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## SIGNIFICANCE OF RPG GAME IN LEARNING OF READING COMPREHENSION FOR BEGINNER BIPA LEARNERS

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### ABSTRACT

Product development in this article produces learning media to practice reading comprehension skill-based RPG Game for beginner BIPA students. The model used in developing the product is the adaptation of the Borg and Gall model. Adaptation of the model is done by converting ten stages into eight stages only. Based on product trial conducted, the final product validation result in BIPA experts is 98.44%, BIPA learning experts is 78.13%, and the learning media expert is 83.82 %. The final product validation result for BIPA students is 97.92% and 97.22%. Based on these results, the product is classified as very feasible and can be implemented.

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## INTRODUCTION

The development of technology becomes a trigger for various fields in developing new innovations in the field by collaborating with technology. This also happens in the field of education. Many media and teaching materials are developed on a technology basis. It is in line with student development in the digital age. Wang (2017:1) said that “The experimental results showed that the students who learned with the micro-world-based gaming approach had better learning achievement and motivation in the mathematics course than those who learned with the conventional technology-enhanced learning approach”. Wang conducted a mathematical learning study using a technology-based approach. Based on the statement, it can be concluded that technology-based mathematics learning is able to improve student achievement and motivation. This can be applied also to learning in other fields, one of them in learning the Indonesian language for foreigners (BIPA).

One of the products of technological development is an RPG game. RPG stands for Role Playing Game. Role Playing Game (RPG) is a game that has a complex story element and role art that makes a person feel like being a character in the game (Saputri and Pratiwi, 2016: 9.1). This type of game can be developed as an interesting medium in training reading comprehension skills

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of beginner BIPA students. This is because RPG games can contain readings supported by visual and audio simulations to make it easier for learners to understand a reading context. Therefore, learning media to read understanding of the form of RPG games can be developed to increase the amount of technology-based media availability in training reading comprehension skills of BIPA beginner level students.

There are already several studies that use RPG as teaching materials and media in a lesson. The research was conducted by several researchers from various fields, especially in the field of informatics engineering. Siswanti (2015: 1144-1151) conducts research entitled *Jejak Merah Putih: Game Perjuangan berbasis RPG (Role Playing Game) di Platform Desktop*. Another research was conducted by Mahanani, from the physics education study program of UNS, in 2016. The research entitled *Pembuatan Media Pembelajaran Berupa Game Edukasi Role Playing Berbasis RPG Maker Vx Ace pada Sub Materi Matahari sebagai Sumber Energi Alternatif untuk Siswa SMP Kelas VIII*. In addition, other relevant research was also conducted by Setiawan (2016) from Informatics Engineering study program, Faculty of Information Technology, Satya Wacana Christian University Salatiga. He conducted the research under the title *RPG (Role Playing Game) Pembelajaran Kosakata dan Tenses Bahasa Inggris Berbasis Mobile*.

This study has similarities with these three previous studies. The equation lies in the use of RPG games in a lesson. The three previous studies using game media in facilitating the learning process in learning. It is the same as the research that will be developed. The research that will be developed will also focus on developing game media to facilitate the learning process in learning.

There are some differences between this study and those three previous studies. The material developed in Siswanti's research is historical material. The material developed by Mahanani is a matter of physics. The material developed by Setiawan is English material. In this study, the material developed is Indonesian language material in BIPA. In addition, the object of research in previous research is the junior high school students, while the object in this study is BIPA students beginner level.

Based on the background that has been formulated, this research needs to be implemented. It happens because at this time much needed by many innovative media based on technology to facilitate the learning process of BIPA. RPG game-based learning media can be used as one of the choices of technology-based innovation that can facilitate the process of learning to read understanding of students beginner level BIPA. RPG game-based learning media can be used to practice reading comprehension skills of novice BIPA students. Therefore, research and development are very important to do.

## METHOD

The method used in this research is research and development method. The development model used in this research is the adaptation of the Borg and Gall development model. The development model consists of ten stages but is adapted into eight stages. Stages that have been adapted can be seen in the following figure.

