DESIGNING *e-PoN* TO ENCOURAGE STUDENTS AT ELEMENTARY SCHOOL IN LEARNING NUMBERS

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Abstract
The aim of this research is to design an e-presentation as a multimedia product that can be used in learning numbers. The method of this research is development research which consists of four phases; analysis, design, develop and implement (ADDI) as the phases in designing e-PoN. e-PoN is an electronic presentation containing materials about numbers. e-PoN provides four menus as the main features. Each menu presents different types of content regarding the topic. The respondents in this research are the fourth-grade students and the English teacher of SDN 34 Pontianak Kota. The researcher also involved some English teacher from another school as a facilitator to find out whether e-PoN can be used in learning number through a multimedia rubric. The multimedia rubric was developed by following criteria for assessing the multimedia project. The multimedia rubric results 88% which indicates that e-PoN can be used as a multimedia product for encouraging elementary school students in learning numbers.

Keyword: e-Presentation, Development Research, Learning Number

Technology has become a staple in our lives. Technology has the important role in enhancing learning. It has been used in education in different ways throughout the time. It has been tested effectively and is widely accepted for teaching in the modern world. One of the uses of technology in education is teaching English through multimedia. Multimedia in education is a topic that frequently heard and discussed among educational technology today. According to (Mayer, 2009) multimedia refers to learning from words and pictures. The combination within multimedia creates the process of learning become more goal oriented, more flexible in time and space.

The researcher's own experience when did teaching at an elementary school in Pontianak, Indonesia. The researcher was found that the students have some problem in learning English, especially in learning numbers. The problems are the students still make some mistakes in mentioning and spelling the numbers. There are many students who are still confused about the order of numbers and they were too difficult to catch the meaning of it. Based on the problems, the researcher has a chance to design a multimedia product which can be used for learning the topic called *e-PoN (e-Presentation on Number). e-PoN* is designed using a software namely PowerPoint Presentation.

PowerPoint Presentation is one of multimedia technology. It is already a common method of presenting information for a variety of audiences in business, government, and education. Especially in education, it is becoming commonplace in the school classroom for both teachers and students. PowerPoint Presentation is a kind of presentation program that consists of text, graphics, pictures, sound and video which can be used to convey the material in teaching and learning process.

It is a complete presentation program that allows teachers to produce professional-looking presentations in EFL classroom

(Lari, 2014). The teachers can use PowerPoint Presentation program to design interactive teaching materials. Interactive teaching materials can make the teaching and learning process in the classroom more enjoyable and interesting. The materials designed to make students interesting and easy to comprehend the materials. The researcher hopes by designing *e-PoN,* it can be used as a multimedia product for encouraging students at the elementary school in learning numbers.

METHOD

Considering the purposes of the research and the problems, this research used development research. The purpose of development research is to develop new or improved interventions or strategies to achieve well-specified learning goals or objectives. In this research, the researcher used ADDIE concept to create an e-Presentation to encourage students at the elementary school in learning numbers. ADDIE is an acronym for *Analyze, Design, Develop, Implement, and Evaluate*. Because limited time and sources for evaluation the researcher only conducted the research until implement phase. According to Branch (2009) the sketch of the ADDIE model can be seen as follows;

Analyze → Design → Develop → Implement

Figure 1. The procedure of the ADDI Model

In conducting this research, the researcher used observation, interview and multimedia rubric. Observation and interview were used in the analysis phase to get the information about the problems of the teacher, students' condition, the situation in the classroom and the facilities for teaching and learning in the classroom. Meanwhile, the rubric was used in implementation phase to find out whether *E-PoN* can be used for learning numbers or not. The rubric data than was analyzed by rating scale. Adapted from Harry Walker's instrument (2013), the scale was score by this formula;

$$P = \frac{result\ score}{amount\ of\ point\ X\ amount\ of\ catagories} \times 100$$

P = Percentage

Then the result will be converted into interpretation based on the percentage range. Percentage of the result will be converted into interpretation based on the percentage range. The range is; (1) 0-25% to indicate as bad (revised). (2) 26-50% to indicate as poor (revised). (3) 51-75% to indicate as good and (4) 76-100% to indicate as very good. The participants of this research are the teacher and the fourth-grade students of SDN 34 Pontianak Kota. The teacher role is as a source to get students prior knowledge and gap. The teacher will be the respondent of the interview and the source of information in formulating the students need. The researcher also involved two English teachers from another school who teach at the same level to try the product.

FINDINGS AND DISCUSSION
Findings
Analysis phase

The analysis phase was used by the researcher to find out the basic background of the students and the teacher's needs. It is important to determine whether the product which was created is appropriate or not. In this phase, the researcher interviewed the teacher of SDN 34 Pontianak Kota to gain some information. The information contained an analysis of the condition of the student, teacher and also the school regarding the multimedia learning. It's really important to considerate in design the product for students because of it as a basis for creating the product.

