



RECTEMA (Recount Text Maze): An Educational Game to Facilitate Reading Recount Text

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Abstrak

Tujuan penelitian ini adalah mengembangkan RECTEMA (Recount Text Maze): an educational game to facilitate the eighth-grade students of SMPN 1 Suruh in reading recount text. Desain penelitian ini adalah R&D yang bertujuan untuk mengembangkan produk pembelajaran dan dilengkapi dengan kuasi-experimental untuk menguji keefektivan produk tersebut. Sampel penelitian ini adalah siswa kelas VII di SMPN 1 Suruh tahun ajaran 2020/2021 yang terdiri dari 17 siswa kelas A dan 17 siswa kelas B. Instrumen yang digunakan dalam penelitian ini adalah angket dan wawancara. Hasil dari data kuesioner dianalisis secara kuantitatif. Sedangan hasil dari data wawancara dianalisi secara kualitatif. Produk pembelajaran ini dikembangkan melalui 5 tahap yaitu analisa kebutuhan berdasaran kebutuhan siswa, teori yang berkaitan dengan produk, pengembangan produk, evaluasi hasil produk oleh ahli, dan pengujian produ di lapangan. Penelitian ini menggunakan bantuan dari SPSS 25 untuk mengolah data yang sudah terkumpul dan hasil dari t-test sig. 2 tailed adalah 0.000 (<0.05), ini berrarti ada efek antara eksperimental group dan control group. Berdasarkan penjelasan diatas, RECTEMA (Recount Text Maze) adalah produk yang efektif sebagai media pembelajaran untuk recount text.

Kata kunci: Teks Recount, Gamification, RECTEMA

Abstract

The objective of this research was to develop RECTEMA (Recount Text Maze): an educational game to facilitate the eighth-grade students of SMPN 1 Suruh in reading recount text. The design of this research was R&D which aims to develop learning products and is equipped with quasi-experimental to test the effectiveness of these products. The sample of this study was class VII students at SMPN 1 Suruh for the academic year 2020/2021 which consisted of 17 students in class A and 17 students in class B. The instruments used in this study were questionnaires and interviews. The results of the questionnaire data were analyzed quantitatively. Meanwhile, the results of the interview data were analyzed qualitatively. This learning product was developed through 5 stages, namely needs analysis based on student needs, theories related to products, product development, evaluation of product results by experts, and product testing in the field. This study uses the assistance of SPSS 25 to process the data that has been collected and the results of the t-test sig. 2 tailed is 0.000 (<0.05), this means there is an effect between the experimental group and the control group. Based on the explanation above, RECTEMA (Recount Text Maze) is an effective product as a learning medium for recount text.

Keywords: Recount Text, Gamification, RECTEMA

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INTRODUCTION

Globally, the scope of education from basic to higher education has stopped due to the COVID-19 pandemic (Mkhize, et al., 2020). Educational institutions must continue the teaching and learning process and ensure that no students are left behind as a result of this situation. Then, the corona virus is considered one of the worst pandemics for decades due to its easy spread and high mortality rate from the virus (Mukti and Basuki, 2020). Furthermore, students are forced to study from home to break the chain of transmission of the Covid-19 virus. Therefore, all educational institutions implement online learning by utilizing e-learning to save the academic year during the COVID-19 pandemic.

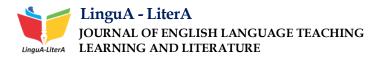
Meanwhile, E-learning has emerged as a powerful medium of learning particularly using internet technology, as a direct result of the integration of technology and education (Al-Fraihat et al., 2020). Then, e- learning can use the advantages of information and communication technology (ICT) to enhance the student achievement in learning process by providing learning experience (Mukti and Basuki, 2020). Therefore, e-learning can use the advantages of information and communication technology (ICT) to create learning experience and enhance student knowledge by providing facilities in daily teaching-learning process.