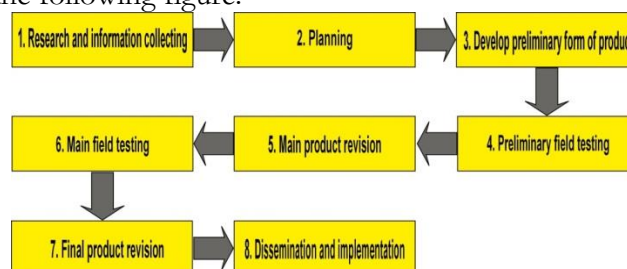


Figure 1 Adaptation Development Stage from Borg and Gall Model

In figure 1 can be seen the stages of development research conducted in this development research. This development research uses the adaptation of the Borg and Gall development model. This is done by adjusting conditions in the field. This research and development are done with two stages of testing. The first phase of the trial is the validation stage of product development by the validator, that is a validation of one expert BIPA, one BIPA learning expert, one expert of instructional media. The BIPA experts who validated were Dr. Arif Budi Wurianto, M.Si., Chairman of BIPA East Java. BIPA learning experts who perform the validation is Peni Dyah Anggari, M.Pd., a lecturer of Indonesian literature UM and a lecturer of BIPA UM. Learning media experts who perform the validation are Andika Agung Sutrisno, M.Sn., DKV UM lecturer and practitioners in the field of learning media. The second phase trial is a test phase on the use of the product, ie beginner level BIPA students. The data collection instrument consists of three instruments, namely the questionnaire, observation guidelines, and interview guidelines. Observation guidelines are used when analyzing the needs of BIPA beginner level students. Interview guides are used to find out the student needs of beginner level BIPA from teachers in beginner class of In Country 2017 program, BIPA, UM. The questionnaire is used for product trials with experts and users. The data analysis technique is used in analyzing quantitative data and qualitative data. Quantitative data were analyzed using percentage calculations. The calculation is obtained through the scores obtained from the questionnaire. Qualitative data were analyzed by describing the observations made and comments written in the questionnaire. The data is in the form of verbal data embodied in the criticism, suggestions, and comments on the questionnaire.

The following is the calculation and discussion of product feasibility tests conducted by experts BIPA, the experts learning BIPA, learning media experts, and students beginner level BIPA. Percentage of product feasibility level is obtained from the following formula.

$$P = \frac{\sum X}{N} \times 100\% \text{ dan } NA = \frac{\sum P}{n} \quad (\text{Sugiyono, 2013:99})$$

Keterangan:

$P$  = Persentase skor

$\sum X$  = Jumlah jawaban tiap responden dari tiap butir pertanyaan/ pernyataan.

$N$  = Total skor maksimal

$NA$  = Nilai Akhir

$n$  = Banyak butir pertanyaan dan pernyataan

$\sum P$  = Jumlah percentage skor

## FINDINGS AND DISCUSSION

### The Model of RPG Game

The game is something done by playing. According to Maratow (2015: 24), the game is an absolute part of the child's life and the game is an integral part of the process of forming the child's personality. That sense refers to the general concept of the game as being part of the child to shape their personality. In this concept, the game can be interpreted as an activity as well as a product used to play.

King (2016: 26) says that the game has two understandings. First, the game is a purely playful activity for seeking pleasure without looking for a win or loses. Second, the game is defined as a play activity performed in order to seek pleasure and satisfaction but marked the win-lose quest. The concept has already referred to the game as an activity. This is in contrast to the development research that defines the definition of the game as a product being played. A more appropriate concept to be used as a basis for research development is the concept expressed by Semiawan. Semiawan (2008: 19 - 20) defines the game as a tool for the child to explore his world from a child who does not know until the child knows and from what cannot be done until able to do it. The definition makes the game referred to as a tool to play.

Role Playing Game (RPG) is one of the genres of games played in the world. In the Indonesian language, this game is known as the type of role play. Abror (2012) states that role-

playing (English: role-playing game abbreviated RPG) is a game whose players play the role of fictional figures and collaborate to knit together a story.

RPG type games have a real-life path (Subrahmanyam, 2015: 18). The flow can be planned and arranged according to the wishes of the creator. It is an attraction for game developers to create unique stories according to their imagination in the game. Players can choose their own role in the game. In addition, players can also run the main characters in the game as they see fit, but the main storyline is already set by the game creator so players must also follow the mainstream to complete the game. So, players can immediately complete the game by following the groove according to the flow that has been set, creator. On the other hand, players can also play the main character as they wish regardless of the storyline the creator has set, but it will not lead to the completion of the game because the player does not comply with the plot set by the game creator. Leow (2016: 78) explains that RPG is a flexible game. Flexible in the notion is the RPG's ability not to be tied to the groove.

RPG games can improve students' learning motivation. Based on the results of the study, students can be more motivated in learning through the material packaged in an RPG game (Umam, 2011: 14). In addition, RPG games are also able to provide examples of virtual models that resemble reality to facilitate understanding of a particular concept. Sari (2014: 10) explains that RPG games can facilitate students in understanding abstract concepts through activities in the game. This opinion is in line with the results of Santoso's research (2015: 11) which suggests that junior high students can easily understand the working principle of thermal energy through RPG games rather than textbooks. In addition, Panji (2013: 24) proves that there is an increase in student learning outcomes in mastering the circulatory material through RPG games. On the teacher's side, Kangas (2016: 10) gets research results that teachers can more easily condition students to learn without stress because the game can become entertainment for students. Based on some of the evidence, RPG games have a high capacity for improving a student's learning motivation. This can be the basis of the usefulness of this developed product.

