



DEVELOPING WRITTEN ENGLISHWEB-BASED MATERIALS FOR JUNIOR HIGH SCHOOL STUDENTS

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Abstract

The research tried to answer some problems: (1) the lack of online written materials for seventh grade students outside the school or during day-off; (2) what kinds of online materials the seventh graders needed; (3) how was online materials developed; (4) how effective was the online materials, and (5) what were the advantages and disadvantages of the online materials. The researcher adopted some steps in educational research and development proposed by Borg and Gall in Junior High School 21 Semarang. The researcher chose one class of seven graders that had 24 students in it. In conducting the study, the researcher observed the existing materials and interviewed the teacher for the need analysis. After that, the researcher developed the online materials, then conducted the expert validation to some experts and tests and gave questionnaires to the students. The researcher, then, calculated the product's effectiveness by using t-test. It was found out that the product was considered effective based on the t-test result and very good based on the questionnaire analysis. There were also some online materials available, yet they were not so attractive and complete. Finally, the researcher also found out some advantages and disadvantages from the product.

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INTRODUCTION

The use of technology in teaching and learning process has become an obligation for teacher in many national and international schools. A big question arises if we discuss the topic of technology in language learning. Why should we as teachers use technology in language teaching? Learning a second language is both an intensive and time-consuming process. According to Foreign Service Institute (FSI) in Blake (2008: 1) estimates that anywhere from 700-1,320 hours of full-time instruction are needed to reach a level of high fluency. The ideal language learning allocation can be more than 44 weeks at 30 hours per week or 1,320 hours. Yet, the fact shows that students, particularly in Junior High School on average spend 160 hours per academic year actively studying English or 6 hours per week. It indicates that students need more time to learn English in order to achieve better or even the best fluency in English.

Strother (2005) found that the online program help the students and they can learn English better. His research was intended for professional learners in aviation and the researcher's was intended for seventh graders of junior high school students. Suharmanto and Ratih (2012) found out that his product was good in terms of its appearance, level of difficulty, attractiveness, coverage, and substance. This research differ from the researcher's was that this research was only covered reading materials, where the researcher's covered both reading and writing. The last research was conducted by Prihartiningsih (2012) in which she used Facebook in teaching descriptive text to her students. The result revealed that after applying *letsdescribeit* for teaching descriptive text, the students became more understand the use of descriptive text, when the need to use it and how to construct a descriptive text.

The limit of allocation time of face-to-face meetings in classroom per academic calendar forced teachers to have advance innovation in teaching the students. The use of language laboratory to enhance the students' listening and speaking skills is one of the example. But unfortunately, the language laboratories in general

do not provide students with advance technology such as computers. Language laboratory is usually only equipped with desk, head-set, control panel and computers for teachers and LCD projector and wide LCD screen. Luckily for some students in good schools have got their own laptop or portable computers. This is an advantage for teachers who usually apply technology in language learning.

It is a must for teachers particularly in good schools to master and apply technology during or after the teaching and learning process. Teachers should have the ability to operate the language laboratory and moreover computer technology. Learning Computer Assisted Language Learning (CALL) software, CD-ROMS, and office software applications have become common place in many teaching and learning environments and teachers must make use of them. Hartman and Ditfurth (2010: 28) stated that teachers in the Computer-Mediated Communication have more roles. He/she helps students with tools and facilitate the teaching and learning process to a larger extent in face-to-face classrooms.

The use of technology at schools are hoped to be one medium for students to learn more active. Technology can also change the paradigm of teacher-centered to be student-centered. Use of technology such as computers and the internet inside and outside the class generally motivates students to learn (Evans 2009: 11). This new paradigm will increase the students' autonomy that is hoped to enhance the students' academical achievement. Lee (2011: 87) viewed that teachers has an important role in supporting and motivating students to solve problem, make decision and reviewing their progress.

Based on the two statements above, technology will change the paradigm from the teacher-centered in which teachers are active during the teaching and learning process, into student-centred in which students are more active and autonomy. Teachers are only the facilitator during the teaching and learning process. They motivate and support then help students who have difficulties and by doing so it is hoped that students' quality will be enhanced.

Hadjerrouit (2010: 115) summarized the core of web-based learning as the chart below.