Then, gamification is the application of game principles and game elements in non- game contexts, with a powerful tool to attract student (Freitas et al., 2017). Furthermore, gamification concept can make the learning more fun processing us using treasure hunting or mission-based learning for students (Aini et al., 2020). Therefore, gamification can motivate student to learning more by provide game principles and game elements in non-game context, with a powerful tool to attract student attention for a long period of time. Furrher, Damayanti (2019) also states that the teacher has big effect to enhance the students' motivation in learning process. So, it is very essential to choose the best media used in teaching and learning process.

Further, reading is one of the important aspect of English skill that has be understood by English learner (Mustika, 2020). Then, reading is considered as a key activity, thus the people can receive the information widely without going anywhere (Lesmana and Resmini, 2020). Therefore, students will easily understand the

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contents of the text provided, one of which is the information contained in the reading text. Meanwhile, recount text is a text written to retells for events or experiences in the past (Rahmawati, 2020). Then, the aim is to retells past event of informing or entertaining audience with some description of what and when occurred (Lesmana and Resmini, 2020). Therefore, students can report an incident, imitate someone's good behavior and boast someone by understanding the contents of the recount text well. Based on the explanation above, researcher adapted modul pintar bahasa inggris kelas 8 SMP/MTs for materials and questions about recount text. Here, RECTEMA (Recount Text Maze) is used to facilitate the eighth grade students of SMPN 1 Suruh in reading recount text. Students will be more interested and enthusiastic for participating in learning activities. Students will get some material with audio for example. Based on the description above, the researcher conducted a research entitled: " RECTEMA (Recount Text Maze): An Educational Game to Facilitate Reading Recount Text." The researcher used RECTEMA (Recount Text Maze) because it is very accordance with condition of the eighth grade students of SMPN 1 Suruh in amidst covid-19 pandemic. This media also makes the students more motivate to learn because RECTEMA has 6 chests of materials and 10 chests of questions in each map, there are 5 maps in RECTEMA. The students have to find chests of material (red chest) and chests of question (gold chests) in maze map that provided in RECTEMA. The product specification of this research is RECTEMA (Recount Text Maze). RECTEMA (Recount Text Maze) is an educational game to facilitate the eighth grade students of SMPN 1 Suruh in reading recount text.

RESEARCH METHOD

This research uses a research and development research design that is equipped with a quasi-experimental research design. Research and development as an industry-based development model for creating new products and procedures, and then systematically tested, evaluated, and refined according to the criteria of effectiveness, quality, and standards selected accordingly (Gall et al. (2003) in Basuki et al., 2018). Furthermore, research and development is used to produce new products needed by the field of social science such as in educational institutions (Sugiyono, 2013).

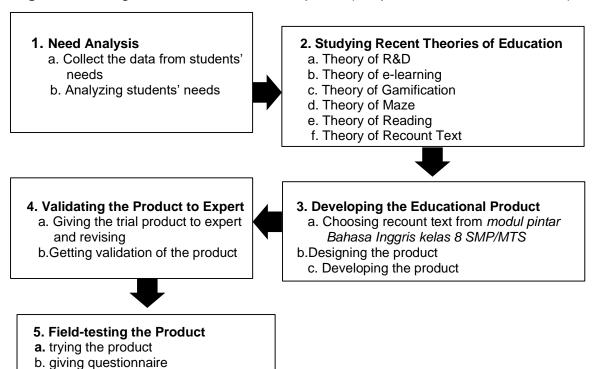
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Moreover, quasi experimental design is a non- randomized design used to know the effect of the treatment given to the experimental group and to compare the results with the control group (Hastjarjo, 2019).

Figure 1. The Figure of Procedure of Development (Adapted from Basuki et al., 2018)



This research uses purposive sampling to select subjects of the research. Purposive sampling is a sampling technique from a population with certain considerations (Sugiyono,2013). The researchers conduct the research from March 2021 to April 2021 and the subject was class A and B of eighth grade students from SMPN 1 Suruh in 2020/2021 academic year. Where, class A would be the experimental group that consists of 17 students, while class B would be the control group consist of 17 students

Meanwhile, due to Covid-19 pandemic, the researcher could not have a face to face meeting and only could have online meeting with the subjects. However, the researcher use questionnaires and conducted interview one-on-one to collect the data. The questionnaires consist of five alternative answers; strongly disagree, disagree, neutral, agree, and strongly agree. The researchers use questionnaires as instrument three times.