### **The Accuracy of RPG Game in Reading of Comprehension**

Product validation by BIPA experts was conducted on February 26, 2018. The validation was carried out in the headroom of UPT BIPA UMM. The researcher gave the product along with the questionnaire to be filled by the BIPA experts in the room. Aspects assessed in the questionnaire are divided into four categories, namely the content of instructional media, systematic presentation of instructional media, the language in learning media, and presentation and operation of instructional media.

Based on the results of validation questionnaire by experts BIPA, note that the feasibility of the product reached 98, 44%. The percentage shows the result that the product is very feasible and can be implemented. This indicates that product validation at BIPA experts is sufficient. However, there are suggestions to improve the product. The suggestion is three points: adjusting the setting or background of the game with the Indonesian culture, re-writing the sentence of the sentence (writing, spelling, punctuation, and sentence structure), and the need for a printed tutorial in order to facilitate the learner in using the product. After conducting such validation, the researcher revises the advice given by the BIPA expert.

Product validation by learning media experts was conducted on March 26, 2018. The researcher provided the product and the validation questionnaire to the instructional media expert on that date. The validation process lasts for three days. On March 1, 2018, the instructional media expert gave the validation questionnaire already given. Aspects assessed in the questionnaire are divided into two categories, namely software and visual communication.

Based on the results of validation by the expert media learning and obtained percentage of 55.88%, the percentage shows the result that the product is quite decent, but needs revision. This indicates that the product must be revised first and then validated again to the media

learning expert. There are five comment points and one suggestion point given by the instructional media experts, i.e. the back button to the main menu does not exist, the plot is not clear, return to the previous level one step does not exist, the character has not shown the local wisdom of Indonesia, the setting must be adjusted to the real condition, and make a study of local wisdom in order to achieve the context of the image in accordance with the real conditions of Indonesia. After getting these suggestions, the researcher revised the results accordingly.

The product validation by BIPA learning experts was conducted on March 1, 2018. The researcher provided the product and the validation questionnaire to the BIPA learning expert on that date. The validation process lasts for five days. On March 6, 2018, BIPA learning experts gave validation results that have been given. Aspects assessed in the questionnaire are divided into four categories, namely the content of instructional media, systematic presentation of instructional media, the language in learning media, and presentation and operation of instructional media.

Based on the results of validation by BIPA learning experts, obtained a percentage of 42.97%. The percentage indicates the result that the product is considered inadequate and should be revised. This indicates that the product must be revised and validate again to the BIPA learning experts based on the revised results. There are four points to be revised in the product: productive variations of discourse and vocabulary, form repetition should be avoided, need to challenge at every level, and need to simplify the names of places contained in the product. Based on these suggestions, researchers revised to achieve the expected product. After that, the researcher can re-validate to the BIPA learning expert.

The second validation by the instructional media expert was conducted on March 9, 2018. The researcher provided the product of the first validation revision and the validation questionnaire to the learning media expert. The validation process lasts for five days. On March 14, 2018, researchers took the validation results from the media's learning experts. Based on these results, obtained a percentage of eligibility 83.82%. The percentage indicates that the product is quite feasible and can be implemented. This indicates that the product is sufficient to say feasible and does not need validation anymore. Although the percentage is considered feasible, there are three suggestion points given by the instructional media experts, which fix the function of the buttons in the product to fit its function, clarify the flow of the game, and add the instructions in the product. These suggestions serve as the final revision of the product.

The second validation by BIPA learning experts is conducted on March 12, 2018. The researcher gives the product of the first validation revision and the validation questionnaire to the BIPA learning expert. The validation process lasts seven days. On March 19, 2018, researchers took validation results from BIPA learning experts. Based on these results, obtained a percentage of 78.13% eligibility. The percentage indicates that the product is quite feasible and can be implemented. This indicates that the product is sufficient to say feasible and does not need validation anymore. Although the percentage is considered feasible, there are six suggestion points given by BIPA learning experts, namely note punctuation, need new challenges at each level, need to score as challenge evaluation, need a lot of conversation variation, expansion of conversation according to context of requirement, and variation of form questions need to be added. These six points serve as the basis for the final revision of the product before being implemented in the field.

The total percentage of product feasibility rate is 86.80%. The percentage indicates that the product is very feasible and can be implemented. Based on the result, the researchers continue the stages of product revision and implementation in the field.

