



Original Research Article

Developing E-Reading Materials for Students of Grade Seven

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ABSTRACT

This study aims to develop electronic reading materials in the form of interactive CD. The need analysis questionnaires shows that English reading skill of students of grade seven in Gresik need to be developed. Therefore the reading materials that used in the class need to be supported by supplementary materials. This study applied research and development (R & D) design. The development in this study consists of needs analysis, developing materials, evaluation, and product try-out and revision. The subjects of the needs analysis consist of 33 students from junior high school at the seventh grade who represented three levels of ability (good, average, poor) and the English teacher. The product is evaluated by two experts who have the ability in technology and English language teaching. The result shows that the interactive CD is acceptable for the seventh grade students.

Keywords: Curriculum 2013, E-Reading Materials, Developing material.

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1. Introduction

The Application of Curriculum 2013 in Indonesia has many implications. Many schools in Indonesia are not ready to apply Curriculum 2013. It makes teachers and students face many problems in teaching learning process. In Curriculum 2013 in Indonesia, the government reduces some teaching hours of English and technology subjects at the school for junior high level. The government thinks that every teacher can operate the technology well whereas in reality many teachers are not able to operate the technology especially computer. On the other hand, the teacher should be a person who knows and understands how to use computer as media or tool to make the teaching process more interesting (Keengwe & Anyanwu, 2007). The government also wants to increase the sense of nationalism so that the government allocates more time for Indonesian subject and decreases the time for English subject.

Despite the intention is to increase the nationalism and improve the teacher's ability in technology, these government's strategies give some negative effects especially for the

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students. First, it decreases the students' ability in those subjects because the time proportion of those subjects are limited and shorter than before. According to Hedge (2008) says that one of some factors that affect vocabulary acquisition is frequency. If the time proportion in learning English was decreased, the frequency in learning English was shorter, so that the students' vocabulary will be lower also. Second, it increases the students' difficulties especially for those subjects. Hedge (2008) explains that the hour of teaching affects the potential roles of teachers and learners. It means that the shorter time in teaching learning process affects what the teachers gave and students got. Third, they cannot follow the development of those subjects intensively. In other words, the quality of the students' will decrease. They will lag behind the information and the development of education in the world. It is opposite with one of the purposes of Curriculum which wants to develop students' knowledge (Glatthorn, 1987).

In Curriculum 2013 the government requires that all schools at junior high level in Indonesia to use books from the government including English book. The English book from the government is not bad. There were many colorful pictures inside which relates to the topic. Besides, there were some song's lyrics, instructions and activities that can build the students' English skills. Although it was supported by them, the portion of every skill is not balanced. The content of that book is more focused on listening, speaking and writing skills, while reading skill had smaller portion. Moreover, there was no vocabulary list in all chapters whereas vocabulary is the most important role in English learning (Oxford, 1990). It influenced the students' ability in English especially in reading because the vocabulary knowledge affects the students' reading comprehension ability (Gauthier, 1991; Guo & Roehrig, 2011; Lin, 2002; Marks, Doctorow, & Wittrock, 1974; Mezynski, 1983; Nagy, 1988; Qian, 1999; Qian, 2002; Rashidi & Khosravi, 2010; Stahl & Nagy, 2006). The explanation above showed that English book of Curriculum 2013 needed to be supported by some materials which can cover the lack of that book especially for reading skill.

2. Methods

In this study, the researcher adopts Yalden's design in product development (1987) to develop E-Reading materials. It consists of four steps: Needs Analysis, Developing materials, Evaluation, and Product Try-out and Revision.

The needs analysis was completed by visiting a junior high school of grade seven in Gresik. The subjects of the needs analysis consist of 33 students from junior high school at the seventh grade who represented three levels of ability (good, average, poor) and the English teacher.

In developing the material, there are some steps that were done by the researcher, namely constructing the materials, developing the electronic reading materials and writing the procedures. In constructing the materials, the researcher combined English materials especially for reading skill from some resources. It consists of reading texts, vocabulary list, video, dictionary, instructions, music, animation, games and test items. The instructions in the materials were based on the syllabus and the test items consist of multiple choices, matching words and other forms based on the learning objectives.

In developing the electronic reading materials the researcher used some programs to design the materials, the test items, the animation and the score to be flash files which can be operated by all students in their computer by themselves. Afterwards, the researcher wrote the procedure in operating the electronic reading material to make the user know how to operate it easily.

The evaluation of the product was done by experts who have the ability in technology and English teaching learning and the English teacher to get comments and suggestions. The comments and suggestions from the experts and the English teacher were used as consideration for improving and revising the product. After that, the product was revised based on the experts' review.

In product try-out and revision, the researcher gave the materials to the experts to get suggestion as basic revision for the materials. After that, the product revision or the materials were delivered to the large group which consists of 33 students of the seventh grade of junior high school who represented three levels of ability (good, average, poor). Then, the researcher gave the questionnaires to get their comments and responses about the materials. Their comments and suggestions became the basis of the materials revision. Finally, the final product or electronic reading materials were finished.

3. Findings and Discussion

The first step of this study was need analysis. It was conducted to find out the potency and the problems faced by the students and English teacher in the English class. The result can be seen on Table 1.