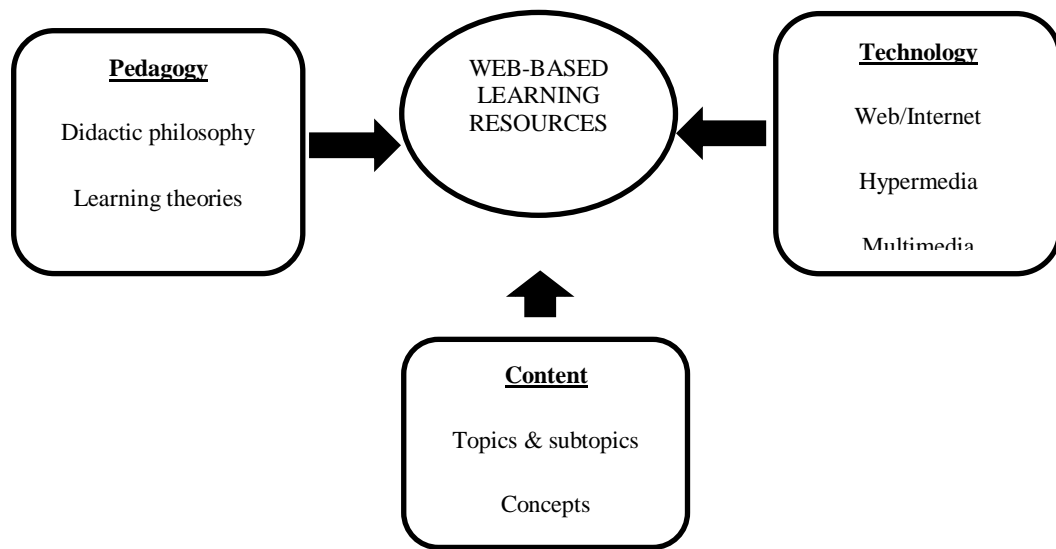


Diagram 1. Characteristics of Web-Based Learning

From the pedagogical point of view, web-based learning is combined with some pedagogical strategies such as learning theories, teaching methods and learning strategies applied in the classroom. From the technological point of view, web-based learning needs the web browser or internet; the scripting languages to create PHP / HTML; multimedia which covers audio, video, and images; and authoring software to create the materials. Meanwhile, the content of the web-based learning resources cover the topic of discussion, task-based activities, quizzes, exercises, and assignments based on the school-based curriculum.

The changes of advanced technology now can also be used in the part of our education systems. Teaching and learning process can be more fun, flexible, efficient, and interactive. Yet, online module has not been developed and segmented well especially for the Junior High School students. Compared to materials for Senior High School students and College students, materials for Junior High School students are less provided. Students often get bored by the traditional method of teaching and learning. That's why the demand for interactive online web-based learning is getting higher and more needed in the future. So that, learning can be more flexible in terms of time and place.

After giving some brief introduction above, the researcher aware that there were some problems that this research tried to answer. Those

problems were (1) the lack of online written materials for seventh grade students outside the school or during day-off; (2) what kinds of online materials the seventh graders needed; (3) how was online materials developed; (4) how effective was the online materials, and (5) what were the advantages and disadvantages of the online materials.

RESEARCH METHOD

The study of this research adopted the research and development approach. It aims to develop a web-based learning materials wich consists of English grammar, expressions, genres, short functional texts, daily quizzes, remedial, and enrichment programs intended for the seventh grade of junior high school students. Borg and Gall (1983: 772) define research and development as a process used to develop and validate educational products. It will use ten steps proposed by Borg and Gall, (1) need analysis, (2) planning, (3) developing preinary form of products, (4) preliminary field testing, (5) main product revision, (6) main field testing, (7) operational product revision, (8) operation field testing, (9) final product revision, and (10) dissemination and implementation. Out of the ten steps above, the researcher adopted only seven steps in his research.

The study was conducted in an English class at State Junior High School 21 Semarang of the seventh grade students from April 15th 2013 until June 11th 2013 in which the students tried to access the online materials from April 22th 2013 until June 4th 2013. There were 24 students in the class. The students were the combination between male and females and their English proficiency level were diverse.