Student's Condition

This research is conducted for fourth-grade students of SDN 34 Pontianak Kota. One class consists of 30 students. The learning process starts at 10.00 am and end at 1.30 pm. The student's average age is around 10-11 years old. Ersoz (2007) classifies the range of this age as older or late young learners. Their characteristics are longer attention, learning seriously, developed social and more cooperation. Sometimes, they learn using particular facts and examples to make them understand. So, they still learn by concreting with the daily life and some factors. Based on the observation in the classroom. Almost all the time in the teaching-learning process, the students just listen to the teacher explanation and do the task in the book after all. Finally, they get bored and lose enthusiasm for learning.This process is not the same as young learner characteristic. Based on the researcher observation, some student looks uninteresting to learn and it causes the ineffective learning.

Teacher's Condition

Based on researcher observation and interview, the researcher found some problems in teaching English in the classroom regarding the teacher. The teacher only used one book as the main material and followed instructions and rules of the book without any development of the material. In teaching English, the attention and motivation were two things that the teacher expected from the students in the classroom. Regarding the problems, the teacher wants to attract the students' attention and enhance the students' motivation by preparing and presenting creative teaching materials. The teacher realized that teaching the topic is important to the students, but she could not find other material in teaching process except for a textbook. She thought it would be hard and it would spend her time to find an interesting and suitable material that could be used in the classroom. Therefore, the teacher supported and agreed the researcher that creating an e-presentation could be the best solution for solving the problem mentioned above. During the research, the researcher got a good response of e-presentation as an alternative way of teaching English, especially about numbers.The teacher suggested that the researcher should design the material as attractive as possible such as designing the layout, coloring, and supported content in order to attract the students' attention, and enhance their motivation in learning the topic.

Students and Teacher toward Multimedia Learning

Based on the observation, the researcher got some information about the students' learning through multimedia. Some of the students were able to use computer and familiarity with computer. But they are not familiar with Microsoft PowerPoint Presentation. Based on the interview, the teacher said that she is already familiar with Microsoft PowerPoint Presentation. But, she never uses it to create a material or apply it to support her in the teaching and learning process. Based on the statement from the teacher, it can be concluded that the teacher just used the same way in the teaching-learning process. Maybe it was the cause that

makes students lose their focus and their eagerness to learn. They would play rather than studying in the classroom.

Analysis of the school

SDN 34 Pontianak Kota is one of an elementary school in Pontianak which was given their attention to the importance of quality in education to the children. In order to objectify in improving the quality of the education of their students, the school provides the facilities in teaching and learning process. The facilities such as LCD projector and sound system are available and working properly even though those facilities are in portable function. Moreover, those facilities were enough to facilitate the teaching-learning process of multimedia-based.

Design Phase

In this phase, the researcher tried to design the concept of the material that will be developed. The researcher has to decide what topic and what parts that would be applied in the e-Presentation. After deciding the topic and parts of the e-Presentation, the researcher collected some material from the book and internet. The researcher decided to use numbers as a topic in this e-Presentation because it appropriates students at the elementary school to helps them in learning English. The objectives of this e-Presentation are to ease the student in learning numbers, to help the students understanding the topic in interesting and fun way based on context and for encouraging the students in learning the topic. The researcher designed the product using Microsoft PowerPoint. The product which was developed by the researcher was given a name as "*e-PoN*" (e-Presentation on Numbers). This e-presentation available in two languages; Bahasa Indonesia and English. This e-Presentation consists of several slides that contain 4 main menus which have its own function. The first menu is "Numbers menu". It consisted of main lesson materials such as

the explanation of the topic that is cardinal numbers, the use of cardinal numbers, and the example of cardinal numbers. The second menu is "Videos Menu". It consisted of 6 animated videos lesson material. All of the videos in *e-PoN* are the video concerning with numbers. Those videos presented in animation and narration. The third menu is "Games Menu". In this menu, the content consisted of two variety games namely "Choose the Numbers and Pick the Word". The last menu is "About". This menu consisted of the explanation about *e-PoN*. The researcher also follow the guideline in designing the material from (Richard & Rodgers, 2001), they said design is level of method analysis in which we have to consider some aspect as follow; (1) In *e-PoN*, the learner role as a Global Learner. Global learners are spontaneous and intuitive. They are preferred with the interesting and attractive materials. (2) The roles of the teacher concerning to the product are teacher acts as a facilitator and motivator in the learning. (3) The role of material here is the material will be used as teaching multimedia for teacher and learning resources for students. It is a tool for the learner to learn the topic in fun, and interesting way so they can be motivated in understanding the material, and improve their knowledge and information. It will become the reference and resources both the teacher and the students in learning the topic.

