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E-book Development on Disaster Mitigation Materials to Improve Students' Readiness Behavior in Facing Disasters

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ABSTRACT

Indonesia is one of the countries that has a high risk of natural disasters because it is traversed by the Pacific Ring of Fire. Post-natural disasters cause great losses, especially the emergence of various infectious and contagious diseases. To reduce this risk, it is necessary to build disaster preparedness behavior through education with attractive teaching materials. This research aims to develop e-books of disaster mitigation materials to improve students' disaster preparedness behavior. The population and sample were 29 students of SMAN 10 Bogor City class XD. The type of research used is Research and Development (R&D) research with a research design developed by Branch which consists of five stages, namely needs analysis, design, development, implementation, and evaluation. Data collection used interview and questionnaire techniques. Field trials were conducted using a one-group pretest-posttest design. The results of this study indicate that the e-book teaching materials developed have a very valid category. Based on the percentage of assessment by media experts of 96.43% and material experts of 97.50%. Students' preparedness behavior has increased after using e-book teaching materials on disaster mitigation material, from moderate to high levels with a percentage increase of 15.09% and an average n-gain of 0.53 with a moderate or moderately effective category. The development of e-book teaching materials that have been compiled and validated is categorized as very practical and effective as teaching materials. In terms of teacher questionnaire response, it obtained a percentage value of 95.83%, and student questionnaire response obtained a percentage value of 86.72%.

Keywords: E-book, Disaster mitigation, Readiness behavior, Research and development

Introduction

Indonesia is located in a territorial area that is very prone to natural disasters, this is because it is at the confluence of 3 world plates, namely the Indo-Australian, Eurasian, and Pacific plates (Dwiyanti et al., 2020). Indonesia is part of the Ring of Fire that passes through the Pacific plate (Pacific Ring of Fire), which is a track where there are rows of volcanoes, so it is not surprising that countries that pass by this ring of fire often experience earthquakes, both tectonic and volcanic earthquakes. In the past decade, natural disasters have cost an average of 60,000 people per year worldwide, representing 0.1% of total deaths (Cardil, 2020). Based on data on disaster events in Indonesia recorded by the BNPB (National Disaster Management Agency) Data, Information and Public Relations Center, it shows that 3,522 natural disasters occurred in Indonesia throughout 2022. The province that often experienced natural disasters during this period was West Java, with 755 events. According to the Head of the Bogor Regency BPBD Emergency and Logistics Division, Bogor Regency ranks first in the number of natural disasters, which include floods, landslides, strong winds, and other disasters. This is because Bogor is in an area that often rains with a humidity level or air moisture content of around 70 percent.

Natural disasters lead to potential disease outbreaks such as diarrhea, malaria, hepatitis A, childhood illness (malnutrition), measles, and ARI. The National Disaster Management Agency (BNPB) recorded 851 deaths from natural disasters in 2022. The high mortality rate shows the community's disaster preparedness and mitigation behavior is still low. Disaster mitigation is an effort to increase public awareness of facing and reducing the impact of a disaster. Preparedness behavior needs to be carried out in various fields and levels, not only in the community but also in schools, especially among school residents, also need to have preparedness behavior (Yanuarto, 2019). The most effective disaster risk mitigation effort is the implementation of education.

Communicating knowledge about disasters and their handling can be communicated with the help of attractive media to students, the media design is based on a curriculum that is integrated into subjects by incorporating disaster mitigation values. The results of interview observations found that students' knowledge of disaster mitigation material was lacking, and the level of student disaster preparedness behavior was also still relatively low at 58%. Teachers have never delivered efforts regarding disaster mitigation against disease, both inside and outside the classroom. In addition, not all teachers can use interesting teaching materials to support the learning process. The use of teaching materials used by teachers only develops PowerPoint slides so it does not support learning in the digital era.

The solution that can be done to overcome this problem is to utilize technology in the learning process. One of the teaching materials that can be used is an E-book. According to The Oxford Dictionary of English, an e-book is a book in digital or electronic form that comes from a printed book without having to be printed, so to read it you have to use a cell phone or something similar. The advantages of E-books are more practical and easy to take anywhere because it is in the form of software, environmentally friendly, durable, and can be said to be eternal, easy to duplicate, and easy to distribute. In contrast to the existing textbooks, to duplicate them by printing books that require costs and are not environmentally friendly because they require paper in the printing process, and are distributed directly. E-book teaching materials are one of the innovations or efforts to improve the quality of learning in the classroom and can be applied to disaster mitigation materials (Hayudityas, 2020).