To answer the three questions stated above, the researcher used some instruments; such as observation, interview, questionnaires, documentation and test. Observation was used to get information or data about the situation in the teaching-learning process. Interview was used to gather some prior information about the teacher's need in creating the online materials. Then, questionnaires were used to gather information about effective dimensions of product preference and personal comments of the students about the online product given. Finally, the test which covered reading and writing which was useful to find out the students' achievement result in the form of scores. By conducting the test, the researcher was able to calculate the effectiveness of the online product by using the two variance t-test.

RESEARCH RESULT AND DISCUSSION

In the research and development the researcher followed some steps. The first step was conducting the analysis. There were two kinds of analysis conducted the researcher. First, the researcher tried to find out and observe what kinds of online materials available for the junior high school students. There was indeed an online materials for junior high school students. The product was developed by the Ministry of Education and Culture, yet there was no classification in the materials whom it was intended to. When the researcher tried to access there was no specific materials for the seventh graders. When the researcher search the key word "English" the researcher found some materials but they were not well-developed. The other websites and blogs also provided such English materials for download, yet they were not made interactively for the students.

Then, the researcher interviewed the teacher and some students. The result showed that the students needed materials that were not boring for them. They wanted materials which were attractive enough. By using multimedia and online technology interactive materials could be created and developed. Moreover, they asked online materials that provided a guide for them when they access the materials. Meanwhile, the teacher asked an effective way of assessment for tasks, assignments, or homework. She asked the researcher to make some topics to be included in the learning materials based on the syllabus. This online materials would be very helpful during the school's day-offs for the seniors to prepare for their national exams. Moreover, it would be also an advantage if she could supervise and get the result remotely. Based on those analyses the researcher could create and develop a new brand interactive online materials for students which could be accessed in any multimedia device.

The next step was creating the interface of the website. The researcher used the Blogger service by Google as the host of the website. This choice was made based on the capacity and service considerations, moreover it is free. The researcher downloaded the available template then edited it with a syntax editor provided within the Blogger service. After the interface, menus, and submenus of the website were done, the researcher then developed the materials by using a software called Wondershare Quiz Creator. Here, the researcher planned the topic of discussions that were going to be put in the online website then created and published them online.

In each topic of discussion, the researcher started with the login page for the students. Only students who got user name and password could log in. Then, there was a welcome screen which provided the greeting from the researcher. After that there was a brief explanation about the indicators and goals of accessing the topic. Next was the brief explanation of the materials the students was learning. Here, the students could know the samples, part of the text, kinds of questions reading comprehension that might appear in a test, and many more. Finally, it was followed by series of exercises and tasks.

There were some types of exercises the researcher developed. The first one is blank page in which the researcher put the examples and explanation about the topic here. Second was the most common type of question, the multiple choice question. As it was intended for the junior high students, the researcher made four choices with one correct answer and three distractors. Then, the true and false question. Here a text was followed by some question in which the students should click on the correct or false statement based on the text. After that, the matching. Matching meant that the students should match or continue the statement on the left with the correct match on the right. Next, the click on the picture which was appropriate in the topic of descriptive text. Here the students were asked to click on the correct picture based on its description. Then we have sequencing which was appropriate to measure the skills of students. Here, the students were asked to sequence the correct order of jumbled sentences. Finally was the short essay in which the students were asked to compose a simple text based on the instruction.

After finishing with the website interface and developing the materials, then the researcher should upload the online materials into the server. Here, the researcher use a free cloud server named OpenDrive. After uploading the materials, then the researcher made the links from the online cloud server into the website. Finally, the online written materials were ready to be accessed.

The website created was also helpful to the students. The researcher was stand by and supervise the students remotely. If the students found some difficulties or might ask questions, they could chat or video call the researcher from the chat bar of the virtual room menu. These two tools were proven helpful to the students. They felt as they were guided when they accessed the online materials. After they finished with each topic, the researcher would get the result of the work by email.

Before conducting the trial, the researcher asked the validation of the product from some experts. There were three experts for this product. One lecturer and one teacher were in charge of validating the curriculum and materials content of the online product. Then one IT expert was in charge of the layout and technical advancement of the online product. After the revision as it was suggested by the validators, the researcher then would conduct a trial in the real teaching and learning process.

A pre-test was conducted to measure the initial performance of the students. Then, the students access the online materials both at schools and at homes during the research period of two weeks. Then they were asked to conduct the post-test. The result showed that there was significant increase of the students' performance before and after they use the online product.