Development Phase

In this phase, the researcher developed the product based on the materials as the content that had been gathered. The materials of the e-presentation were suited based on analysis phase because the information about students had been known from the interview and observation. The development of the product started from the slide as the interface of the e-presentation. The researcher needed to develop colorful, attractive and interesting slide as consideration to attract the students

as young learners. In developing the slide, the researcher needed to develop some elements which were used in the product such as background, menu icons, navigation icons, and contents for the e-presentation. The sound effects, animations, and background pictures were collected from Google and Google Image. These elements were added to the product in order to attract the students' attention. The researcher reason used PowerPoint Presentation to make the product in this research is because it has some advantages. The advantages of this program are allowed the users to develop interesting presentation slide because there are colors, fonts, and animations, both animated text or animated images. PowerPoint Presentation also makes the users are easy to use this product without many difficulties and allows the users to create or modify their presentation slide in simple ways.

Implementation Phase

In implement phase the researchers do the implement phase two times, in the first phase, the researcher tested the product to both the teacher and also the students in SDN 34 Pontianak Kota. According to Branch (2009:133) "The purpose of the implementation phase is to prepare the learning environment and engage the students". The implementation of this product aims to describe the situation in try out the product in the classroom. In implementing the product the researcher firstly introduced the product, such its name, functions, features, and the advantages to the students and the teacher by using LCD projector. After the introduction, the researcher divided the students into six groups which consisted of 5 or 6 students. The researcher explained how to operate the product which was followed by the students and the teacher. In the end, the students and the teacher accessed the product by themselves and explore for its features in

learning the material. In addition, the researcher observed while the students and the teacher were accessing and exploring the product. Based on the observation the researcher found that there were some problems regarding the product as follow: (1) The teacher and the students found that some navigations button of the product is not working. (2) In the game slide, the sound effect is unclear. (3) The font size is too small for some text. (3) Some audios within the video were found unclear and less loud. In the other hand, the researcher also observed the positive effect of the implementation of the product. The researcher observed that there were some reactions during accessing and exploring from both the teacher and also the students toward the product. The result of the observation will be described as follows; (1) the teacher and the students were enthusiasm during the accessing and exploring the product. (2) The teacher and the students were able to operate well the product easily without a doubt. (3) The students exited with the videos and games that provided in the products. Those observation results above showed that the product is promisingly able to encourage the students in learning the topic. Based on these observations both negative and positive side, it can ensure the researcher who developed the product will help the teachers and the students to have a better understanding and also change the atmosphere in the process of learning about the topic. Those observations will be used as guidance in revising this product to make it better and can be developed to achieve the objectives. The focus of the second implementation is to see whether the product can be used for learning numbers or not. In this implementation, the researcher involved two English teachers who teach at the same level, which is the elementary school. The first is an English teacher from another school and the second is an English tutor. Both teachers were given a brief explanation

for helping them to understand how to use the product. In this implementation, the researcher provided a multimedia rubric to see their opinion and perspectives after using the product. Then the result will be measured by this table:

Table 1. Result of Multimedia Rubric of First Teacher

No.	Points	5	4	3	2	1	Category
1.	Technical		x				Good
2.	Content		x				Good
3.	Screen Design	x					Excellent
4.	Navigation	x					Excellent
5.	Background & Text	x					Excellent
6.	Mechanics			x			Moderate
7.	Interactivity		x				Good
8.	Creativity & Problem Solving			x			Moderate
9.	Use of Enhancements			x			Moderate
10.	Originality			x			Moderate
	Total Score			39/78%			Formulated

Table 2. Result of Multimedia Rubric of Second Teacher

No.	Points	5	4	3	2	1	Category
1.	Technical	x					Excellent
2.	Content	x					Excellent
3.	Screen Design	x					Excellent
4.	Navigation	x					Excellent
5.	Background & Text	x					Excellent
6.	Mechanics	x					Excellent
7.	Interactivity	x					Excellent
8.	Creativity & Problem Solving		x				Good
9.	Use of Enhancements	x					Excellent
10.	Originality	x					Excellent
	Total Score			49/98%			Formulated

Based on the result above, the researcher found that the first teacher categorized the result of *e-PoN* were considered *Very Good* with the percentage is78%. The second teacher categorize the result of *e-PoN* were considered is *Very Good* with the percentage is 98%.Based on data above, the researcher ensured that *e-PoN* can be used for encouraging elementary school students in learning numbers.