The low readiness behavior of students regarding disaster mitigation is related to the biology teaching materials used which are still monotonous such as through textbooks with the help of PowerPoint media, and students' knowledge related to disaster mitigation material is also still lacking. No E-book teaching material discusses disaster mitigation in improving readiness behavior. For this reason, the purpose of this study is to develop E-book-based biology teaching materials on disaster mitigation material to improve student readiness

behavior in dealing with disasters. The formulation of the problem in this study is how the effectiveness of the development of e-books on disaster mitigation material to improve student readiness behavior in the face of disasters. This E-book is expected to provide benefits to increase student motivation in learning about disasters, as a guide in conducting disaster mitigation and fostering student readiness behavior, and can be a source of information in efforts to improve the quality of biology learning in schools.

Methods

The research was conducted in February - June 2023 at SMA Negeri 10 Bogor City, with 29 students. This research is educational research using the R&D (Research and Development) method with the ADDIE model developed by Cahyadi. The selection of this development model is based on the reason that the stages of ADIDIE development are simple and easy to practice in developing teaching materials. The ADDIE model (analysis, design, development, implementation, and evaluation) is divided into five stages, namely, stage I is an analysis by conducting initial observations and needs analysis which includes curriculum analysis, learning processes, teaching materials, and learning models, as well as conducting preliminary studies in the form of questionnaires regarding disaster mitigation to determine the percentage of students' readiness behavior in facing natural disasters. Stage II is designed by determining the subject matter and making E-book teaching materials with content, illustrations, images, and layout. Stage III is development, consisting of validation of teaching materials in the form of materials and media by experts, validation of instruments in the form of questionnaires, and revision of teaching materials based on expert input. Stage IV is implementation, at this stage testing is carried out on students using the one-group pretest-posttest research design. Stage V is evaluation, at this stage teachers and students are given a questionnaire to find out the responses to the E-Book teaching materials that have been used.

The type of test used is a questionnaire with a rating scale type filled in the form of a checklist. The questionnaire uses a Likert scale. The instrument was prepared based on disaster preparedness behavior parameters according to the LIPI-UNESCO/ISDR research team which consists of five aspects, namely 1) knowledge and attitudes towards disaster risk; 2) policies and guidelines; 3) emergency response plans; 4) disaster warning systems; and 5) resource mobilization. The validation test was carried out on each statement item using the Pearson Product Moment formula. The reliability test of the statement instrument or questionnaire was carried out using the Cronbach alpha formula. Variables are said to be reliable if they have a value >0.334. Cronbach's alpha reliability test uses the formula:

$$r_1 = \left(\frac{k}{k-1}\right)\left(1 - \frac{\Sigma s_t^{\,2}}{s_t^{\,2}}\right)$$

Description:

r_1 : alpha reliability coefficient
k : mean square between subjects
$\Sigma s_t^{\,2}$: mean square of error
$s_t^{\,2}$: total variance

The level of disaster preparedness behavior can be known by calculating the scoring method or assessment of respondents' answers. Respondents' answers were grouped based on parameters and then summed and weighted. To determine readiness, calculations can be made with the following formula:

$$IKB = 35\ (PS) + 10\ (K) + 15(RTD) + 25(SPB) + 15(MS)$$

Description:
IKB : Disaster readiness index
PS : Knowledge and attitude
K : Policy
RTD : Emergency response plan
SPB : Disaster warning system
MS : Resource mobilization

The power analysis method used is the descriptive percentage method. The percentage is calculated using the descriptive percentage formula, namely:

$$DP = \frac{n}{N} x\ 100\%$$

Description:
DP : Descriptive Percentage
n : Empirical score (score obtained)
N : Ideal score (maximum score value)

The results of the percentage score of student readiness are then interpreted with the criteria in table 1.

Table 1. Criteria for determining the improvement of student readiness behavior

Score	Class
<60%	Low
60% - 80%	Medium
>80%	High

The score data is obtained then to determine the increase in student readiness behavior, the gain index value formula is used as follows:

$$N\text{-}Gain = \frac{Posttest\ Score - Pretest\ Score}{Max\ Score - Pretest\ Score}$$

The normalized gain value is distributed on criteria as in the following Table 2.