### **The Significant of RPG Game for BIPA Student**

The first product trial was done outside the classroom. The trial of the product is done by students of BIPA beginner level of the program In Country 2017, BIPA, UM. Questionnaires given to BIPA students contain eight questions, namely (1) Is the product easy to use, (2) Are the

instructions on this product easy to understand?, (3) Do you have difficulty in operating this product? (5) Is this product useful for you in learning Indonesian?, (6) Is this product interesting to use?, (7) Does this product can improve motivation in learning the Indonesian language?, and (8) Is this product worthy of use in learning BIPA?. The eight questions must be answered by BIPA students. In addition, the questionnaire is also available to comment fields, criticism, and suggestions to contain things that have not been contained in the question. On the other hand, the researcher may also use the translation in that column to correct or revise the product.

Based on the results of the questionnaire, the total percentage of product feasibility level is 97.92%. The result is obtained from the calculation of the value of each positive item multiplied by two scores and the value of each negative item multiplied by one score. Complete calculations are elaborated in the product feasibility test section. Based on these calculations, obtained a percentage of 97.92%. The percentage indicates that the product is very feasible and can be implemented.

The second trial was conducted in the classroom on April 16, 2018. The trial consisted of nine BIPA students at the beginner level of In Country 2017 program, BIPA, UM. In this second trial, the instrument used there are two, namely the questionnaire (as before) and Student Worksheet (LKS). The questionnaire is used to determine the level of product feasibility. LKS is used to know the score of students in answering questions related to reading in the product.

Based on the acquisition score of LKS work, it was only one student who scores below 100. Most students can do well and get a score of 100. The cause of one student score has not reached the score 100 is the existence of two problems that are not done. This can be caused by the forgetting factor to do or indeed the learner does not understand the reading well so cannot answer the two questions. Based on these results can be seen that most students get a perfect score in answering questions in the LKS. This is in accordance with the findings of Maratou (2014) which shows that learning games can improve students' motivation and learning outcomes because they do the learning with pleasure and no burden. The score of the test indicates that the product is easy to use and able to make the learner understand the reading in this product well. This is in line with the purpose of this product to practice reading comprehension skills of BIPA beginner level students. In addition, students are also very enthusiastic about running this product. This is due to the student's interest in the game is quite high. Therefore, they love to learn in the game packaging in this product.

Based on the result of a questionnaire given on product trial in that class, the total percentage of product feasibility level is 97.22%. The result is obtained from the calculation of the value of each positive item multiplied by two scores and the value of each negative item multiplied by one score. Complete calculations are elaborated in the product feasibility test section. Based on these calculations, obtained a percentage of 97.22%. The percentage indicates that the product is very feasible and can be implemented. The percentage differs from the percentage of product eligibility in the first try. In the first trial obtained a percentage of 97.92%, but in the second trial obtained a percentage of 97.22%. This can happen because of differences in situations between outside the classroom and in the classroom. Situations outside the classroom tend to be more relaxed so that learners can be more relaxed in using this product. Unlike the formal situation in the classroom, students tend to be tenser in using the product. It does not have a major effect on the use of the product. This is not a problem as the percentage stays in the category indicating that the product is very feasible and can be implemented.

## **CONCLUSIONS AND SUGGESTIONS**

### **Conclusions**

The product developed in this research and development is learning media to read game-based understanding for novice BIPA students. The development of this product uses the Borg and Gall development model adapted from ten stages to eight stages of development. Validation of this product is done by three experts, namely experts BIPA, BIPA learning experts, and media

learning experts. The final product validation result at BIPA experts is 98.44%. It shows that the product is very feasible and can be implemented. The final result of product validation at BIPA learning experts is 78.13%. It shows that the product is quite feasible and can be implemented. The final result of product validation on the learning media expert is 83.82%. It shows that the product is very feasible and can be implemented. Based on the overall percentage, the product is considered feasible and can be implemented.

Product trials are also conducted by beginner BIPA students. Trial of the product is done twice, that is outside the classroom and in the classroom. The final result of product validation on the novice BIPA students outside the classroom is 97.92%. It shows that the product is very feasible and can be implemented. The final result of product validation on the novice BIPA student in the class is 97.22%. It shows that the product is very feasible and can be implemented. Based on the overall results of validation conducted by the researchers, obtained a percentage indicating that the product is very feasible and can be implemented. Therefore, this product can already be used widely.

### Suggestions

Utilization of this product can be obtained by BIPA teachers, BIPA students, and other researchers. BIPA teachers can use this product to practice reading comprehension skills of BIPA beginner level students. In addition, BIPA teachers can also use this product in the classroom as an exercise to understand the reading. BIPA students can use this product as a medium to practice their comprehension reading skills independently. In addition, BIPA students can also increase the number of vocabulary that is controlled by the readings contained in this product. Other researchers can use this product as one example of the application of technology-based learning media. In addition, other researchers can also develop learning media of this type of product with a different learning focus.

There are three suggestions to other researchers. First, other researchers can develop other game-based BIPA learning products that focus on other language skills. Second, other researchers can conduct large-scale trials on this product. Third, other researchers can continue the development of this product to produce products that can be used in Android applications.

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