Table 1. Students' Pre-Test and Post-Test Result

No	Student Code's	Pre Test	Post Test
1	E-01	7.5	8.25
2	E-02	6.7	7.75
3	E-03	6	8
4	E-04	8	9
5	E-05	7.25	8.5
6	E-06	7.5	8.25
7	E-07	6.25	7.25
8	E-08	5.75	7.5
9	E-09	7.25	8.5
10	E-10	7.25	9
11	E-11	5.5	7.25
12	E-12	6.7	7.5

13	E-13	7.5	8
14	E-14	7.5	8.75
15	E-15	7.5	9
16	E-16	6.7	7.5
17	E-17	6	8.5
18	E-18	6.25	8
19	E-19	6	8
20	E-20	5.75	7.5
21	E-21	3.25	6
22	E-22	7.5	8.25
23	E-23	7.5	8.5
24	E-24	8	9.25
25	E-25	7	8.5
		168.1	202.5
Average		6.724	8.1
Score > 7.2		13	1

In the pre-test there were 13 students who got score below 7,2 and after the treatment there was only 1 student who got below the minimum score. Based on the table above, we know that, there was an increase of around 20% between the average score in the pre-test (6.7) with the score in post-test (8.1). So, we can conclude that the online English materials helped students in increasing their achievement.

After finding out the result in both pre and post-test, the researcher then tried to calculate the “t-test” to find out the product’s effectiveness. The result of the “t-test” was 9.00213. This was proven by the $t_{observe}$ was higher than the t_{table} ($9.002 > 0.26$ or

25.5%. The result of the t-test showed that the $t_{observe}$ was higher than the t_{test} . So, we could conclude that the researcher’s hypothesis that the product was effective was accepted.

Finally, in finding out the advantages and disadvantages of the product, the researcher gave questionnaire to the students and asked them to fill it in online. Here, the researcher used the likert scale. When responding to a Likert questionnaire item, respondents specify their level of agreement or disagreement on a symmetric agree-disagree scale for a series of statements. Thus, the range captures the intensity of their feelings for a given item as stated by Burns *et al* (2008: 245).

Table 2. The Students Online Survey Result

No.	Statements	Point	Category
1.	It is easy to access the web-based materials from any gadget	46.4	Excellent
2.	The interface and layout of the webpage and the flash program is attractive.	40	Very Good
3.	The program is attractive to be used to learn English better outside the classroom.	40.4	Very Good
4.	You can use this program easily without any guidance from your teacher.	34	Good
5.	The instruction given in the web-based materials are clear enough and easy to understand for you.	37.6	Very Good
6.	The tasks in the web-based materials are interesting and enjoyable to you.	40.8	Very Good
7.	The web-based materials help you to learn English	40	Very Good

	more active.		
8.	The web-based materials are also appropriate to be used in the classroom.	41.2	Very Good
9.	The program can motivate your better in learning English	37.2	Very Good
10.	The speed access of the web-based materials is fast.	30	Good

Based on the table above, the average category of the questionnaire result was very good. It showed that the product had positive impact to the students. There were some advantages of having this online product. Students could be more autonomous and they would not get bored of learning English. Learning is now more flexible and fun. Yet, the lack of internet speed or multimedia devices were some of the obstacle of having such online materials.

CONCLUSION

Referring to the research findings and discussions, the researcher could draw some conclusions. There were some online materials available over the web. Yet, there was only a few or none that was intended for the seventh grade students of junior high school. Then, the online materials were needed for the students and the teacher. Both tried to find a new way of attractive and efficient learning. Especially when the seventh graders were studying at home during the school-break. Creating and developing English online materials were not simple. There were some steps that should be followed. After creating the interface of the website, the researcher planned which materials were to be put in the website, and then designing the flash program so that the materials were attractive enough for both students and teacher. The researcher also provided the chat box service and virtual room as a space for interaction for both teacher and students on the web. Based on the calculation of the t-test, the product was considered effective in improving the students' achievement. Moreover, based on the students' questionnaire it was found out that the students' opinion toward the online product could be classified as very good. Some good impacts of having the online product were that students could be more independent and motivated in learning. Motivation means good achievement. Yet, the lack

of internet and technology infrastructure became one of big obstacle of having such online product.

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