Table 2. The mean value of normalized n-gain and its classification

Average Gain	Classification	Effectiveness Rate
(g) > 0,70	High	Effective
0,30 < (g) > 0,70	Medium	Quite Effective
0,30 > (g)	Low	ineffective

The media validation test can be done using the following formula:

$$P = \frac{\Sigma x}{\Sigma x_i} x\ 100\%$$

Description:
P : Feasibility Presentation
χ : Answer Validity Score (Real Value)

χ_I : Highest Answer (Expected Value)

The results obtained from the formula above will be converted to assessment statements to determine the quality and level of usefulness of the products produced based on user opinions. Converting scores into assessment requirements can be seen in the following table 3.

Table 3. Eligibility criteria

Percentage Score (%)	Interpretation
P > 80%	Very feasible
61% < P < 80%	Worthy
41% < P < 60%	Decent enough
21% < P < 40%	Less feasible
P < 21%	Very less worthy

Based on the table above, the teaching material development product has met the eligibility criteria based on the response questionnaire of students and teachers. E-book teaching materials are categorized as theoretically feasible if the percentage of feasibility is ≥ 61%.

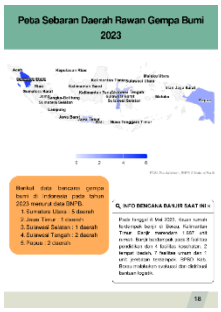
Results and Discussion

The development of e-book teaching materials on environmental change material on post-disaster disease mitigation to improve disaster preparedness behavior was developed through several ADDIE stages, namely Analysis, Design, Development, Implementation, and Evaluation. The first stage begins with an analysis through field studies in the form of observations and interviews with Biology teachers and distributing preliminary questionnaires to class X high school students in one of the public high schools in Bogor City. Learning materials on environmental changes about post-disaster disease mitigation to improve students' preparedness behavior in the face of disasters have never been introduced and delivered by teachers during learning both in the classroom and outside the classroom. The learning model that teachers usually use during the teaching and learning process uses several learning models that follow the independent curriculum, namely problem-based learning (PBL), project-based learning (PJBL), discovery learning (DL), and inquiry learning (IL).

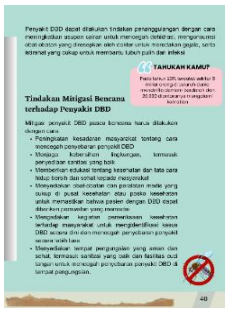
The teaching materials commonly used by teachers in the learning process are only through media slide presentations and images that do not support learning in the digital era. Students do not yet understand how to respond to problems regarding disasters and the steps that must be taken to mitigate disease after natural disasters. The level of students' readiness behavior in dealing with post-natural disaster diseases is still relatively low at 58% so it needs to be improved. Based on the results of the preliminary study, information was obtained that all students already have gadgets in the form of smartphones that can be used to access the internet, meaning that students can utilize this technology to support learning. In the design stage, the initial design of E-Book teaching materials and the content of the teaching materials is carried out. The initial design of the E-Book can be seen in Figure 1.

Initial form of E-Book cover

Core Competencies

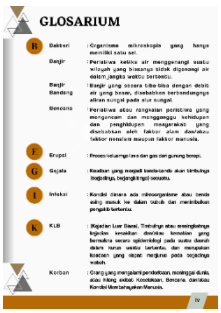


Regional distribution map disaster-prone



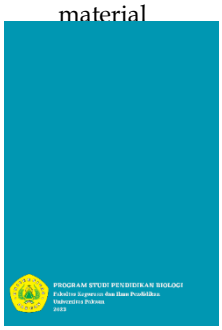
Design at a glance info and did you know

Contents of e-book material



Glossary View

Bibliography list view



The shape of the back of the e-book cover

Figure 1. Initial design of E-Book

This E-Book of Disaster Mitigation Material to Improve Students' Readiness Behavior in Facing Disasters has been validated by 2 media experts, namely Biology Education lecturers and Biology teachers in State High Schools. The media was declared very valid with the results of media validation from both validators amounting to 96.43%. The results of media validation can be seen in Table 4.