Table 1. The results of needs analysis questionnaires

No	Potency of the students	Problems of the students
1	81% of students like English lesson.	75% students feel difficult in understanding the English reading text.
2	87,8% students were familiar with computer.	87,8% students thought that they need vocabulary list with the meaning to help them in understanding the reading text.
3	87,8% students were happy to join English class when the English teacher used some media such as: video, quiz, games and etc.	81% students asked the English teacher or their friends if they did not understand the meaning.
4		The English teacher felt that reading text should be added and consisted in every chapter.
5		The English teacher felt that the questions and the instructions in the book did not relate to the reading skill.
6		The English teacher felt that the level of the book is too low.

The second step was developing materials. In developing E-reading materials, the researcher used the result of need analysis, Syllabus and criteria of good reading materials as the basic construction of the product. The criteria of good reading materials are based on Masuhara (2003, p.351-354). He emphasized four criteria: engaging affect of reading materials, listening to a text before reading that encourages learners to focus on meaning, the material is achieving multidimensional mental representation in the reader's mind, and the materials help learners experience the text first before they draw their attention to its language. The content of the development of E-reading materials consist of combination of

English materials, video, reading text, activities, English dictionary, games, music, exercises and animation. Besides, the feedback of the test and the score also existed in every exercise.

The third step was evaluation of the product which involved two experts and the English teacher. The first expert specializes in designing English curriculum and materials. The second expert specializes in teaching English and in integrating technology in the English teaching and learning process, and the English teacher was a graduate student of English department from one of universities in Surabaya. He had taught for two years. The result of evaluation of the product can be seen on Table 2.

Table 2. The result of evaluation of the product

Aspect	Development
Content	<ol style="list-style-type: none">1. The materials were interesting and attractive.2. The materials were relevant with Curriculum 2013.3. The materials were appropriate with students' level and support the course book commonly used by the students.4. The materials provided vocabularies with the meaning which related to the topic.5. The materials provided reading text in every chapter related to the topic.6. The materials consisted of E-dictionary with UK and US pronunciation.7. The materials provided combination of colorful pictures, videos, sounds, games and animation.8. The materials had multicultural content.9. The design of materials are attractive and interactive.10. The materials are easy to operate.
Language	<ol style="list-style-type: none">1. The language formality.2. The easiness of language used.3. The clearness of the reading text and instruction.
Activities and Assessment	<ol style="list-style-type: none">1. Providing opportunities for the students to use language.2. Providing questions related to the topic.3. Including activities which involve the learners in discussing.4. Containing activities which required students to do them mentally or physically in response the reading text.5. Containing variation assessment such as: multiple choices, true/false, fill in the blank, matching, word bank and short essay.6. Providing feedback.

In evaluation of the product, the expert and the English teacher also gave some comments and suggestions. The comments and suggestions from the experts were used as consideration for improving and revising the product. They can be seen on Table 3.

Table 3. Comments and suggestions from the experts and English teachers

Aspect	Comments and Suggestion
Content	<ol style="list-style-type: none"> 1. Some pictures were too small. 2. Put the dictionary link on each page! 3. Use different fonts and colors to make them better! 4. Give more explanation about how to operate the software until finish it! 5. Make the navigation to be easier to operate. 6. The background music should be more than one.
Language	<ol style="list-style-type: none"> 7. Revise some grammatical mistakes!
Activities and Assessment	<ol style="list-style-type: none"> 8. Some questions in the assessment were too easy. 9. It would be better if the feedback is based on one to one item

All the comments and suggestions from the expert and the English became the basic revision of the product. Based on them, there were some aspects that should be revised by the researcher that can be seen on the Table 4.

Table 4. The aspects that should be revised

Aspect	Revision
Content	<ol style="list-style-type: none"> 1. Changing the small pictures to be bigger. 2. Putting the dictionary link on each page. 3. Varying fonts and colors. 4. Giving more explanation about how to operate the software. 5. Modifying the navigation to be easier to operate. 6. Adding the background music.
Language	<ol style="list-style-type: none"> 7. Revising some grammatical mistakes.
Activities and Assessment	<ol style="list-style-type: none"> 8. Combining the questions in the assessment (easy, neutral and difficult). 9. Giving feedback in every item.

After revising the product, the researcher did the product try-out. Before doing the product try-out the researcher socialized to the English teacher and the students about the steps in operating the product. The researcher also provided guide in the product to make the

students easier to operate the product. The product was in software form. It needed computer to operate it, so that the researcher asked the English teacher to do it in the computer laboratory room. Product try-out was done in two meetings. The implementation of E-Reading materials were applied in pre-teaching until post-teaching.

During the try-out of the product, the researcher observed the students' involvement and the situation in the computer laboratory room. From the observation, the researcher found that the students felt enthusiastic when they operate the product. Almost all students can operate it by using computer because all students always use computer every week and almost of them have computer or laptop. The English teacher also appreciated and impressed to the product. Some of them felt difficulty about some words in the reading text that they did not know the meaning, but he instructed them to next slide which contained the vocabulary list. He also suggested to them to open the English dictionary by clicking the button to get more explanation about the words that they did not understand.