First, it completely was to fulfill the data of students' need analysis. It consists of questions about students' opinions about their needs and interests in reading recount text and an educational maze game. Second and third, pre-questionnaire and post- questionnaire was used in a quasi-experimental research design in the step of field testing the developed product. The pre-questionnaire is used to obtain data of the subject before intervention of the product. The pre-questionnaire was used to obtain data of the subject after intervention of the product. Both prequestionnaire and post- questionnaire are similar and consist of 15 questions about students' intensity in their self- regulated learning. The researchers also uses interview to get expert's validation and suggestion during developing the product. The questionnaire has been piloted before it is implemented to the real subjects of the research. The researchers use SPSS for Windows version 25 to know the validity and reliability of instruments. In validity test, all questionnaires resulted the values of Pearson Product Moment correlation more than 0.310 (>0.30) and declared valid (Andresen in Anisah, 2018, p. 33). While in reliability test, all questionnaires resulted the values of Alpha Cronbach more than 0.80 (>0.60) and declared have good reliability (Sekaran and Bougie in Muldyagin, 2018).

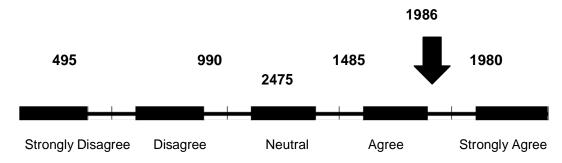
Further, the data collected from interview was analyzed qualitatively by using descriptive qualitative. Then, the data collected from pre-questionnaire and post- questionnaire were analyzed using independent sample t-test with the help of SPSS for Windows version 25. While data collected from questionnaire for students' needs were analyzed quantitatively by using the Likert scale. Likert scales data can be analyzed by summarizing the respondent's score, and then find its criteria. The Likert Scale provided scores as follows; 1 (strongly disagree), 2 (disagree), 3 (neutral), 4 (agree), and 5 (strongly agree) (Syofian et al., 2015).

FINDINGS OF THE RESEARCH

First step of this research is need analysis. The purpose of need analysis is to know what the respondents needs. Need analysis of this research is done by implementing the questionnaire that consists of 15 questions and it's given to 34 respondents.



Figure 2. The Figure of Continuum Diagram of Need Analysis



The following table is the findings of the students' need analysis questionnaire. The questionnaire consists of 15 stataments

Table 1. Table of the Finding on Students Need Analysis

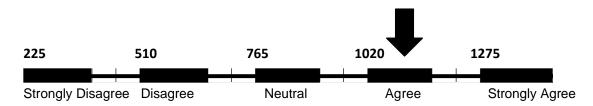
No.	Findings
1	About 84% of students agree that learning resources that can increase learning motivation are
	needed for students.
2	About 81% of students agree that good learning motivation affects student learning
	outcomes.
3	About 75% of students agree that learning recount text is easier with the provided games.
4	About 57% of students agree that educational games motivate learning more than printed
	books.
5	About 66% of students agree that learning to use educational games with maze map designs
	can add to the attractiveness of students
6	About 51% of students agree that materials in digital form can add to the attractiveness
	of students.
7	About 81% of students agree that educational games must be interactive.
8	About 54% of students agree that learning in an interactive way can grow.
9	About 87% of students agree that I enjoy learning with the help of games.
10	About 93% of students agree that educational games must have an attractive appearance.
11	About 93% of students strongly agree that the explanation provided by the educational game
	must be clear
12	About 90% of students strongly agree that educational games should be provided for free
13	About 75% of students agree that educational games must be usable on android
	smartphones.
14	About 96% of students agree that educational games should be easy to use.
15	About 53% of students agree that educational games such as the characteristics above are
	needed by students

The next questionnaire is the next step to know the feedback from the respondent about the product of the research. Field testing is done by giving the product and implementing the questionnaire. The questionnaire consists of 15 questions. It is given to 17 respondents. The following table shows the interpretation of the questionnaire result of students' field testing.