Table 4. E-book Media Validation Results

Validator	Assessed aspect		
	Display	Presentation	Language
1	40	7	7
2	39	7	8
Total Score	79	14	15
Maximum Score	80	16	16
Percentage	98,75%	87,50%	93,75%
Criteria	Very Valid	Very Valid	Very Valid
Overall Score		(108: 112) x 100% = 96,43%	
Criteria		Very Valid	

Media expert validation is done by filling out an assessment questionnaire sheet consisting of 3 aspects and each aspect has several statements. The results of media design validation obtained several suggestions from experts including consistency in choosing the type and size of fonts and adding sentences appealing for a first aid kit in every home or school. Based on the validation, the e-book gets an overall percentage of 96.43% with very feasible criteria, in the assessment there are three aspects, namely appearance, presentation, and language. In the display aspect, the percentage obtained is the highest, which is 98.75%. The high percentage is obtained because the media display follows the characteristics of an interesting e-book. An e-book contains many graphic elements such as cover design, images and graphics, videos, colors, consistent typography, illustrations, and additional interactive elements that make the e-book attract the attention of readers (Yulianto, 2024). In the presentation aspect, the percentage obtained is 87.50%, and the linguistic aspect is 93.75%. Following the opinion of Arikunto (2013) states that the percentage value ranging from 81%-100% is declared very feasible or valid. It can be concluded that the e-book developed is very feasible to be used as teaching material.

In addition to the media validity test, a material validity test was also conducted. The material validation results from validator 1 amounted to 97.50%. The material validation results can be seen in Table 5.

Table 5. E-book Material Validation Results

Aspect	Score Each Aspect	Maximum Score	Percentage	Criteria
Content Feasibility	23	24	95,83%	Very Valid
Language Feasibility	8	8	100%	Very Valid
Presentation	8	8	100%	Very Valid
Overall Score		(39: 40) x 100% = 97,50%		
Criteria		Very Valid		

The e-book product was also validated by material experts on post-disaster disease mitigation material. Material expert validation is done by filling out a questionnaire sheet on the assessment aspects consisting of 3 aspects and each aspect has several statements. The results of the material expert validation obtained several suggestions from experts including adding material about things that are usually needed during evacuation. Based on the validation results, it is known that all three assessments have very feasible feasibility criteria because they have a percentage value >80%. In the aspect of language and presentation feasibility, it has the same percentage and the highest is 100%. This high percentage was obtained because the language was easy to understand and the presentation was able to attract students' interest, this is also following the opinion of Manurung et al. (2021) which states that language and presentation that are easy to understand can attract readers' interest and can improve students' ability to read. In the aspect of content feasibility, the percentage is 95.83%. The total percentage is 97.50% with very feasible criteria. Following the opinion of Arikunto (2013) states that the percentage value ranging from 81%-100% is declared feasible, so it can be concluded that the material content presented is very feasible or valid.

At this stage, validation of the research instruments used was also carried out, instrument validation was carried out by distributing questionnaires to students who were not research subjects. The validation of the research instrument was then analyzed using the Pearson product-moment formula, obtaining the validation results of 35 research instruments, 33 of which were declared valid while 2 of them were declared invalid.

Limited field trials were conducted using one class as a research subject consisting of 29 students and given experiments using e-book teaching materials. This study used a one-group pretest-posttest design using a research questionnaire and a learner response

questionnaire. This test aims to determine the value of students' readiness behavior, the results of the test are presented in Table 6.

Table 6. Table of validity results for pretest and posttest questions

No.	Type of Assessment	Total Score	Maximum Score	Percentage
1.	*Pretest*	52690	75980	69.35%
2.	*Posttest*	64155	75980	84.44%
	Improved Readiness Behavior			15.09%

The results of the pretest and posttest of 29 students in the experimental class experienced a significant increase in the percentage of disaster preparedness behavior, which was 15.09%. Based on the research, initially, students only had disaster preparedness behavior of 69.35% in the medium category, after using e-books it could increase to 84.44% in the high category. The e-book effectiveness testing stage carried out on X-D class students can be said to have increased disaster preparedness behavior, this can be seen from the student and teacher response questionnaires and the average scores obtained during the pretest and posttest. This test also aims to determine the increase in students' disaster preparedness behavior by looking for the N-Gain value. The results of the pretest and posttest as well as student and teacher response questionnaires are presented in Table 7.

