ISSN: 2089-9823 DOI: 10.11591/edulearn.v16i2.20402

Electronic module as learning needs to write exposition texts for junior high school students

Charlina Charlina, Elvrin Septyanti, Tria Putri Mustika, Annisa Rahmi

Indonesian Language and Literature Education, Faculty of Teacher Training and Education, University of Riau, Riau, Indonesia

Article Info

Article history:

Received Oct 24, 2021 Revised Apr 24, 2022 Accepted May 29, 2022

Keywords:

Electronic module
Exposition text
Junior high school students
Learning needs
Writing skill

ABSTRACT

This study was a step toward the creation of an e-module to creat flips bookbased exposition texts for junior high schools. The purpose of this study was to offer an examination of students' demands when creating exposition papers. A survey was used for the investigation. The data for this inquiry was gathered through a questionnaire. In this study, a Likert scale was utilized to examine students' attitudes, opinions, and perceptions of the built electronic module. This research made use of a checklist-style questionnaire with a range of assessments of 1 to 5. The questionnaire was distributed to students from four junior high schools. This sampling technique was based on the sampling quota established by the researcher. The data analysis technique involved converting the category value into an assessment score and examining the result. According to the findings, 61.5% of students had difficulties in interpreting the material of exposition text, and the rest of 80.1% desired that the exposition text writing content be presented using entertaining, interactive, and innovative learning methods. This showed the need for the preparation of electronic modules for writing flip book-based exposition texts.

This is an open access article under the <u>CC BY-SA</u> license.



219

Corresponding Author:

Charlina Charlina

Indonesian Language and Literature Education, Faculty of Teacher Training and Education University of Riau, Indonesia

Hang Tuah Street, No. 223 Districts Lima Puluh, Pekanbaru, Riau, 28142, Indonesia

Email: charlina@lecturer.unri.ac.id

1. INTRODUCTION

According to the 2013 curriculum, one of the goals of studying Bahasa Indonesia is to be able to communicate and write in the language. Writing exposition text is one of the text-based materials related to writing activities. This material is found in class VIII in *Kompetensi Dasar*/Basic Competence (KD) 3.5 recognizing information on texts of exposition in the form of widely circulated scientific articles from newspapers and magazines and KD 4.5 concludes the contents of exposition texts (popular scientific articles from newspapers and magazines) that are heard and read. The 2013 curriculum emphasizes that teachers act as facilitators and must encourage students to participate more actively in their studies [1]. In addition, it supports the Indonesian 2013 Curriculum Characteristics, namely developing affective, cognitive, and skill aspects and their implementation in various situations both at school and in the community [2].

Since the Indonesian Minister of Education and Culture issued Circular Letter No. 4 of 2020 concerning the Implementation of Education in the Coronavirus Disease (COVID-19) Emergency Period, it is said that the learning process at all levels has switched to an online learning system. This condition causes all learning components to adapt and adapt to new patterns. One of the successes of the teacher as a facilitator in this learning activity is the selection of the right media. For this reason, it is very necessary for learning

media that are appropriate for the individual's abilities and conditions of students so that they can learn independently, actively, and follows learning as expected from the implementation of the 2013 Curriculum. Technology wil helps students skillfully find information on their own and actively use thinking and imagination so that they can develop students' potential. Information and communication technologies (ICT) becomes a tool to enhance learning, teaching, and leadership [3]. This is so that educational activities continue to occur, then alternative systems can be implemented without risk [4]. Especially, in the current era of the 4.0 industrial revolution, books have undergone a metamorphosis from

With the condition of online learning and the 2013 Curriculum which emphasizes that the teacher acts as a facilitator, then the electronic module will be very much needed by students in learning Bahasa Indonesia independently. Learning modules are teaching materials designed to be used for independent learning by students [5]. Module as a type of learning activity unit that aims to assist individual students in achieving their educational goals. This corresponds to, the module can be promoted as independent learning and critical holistic development students think. In addition, it is highly recommended to be given to students as a way of bridging distance learning during unforeseen circumstances such as a pandemic (e.g. COVID-19) [6].