Figure 3. The Figure of Continuum Diagram of Field Testing
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The data of field resting is recapitulated in the following table.

Table 2. Table of the Finding on Students Field Testing

No.	Findings
1	About 100% of students agree that image design of the educational game is attractively
	arranged
2	About 88% of students said that 3D design on educational game is interesting
3	About 64% of students said that camera angle presented in the educational game is
	appropriate.
4	About 82% of students said that there are interactive elements in educational games.
5	About 82% of students said that material presented is in accordance with the printed book.
6	About 70% of students said that the material and questions in educational games can be
	understood easily
7	About 64% of students said that this educational game can improve other skills in learning
	English
8	About 58% of students said that this educational game is easy to use.
9	About 76% of students said that there is no problem when using this educational game.
10	About 94% of students said that this educational game increases student motivation in
	learning.
11	About 88% of students said that this educational game helps students learn to read ecount text
	anytime and anywhere
12	About 70% of students said that the educational game feature creates a new experience in
	learning recount text.
13	About 76% of students said that learning recount text using this educational game can
	increase students' interest in learning
14	About 64% of students said that educational games are in accordance with the needs of
	students.
15	About 82% of students said that this educational game is recommended for students of SMPN
	1 Suruh.

T-test for pre questionnaire and post questionnaire experimental group and control group are used to determine whether there is effect on students' learning motivation after using RECTEMA (Recount Text Maze). The following are the results of the pre questionnaire and post questionnaire t-test experimental group and control group using independent sample t – test.

Before experimental group used RECTEMA, the mean was 49.2941 while for control group was 50.0000. It means that the experimental group's score was 0.7058 lower than control group. To make sure that the data in pre- questionnaire has equality or in same condition, the researcher checked the value of Sig. (2-tailed)





which value was 0.870. If the sig. value in Levene's test for equality of variances table is more than 0.05 the variances are equal or homogenous (Damayanti et al., 2019). Further, if the value of Sig. (2-tailed) is less than 0.05, then H0 is accepted while Ha is rejected. However if the value of Sig. (2-tailed) is more than 0.05, then Ha is accepted while H0 is rejected (Damayanti et al., 2019).

After experimental group used RECTEMA, the mean resulted 58.1176 while for control group was 51.2941. It means that the experimental group's score had been increased and 6.82353 higher than control group. However, it still did not represent any significant meaning. So, the researcher checked the value of Sig. (2-tailed) which was 0.000. If the value of Sig. (2-tailed) is less than 0.05, then H0 is accepted while Ha is rejected. Thus, there is effect in the result of post-questionnaire of student motivation learning level between experimental group and control group. However if the value of Sig. (2-tailed) is more than 0.05, then Ha is accepted while H0 is rejected (Damayanti et al., 2019). So, to sum up, RECTEMA (Recount Text Maze) as the product of this research is an effective learning media to junior high school student especially for learning recount text.

Regarding the content of this research, the material is adapted from Modul Pintar Bahasa Inggris Kelas 8 SMP/MTs that has some features such as materials and questions about recount text. Regarding the product development steps on this research that took five steps was in line with the expert explanation they are; need analysis, studying recent theories of education product development, developing the educational product, validating the product to expert and field-testing the product. There are five procedures of development (Latief in Basuki et al., 2018). That is need analysis, studying recent theories of education product development, developing the educational product, validating the product to expert, and field- testing the product. Meanwhile, to conduct the research it is also used quasi-experimental with prequestionnaire before field testing and post questionnaire after field testing.