Table 7. Students' pretest and posttest results

No.	Implementation Criteria	Pretest	Posttest
1.	Number of Learners	29	29
2.	Total Score	52690	64155
3.	Maximum Score	75980	75980
4.	Average Score	1816,90	2212,24
5.	Average Maximum Score	2620	2620
6.	Overall average	69,35	84,44
	N-Gain Value	0,53 (Medium dan Moderately effective)	

The results of the questionnaire regarding the readiness behavior of 29 students in the experimental class with a pretest of 69.35% which is included in the medium category, and a posttest of 84.44% which is included in the high category. Based on Table 4, it can be seen that there is an increase in the readiness behavior of students in dealing with disasters, which is 15.09%. The results of the pretest-posttest calculation are also differentiated based on 5 aspects of readiness behavior parameters. The results of the pretest-posttest calculation are also differentiated based on 5 aspects of readiness behavior parameters, namely aspects of knowledge and attitudes towards disaster risk, policies and guidelines, emergency response plans, disaster warning systems, and increased resource mobilization.

Products that have been validated and revised are then carried out at the fourth stage, namely the implementation stage. E-book teaching materials that have passed the expert validation stage are ready to be tested in the field. Limited trials were conducted with experimental classes. The number of students in the class was 29 students, using a one-group pretest-posttest research design. Testing was carried out for one meeting. The learning process consists of giving pretest questions, delivering material, discussion, presentation of discussion

results, and giving post-test questions. The readiness behavior test was carried out using 33 statements, the test will be processed pretest and posttest data to determine the n-gain value.

After the trial, the average overall pretest results of students were 69.35 and the overall posttest results were 84.44, while based on the percentage of readiness behavior it is known that the total score obtained during the pretest was 52690 out of 75980 so it is known that the percentage of students' readiness behavior is 69.35% which is categorized as moderate, then after using the e-book the readiness behavior of students increased to 64155 so that if the percentage is increased, the readiness behavior becomes 84.44% which is categorized as high. From the data above, it is known that the readiness behavior of students has increased after using e-book teaching materials from moderate to high levels with a percentage increase of 15.09% and an average n-gain of 0.53 with a moderate category (quite effective). This study follows the statement of Yanti & Fauzi (2022) that an increase in pretest and posttest results on e-books can shape students' responsiveness to natural disasters. E-book teaching materials are used in every series of learning processes that are useful for students' reference in increasing knowledge about post-disaster disease mitigation, and forming behavior that is ready to face disasters. This is following the opinion of Khair & Fauzi (2022) that e-book teaching materials are effective in improving attitudinal competencies associated with learner knowledge.

The attitudinal competence measured in this study is students' preparedness behavior. Readiness behavior must be owned by every community in facing natural disasters. Hartini et al. (2018) said that attitude changes can be familiarized during the implementation of learning. One of the main factors that measure disaster readiness is knowledge, if the knowledge gained is lacking then the impact will be high. Therefore, knowledge about disasters must be trained early on. Knowledge about disasters affects the attitude of students in dealing with disasters, which is following the opinion of Setyawati (2014) that the knowledge of students will usually affect the attitude and concern of the community towards a matter. Knowledge can be conveyed to students easily if supported by teaching materials, where interactive and innovative teaching materials will be able to increase the interest and motivation of students so that it can help students digest information or knowledge. E-books used in teaching and learning activities are useful for stimulating thoughts and interests, and motivating students so that there will be educational communication.

Based on the results of the study, it is known that there are several advantages of using e-book products developed compared to other traditional or conventional media, namely one of them: (1) e-books can help students in the use of more practical learning media, (2) e-books can be more easily carried anywhere and anytime by students, (3) e-books can also help teachers in delivering learning materials because the material presented is shorter and clearer, making it easier to convey, (4) e-books can also support learning in the digital era by utilizing electronic technology, which can reduce paper production which is considered less effective. Meanwhile, there are also disadvantages of using the developed e-book, namely: (1) e-books can only be accessed by students who have gadgets such as laptops or smartphones, (2) accessing e-books is still limited to internet networks because not all gadgets have good internet networks, (3) the e-books presented are still limited only in post-natural disaster disease mitigation material