Discussion

The researcher developed a multimedia product in this research because the researcher tried to solve learning problem in fourth-grade students of SDN 34 Pontianak Kota in learning numbers. As the result, researcher provided a solution for solving that problem that is the use of *e-PoN* as a tool to encourage students at the elementary school in learning numbers. The method of this research is development research. The process of development of this research consists of several phases; they are analysis phase, design phase, development phase, and implementation phase. In the analysis phase, some of the learning problems were gathered by observation and interview with the English teacher. The result of the analysis phase is the analysis of the learning problem as the basis to design a solution of the learning. Next is design phase, The design phase was conducted based on the analysis phase. In the design phase, the researcher constructed the model of the product which will be used as teaching multimedia. The design phase determined the elements of the material in the learning that are objects of the product, the roles of the learner, the role of the teacher, and the role of the material. Development phase was the next thing to be considered in conducting this research. In the development phase, the researcher developed the model of the product. The researcher uses Microsoft PowerPoint Presentation as a tool to develop the product. The researcher used PowerPoint Presentation application because

it is easy to use and widely available. In this phase the researcher constructed materials which had been selected and gathered from many sources. The researcher also developed the product based on components of contextual material and the criteria of good teaching material. The researcher has successfully designed and developed which fulfilled the criteria of the good material design itself. In brief, the criteria of material design can be seen as follow; (1) Materials should achieve impact. (2) Materials should help learners feel at ease (3) Materials should help learners to develop confidence. (4) Materials should be perceived by learners as relevant and useful. The researcher developed the product into based on these criteria of materials design. As the first criteria, *e-PoN* should achieve impact. It could be seen from the enthusiasm of the teacher and the students when they are using *e-PoN*. The second principle is shown within the use of the *e-PoN* which the students felt at ease. It could be seen from the features within *e-PoN* such as, pictures, audio, video, and games which were developed into a neat packaging. The third and the fourth criteria also can be experienced within *e-PoN* which provided appropriate action in order to develop their confidence and make *e-PoN* as relevant and useful for the teaching and learning process. The last thing to be discussed is implementation. In the implementation phase, the researcher conducted two implementations. The objectives of this implementation are to describe the situation in try out the product in the classroom and to see whether the product can be used for learning numbers or not. As the result of the first implementation, the researcher found that the students are excited and interesting with the material. But there is some aspect need to revise within the product such as some technical error in the product, the videos, sounds, and games. Those aspects become a consideration in revising the product in order to improve the quality of the

product. In the second Implementation, the researcher used the multimedia rubric in collecting the data. The result of the rubric showed the good response from the teachers toward the *e-PoN*. The total score for the rubric from the first teacher is 39 with the percentage is 78%. It is categorized as very good and for the rubric from the second teacher, the total score is 49 with the percentage is 98%. It is also categorized as very good. From those data, the researcher combines the result of the rubric form both teachers to find the average score. The average score of the multimedia rubric from both teachers is, 88% and it is categorized as very good. So based on the average score before, it can be concluded that the *e-PoN* can be used as a multimedia product for encouraging students at the elementary school in learning numbers. In summary, *e-PoN* as the product of this research resulted can ease students in learning English particularly learning the topic. It can be seen from their behavior and attitude in the classroom while using *e-PoN*. The students were caught paying more attention end exited rather than before, they actively participated which bring them in confidence and motivation in the teaching-learning process in the classroom.

CONCLUSION AND SUGGESTION
Conclusion

Referring to this research, the researcher arrived at conclusions and suggestions. The conclusions of this research are; (1) In SDN 34 Pontianak Kota, the main problems regarding the learning are the lack of students' basic knowledge about the lesson and the lack of materials such as media and multimedia. So, those problems can be overcome by using *e-PoN*. (2) The model of *e-PoN* is learning pack which consisted of two languages. It also consists of four main menus namely Numbers, Videos, Games, and About. For Numbers, Videos and Games, it is contained materials which supported the lesson that is talking about "Numbers". (3) *e-PoN* can be used as a multimedia product for encouraging students at the elementary school in learning numbers. (4) Using *e-PoN* creates students into global learners and its features help the students to improve their basic knowledge about the topic and ease them to understand the topic.

Suggestion

Based on the conclusion above, the researcher likes to provide some constructive suggestions as follow: (1) In designing the e-PoN, the researcher should be known to operate Microsoft PowerPoint and other software to create more interesting and attractive e-Presentation. (2) The researcher should provide more instruction as a guide to ease the user in every section of the product. (3) The researcher should avoid grammatical errors in the product especially for the use of learning. (4) e-PoN should develop into wide range such as Web Version or Application Package File (APK). So the user can use the product in their smartphones and is compatible with every computer. (5) The researcher hopes that there will be the next researchers who can make e-PoN become a real product for encouraging students in learning English especially numbers.

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