After the English teacher explained, discussed and did the activities based on the topic, he ordered the students to answer the questions in the product. They were seriously answer all questions in the product. When they finished all questions, they saw the score and the feedback directly. It made them interested. Then, he invited them to play English games that was provided in the product. It added the student's enthusiasm.

After teaching learning process was done, the researcher gave the questionnaires to the students to know more about their opinion about the product. The result of the students' opinion about the product can be seen on Table 5.

Table 5. The result of the students' opinion about the product

Questions	Student's answer	
	Yes	No
Do you like the product that is applied by your English teacher?	38	0
Does the product make you happy in learning reading?	35	3
Does the product help you in understanding the reading text?	35	3
Do you think the product motivate you in learning English by yourselves?	37	1
Does the product help you to memorize English vocabulary?	36	2
Does the product help you to understand English easier?	36	2

The result of needs analysis questionnaires shows the students' potencies and problems in English class. There are three kinds of potencies: the students' familiarity with computer, students' enthusiasm to English lesson and students' interest in media. It shows that 81 % students in the class like English lesson, 87,8 % students are familiar with computer and they also enthuse to join English class when the teacher use media and activities such as: video, games, quiz and etc. Whereas, the researcher also found some problems that happens in the class such as: students' difficulty in reading comprehension, the students' vocabulary needs, reading text are not exist in every chapter of English book, the lack of reading instructions and questions, and the level of the book. The researcher found that 75 % students feel difficult in understanding English reading text, 87. 8 % students think that they need vocabulary list with the meaning to help them in understanding the reading text and 81 % students usually ask the English teacher or their friends when they do not know the meaning. Besides, the English teacher argues that the reading text, reading instruction, reading questions and the level of difficulty in the English book of curriculum 2013 should be added more. Those all potencies and problems becomes basic foundations to develop the product.

As shown on Table 2, there are three aspects that were judged by the experts and English teacher from the product: content, language, activities and assessment. From the result can be seen that they are accept the product with revision. They also give comments and suggestions to revise the product to be better as shown on Table 3 and Table 4. There are nine points that should be revised by the researcher based on the experts' and English teacher's suggestions: the pictures size, the dictionary link, the fonts and colors variety, the explanation of product operation procedures, the navigation, the background music, grammatical mistakes, the assessment variety and the feedback.

After revising the product, the researcher does the product try-out, observes the students reaction and give questionnaires to the students about their opinion. As shown on Table 5. The researcher found that 38 students like the product, 35 students think that it help them in understanding reading text and make them happy, 37 students argue that it motivate them in learning English by themselves, and 36 students argue that it help them in memorizing vocabulary and understanding English easier.

Based on all steps and process above, can be concluded that the product was accepted and becomes the final product in the form of CD interactive. The use of computer as a tool supports the product to be more effective. According to Thomson (2005) explains that the involvement of computer in teaching learning are able to develop students' ability in language. Besides, Fardy, et al., (2011) found that the usage of computer in teaching reading gave the benefit for the students and motivate the students in learning reading. Moreover, Barak, Lipson, & Lerman (2006) indicate that using technology can keep students' motivation and students' focus in the process of teaching learning. So that, the use of computer gave positive effects in teaching learning (Liaw, Huang, & Chen, 2007; Monk, Swain, Ghrist, & Riddle, 2003; Roussos, 2007; Sadik, 2006).

The final product of E-Reading materials were in the form of interactive CD. They consisted of the combination of English materials, video, reading text, activities, English dictionary, games, music, exercises and animation. Besides, the feedback of the test and the score also existed in every exercise. They were divided in four chapters based on the topic which related to Curriculum 2013. The content of the materials contain English reading materials support the Curriculum 2013 for the seventh grade of junior high school. There were pictures, music, videos and animations which support the topic in every chapter which motivate and stimulate the students to learn English by using it. The combination between texts, sound, pictures, and video are needed to create a material that can support the students in building their motivation (Wissick & Gardner, 2000).

The product also has weaknesses, one of them are: It will not be appropriate again if Curriculum 2013 is changed. Yet, students still can use it as a supplement material to support their English learning. Besides, it needs computer or laptop with CD room which supported by some software to operate it and needs electricity to make it work.

4. Conclusions

Electronic reading materials are supplementary materials to support the main materials or textbooks especially English book for junior high school of the seventh grade for reading skill in Curriculum 2013 in Indonesia. Those materials are in the form of interactive CD which must be opened by using computer or laptop. The materials are able to motivate the students to learn reading. It is proven by the result of experts' review, English teacher's review and students' review. So that these materials can be good supplement materials for

the students to improve their reading proficiency. Some suggestions are intended for the improvement and the use of electronic reading materials in reading.

The electronic reading materials are supplementary materials to support the main materials or textbooks. It will be better for the English teacher and the students to have the main materials. Although these materials can be alternative way for the students to learn English, the existence of teacher in teaching process is still important. It will be better if the English teachers use combination between their explanations and these materials in class, and ask the students to learn again at home by using them. Further development studies can be carried out to produce other English materials for other skills such as: listening, writing or speaking.

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