Conclusion

Based on the results of research and discussions that have been carried out regarding the results of research regarding the development of e-books on disaster mitigation materials to

improve students' preparedness behavior in facing disasters, it is known that e-book teaching materials are declared valid and suitable for use in schools. This is because the results of validation by media expert lecturers obtained a percentage of 96.43% and material experts obtained a percentage of 97.50% which is included in the very valid qualifications. Students' readiness behavior during the pretest received a score of 69.35% in the medium category, while students' readiness behavior during the posttest received a score of 84.44% in the high category. Students' readiness behavior increased after using e-book teaching materials on disaster mitigation material, from medium to high level with a percentage increase of 15.09% and an average n-gain of 0.53 in the medium category (quite effective). The development of e-book teaching materials that have been prepared and validated are categorized as very practical and effective as teaching materials. In terms of the teacher's response questionnaire, the percentage score was 95.83%, and the student response questionnaire received a percentage score of 86.72%.

Research on the development of e-book teaching materials has limitations at the trial stage which is carried out on a small scale in one school in one experimental class, where the testing process is not carried out on a large scale to obtain maximum results. E-book teaching materials are only used in schools that allow students to use gadgets to access these learning materials. Research limitations also exist in the use of e-books when students access them, because not all students' gadgets are connected to the internet network properly. As for one of the suggestions that can be given in this study, further research is recommended to conduct trials more broadly, trials can also be carried out by adding disaster mitigation simulations with models, methods or techniques in learning. E-book teaching materials on mitigation material in the face of natural disasters are expected to be used as an alternative teaching material that can improve students' readiness behavior in dealing with post-natural disaster diseases. E-book teaching materials can be used to facilitate students in the learning process independently without being limited by space and time and can support learning in the digital era by utilizing electronic technology.

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References

Arikunto, S. (2013). *Research Procedures: A Practical Approach*. Jakarta: Rineka.

Cardil, A. (2020). Since January 2020 Elsevier has created a COVID-19 resource centre with free information in English and Mandarin on the novel coronavirus COVID- 19 . The COVID-19 resource centre is hosted on Elsevier Connect, the company's public news and information, (January).

Dwiyanti, L. A., Welfare, P., Bandung, S., Welfare, A. P., & Subarkah, A. (2020). Vulnerability of 200 Village Communities to the Threat of Landslides in Dago Village, Coblong District, Bandung City, *2*(2), 131–150.

Hartini, S., Thaybah, Mastuang, & Mahtari, S. (2018). Developing of Physics Learning Material Based on Scientific Literacy to Train Scientific Process Skills. *Journal of Physics: Conference Series*, *1097*(1). https://doi.org/10.1088/1742-6596/1097/1/012032

Hayudityas, B. (2020). The Importance of Implementing Disaster Mitigation Education in Schools to Know Students' Preparedness. *Molecules*, *2*(1), 1–12.

Khair, N., & Fauzi, A. (2022). Effectiveness of High School/MA Physics E-Books Integrated with Earthquake Material Based on Research-Based Learning to Improve Students' Preparedness Attitudes. *Jurnal Eksakta Pendidikan (Jep)*, *6*(1), 44–51. https://doi.org/10.24036/jep/vol6-iss1/650

Manurung, E. B., Warneri, & Syamsuri. (2021). Analysis of the Feasibility Level of Economics Textbooks used by Teachers in Class X SMA Negeri 10 Pontianak. *Jurnal Pendidikan Dan Pembelajaran Khatulistiwa (JPPK)*, *10*(12), 1–10.

Setyawati, H. (2014). *The Relationship between Knowledge and Earthquake Disaster Preparedness in Class XI IPS Students at SMAN 1 Cawas, Klaten Regency*. Muhammadiyah Surakarta University.

Yanti, Y., & Fauzi, A. (2022). Effectiveness of Integrated High School/MA Physics E-books on Earthquake Material Based on Problem-Based Learning Models to Improve Students' Responsive Attitudes. *Jurnal Penelitian Pembelajaran Fisika*, *8*(1), 82. https://doi.org/10.24036/jppf.v8i1.116536

Yanuarto, T. (2019). *Handbook of Resilient Agile Response in Facing Disasters (Issue 48). BNPB Information and Public Relations Data Center*. Retrieved from www.bnpb.go.id

Yulianto, G. (2024). Developing Interactive English E-book Using Kotobee Author For SMAS Pelita Raya 10th Grade Students. *Journal of English as a Foreign Language Education (JEFLE)*, *3*(1), 38. https://doi.org/10.26418/jefle.v3i1.56703