With the regard to those discussions of the finding and sound of theories, it can be said that the product in the form RECTEMA (Recount Text Maze); an Educational Game to Facilitate the Eighth Grade Students' in Reading Recount Text Amidst the Covid-19 Pandemic was suitable with the theory of Landers (2014), gamification can increase student motivation in learning and create a sense of pleasure to learn something by collaborating fantasy (game characteristics),

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student involvement (attitudes), and modernized learning content for learning purposes. Thus, students who found the necessity of the product were satisfied.

CONCLUSION

The outcomes of this research is RECTEMA (Recount Text Maze); An Educational Game to Facilitate the Eighth Grade Students of SMPN 1 Suruh in Reading Recount Text amidst the Covid-19 Pandemic. The educational game is in form of recount text maze game for android smartphones. It was adapted from Modul Pintar Bahasa Inggris kelas 8 SMP/MTs which contains materials and questions. They are chapter 4 (When I Was a Child) and Chapter 5 (I Am Proud Of...). Each chapter is equipped with materials and questions to evaluate student's understanding.

The educational game was compiled based on the result of students' need analysis, some theories of research and development, evaluation and suggestion from the expert who validated the product. She suggested to revise the display image brightness, increase the game resolution to 720p, and fixed the errors in the image instructions appeared. The researcher revised the product and it is ready to be tried in the classroom for the next stage. The field- testing was conducted to know the suitability and the capability of the product toward the eighth grade students of SMPN 1 Suruh in 2020/2021 academic year. The finding of the field testing showed that the product received a good responses from the students. They were satisfied with this product development. The product once was proved practical enough to be implemented and able to increase students' motivation and interest in reading recount text. Further, this research has been able to achieve the objective of the research which is to develop RECTEMA (Recount Text Maze): An Educational Game to Facilitate Reading Recount Text.

Given the findings, discussions, and conclusion elaborated above, it is suggested for the following people who may find benefits of this research. Firstly, for students learning English, it is suggested to use the product of this research as a media to learning reading recount text which adapted from Modul Pintar Bahasa Inggris Kelas 8 SMP/MTs. Secondly, for English teachers, it is recommended to use the product of this research to facilitate reading recount text for the eighth grade students of SMPN 1 Suruh. Thirdly, for other researchers, it is also suggested to use

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the research findings as references or use the product to conduct the research with the similar or different text and/or research and development.

REFERENCES

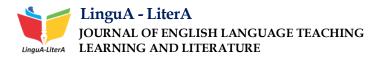
- Aini, Q., Rahardja, U., & Khoirunisa, A. 2020. Blockchain Technology into Gamification on Education. Indonesian Journal of Computing and Cybernetics System, 14 (2): 147-158. https://journal.ugm.ac.id/ijccs/download/53221/27882
- Al-Fraihat, D., Joy, M., Masa'deh, R., & Sinclair, J. 2020. Evaluating E-learning system success: An empirical study. *Computer in Human Behavior*, 67-86.https://www.researchgate.net/profile/Dimah_AlFarihat/publication/335064326_Evaluating_E- learning System Success An Empirical Study/links
- Anisah. 2018. An Ex Post Facto Analysis of the Comparison of Vocabulary Mastery between Using Pictures and Audio-Visual Media at Seventh Grade of Nahdhatul Islahiyah School, Narathiwat, Thailand. Skripsi Program Study Pendidikan Bahasa Inggris Universitas Muhammadiyah Gresik. https://eprints.umg.ac.id/375/
- Basuki, Y., Damayanti, A., & Dewi, S.U. 2018. Vocabulary Coursebook for EFL students of Higher Education in Indonesia. *International Journal of Education & Literacy Studies*, Vol. 6(4): 122-128, http://journals.aiac.org.au/index.php/IJELS/article/view/4912
- Damayanti, Elfana. 2019. Modul Statistika Induktif Uji Dependent Sample T
 Test, Independent Sample T Test, Dan Uji Wilcoxon. Universitas
 Gadjah
 Mada.(https://www.researchgate.net/publication/333999256_MODUL_STATI
 STIKA_IN
 DUKTIF_UJI_DEPENDENT_SAMPLE_T_TEST_INDEPENDENT_SAMPLE
 T_TEST_DAN_UJI_WILCOXON
- <u>Pamayanti, Astried. 2019. Graphic Organizer as Strategy to Teach Extensive</u>

