. They will

get their score automatically when they finish their work.

- 7) Students try other skill in the adobe flash-based interactive learning multimedia.
- 8) Students click “Profile” menu to know the developer of the medium. They can contact the developer if they have difficulties in using this medium.
- 9) Students click “References” menu to know all sources that is used in developing this medium.
- 10) Click “Exit” navigation in top right side to close this medium.