 <u>Reading on Non-Fiction for EFL Learners. Journal of English Language</u>

 <u>Teaching and Linguistics (JELTL). Vol 4 (2): 251-262</u>

 <u>https://jeltl.org/index.php/jeltl/article/view/284 /pdf</u>
- Freitas, S. A. A., Lacerda, A. R. T., Calado, P. M. R. O., Lima, T. S., & Canedo, E. D. 2017. *Gamification in Education: A Methodology to Identify Student's Profile*, 1-8. https://www.researchgate.net/publication/321811936 Gamification in education A methodology to identify student's profile

Vol. 4 No. 2, November 2021 ISSN: 2620 – 410X (Print) ISSN: 2774 – 3713 (Online)





- Hastjarjo, T. D. 2019. Rancangan Eksperimen-Kuasi. *Buletin Psikologi*, Vol. 27(2): 187-203. http://journal.ugm.ac.id/buletinpsikologi/article/download/38619/26463
- Landers, R. N. 2014. Developing a Theory of Gamified Learning: Linking Serious Games and Gamification of Learning. Simulaion & Gaming, 45 (6): 752-768. https://www.researchgate.net/profile/Richard Landers2/publication/268632276 Developing a Theory of Gamified Learning/links/54b940f90cf253b50e291145/Devel oping-a-Theory-of-Gamified-Learning.pdf
- Lesmana, Y., & Resmini, S. 2020. Students Response toward the Use of Scanning Technique in Reading Recount Text. *Professional Journal of English Education*, 3 (5): 577-581. https://jounal.ikipsiliwangi.ac.id/index.php/project/article/download/4910/pdf
- Mkhize, N., Ndimande-hlongwa, N., Ramrathan, L., & Smit, J. A. 2020. Teaching and Learning in Higher Education in the Time of COVID-19. Editorial, 1-15. (http://alternation.ukzn.ac.za/files/book/series-03/00iv-editorial.pdf
- Mukti, B. D. F., & Basuki, Y. 2020. VIVOICE: An Effort to Promote EFL Learner's Self- Regulated Learning during the COVID-19 Outbreak. English Teaching Journal: A Journal of English Literature, Linguistics, and Education, 8 (2): 82-90. https://e-journal.unipma.ac.id/index.php/ETJ/article/view/7715/pdf
- Muldyagin, D. H. 2018. The Correlation between the Interest in Practicing English Conversation and Speaking Fluency of English Department Students of Pasundan University. Bandung: Universitas Pasundan. (http://repository.unpas.ac.id/40125/
- Mustika, Y. 2020. Improving Reading Comprehension on Recount Text By Using Authentic Material. English Language Teaching and Research Journal, 4 (2): 140-151. (https://www.apspbi.or.id/eltr/index.php/eltr/article/download/68/53
- Rahmawati, D. 2020. The Effect of Using GIST Strategy through Recount Text toward Students' Comprehension at Asy-Syukriyyah Collage. Journal Asy-Syukriyyah, 21 (2): 225-242, https://jurnal.asy-syukriyyah.ac.id/index.php/Asy-Syukriyyah/article/download/112/96
- Sugiyono. 2013. METODE PENELITIAN KUANTITATIF, KUALITATIF, DAN R&D. Bandung: Alfabeta, CV. TUCDOC, https://tuxdoc.com/queue/bukumetode-penelitian-sugiyono-16_pdf?queue_id=5f3e7624e2b6f5344d89f50e
- Syofian, S., Setiyaningsih, T., & Syamsiah, N. 2015. Otomatisasi Metode Penelitian Skala Likert Berbasis Web. Universitas Darma Persada, 1-8, (http://jurnal.umj.ac.id/index.php/semnastek/article/view/540/