The development of increasingly sophisticated technology also affects the development of module presentations that can be packaged in electronic form. Electronic modules can be read on a computer and created with certain software [7]. Electronic modules, also known as e-modules, are tools or learning tools that contain materials, methods, limitations, and methods of evaluating that are designed systematically and attractively so that they can achieve the expected competencies according to their level of complexity electronically [8]. Ministry of Education and Culture [9] stated that the electronic module is a module that is systematically arranged into certain learning units, presented in an electronic format, where every learning activity in it is connected by a link as navigation that makes students more interactive with the program, equipped with the presentation of video tutorials, animations, and audio to enrich the learning experience. In general, electronic modules modify the print module's components. The development principle is the same for both the conventional (printed) module and the electronic module. The physical presentation format differs significantly. Some software can convert modules in electronic form, for example, flipbooks. Flipbook is a traditional type of animation made from a stack of paper resembling a thick book, with each page describing a process about something that later appears moving or animated [10]. According to Yogiswara [11], flipbooks can be presented in various devices such as computers, Macs, iPhones, iPads, iPods, Androids, and other mobile devices that include computer and mobile device audiences.

According to Indriyanti [12], the components of the module include an introduction section, a learning activity section, and a bibliography. The introduction section contains a general explanation of the learning modules and indicators. The learning activities section contains a description of the learning content, summaries, tests, answer keys, and feedback. Teaching material is a module if it includes learning objectives, learning materials/substances, and evaluation. The module must have several characteristics, including being self-instructional, self-contained, intact, stand-alone, adaptive, and user friendly. The module is expected to provide learning instructions for students during their education [13].

The objectives of the module include providing teaching materials that are following the demands of the curriculum that take into account the needs of students, as well as the background of their social environment, educational goals can be achieved efficiently and effectively, students can participate in educational programs according to their own pace and ability, students can live and understand as much as possible. carry out self-study activities on an ongoing basis, and modules are prepared based on master learning a concept that emphasizes that students must optimally master the subject matter presented in the module [14]. Almost in every schools, we see signs of learners pursuing areas of personal interest with such technologies [15].

According to Nasution [16], the learning process using modules has several advantages or benefits for students, namely the use of modules can guide students to achieve success in the learning process through regular steps that will lead to learning motivation so that students try as hard as possible in learning. However, the preparation of the module of course requires several steps of needs analysis. Module needs analysis is an activity to analyze the syllabus and lesson plans to obtain module information needed by students in learning the competencies that have been programmed.

In Bahasa Indonesia subjects, e-modules can help students during the learning process. In KD writing exposition texts, there is KD 3.5, which identifies information on exposition texts (popular scientific articles from newspapers/magazines) that is heard and read, and KD 4.5, which concludes the contents of exposition texts (popular scientific articles from newspapers and magazines) that is heard and read.

Exposition text is a variety of discourse to explain, convey, or describe something that can expand the knowledge of the reader [17]. Exposition is also called exposure, which is a form of essay that seeks to explain, describe or analyze the main idea that can expand one's knowledge and views [18]. From the

exposition text, the reader usually looks for the truth of the issue. Therefore, expository texts usually contain data, facts, or the process of something happening [19]. In order to write an exposition text, the author needs to possess adequate knowledge on the subject or topic, with the ability to analyze the problem concretely [20]. A written text is seen as the tangible written record of a potential communicative event [21].

Setyaningrum [22] states in the exposition text, the author explains a topic to provide information without having to conclude. Expository text uses descriptions to provide details about characteristics of something, the sequence of events, compare/contrast the relationship between two things by identifying similarities and differences, cause/effect to explain how an event leads to an outcome, and problem/solution to convey how a problem can be solved [23]. The exposition text is structured with a statement of opinion (thesis), argumentation, and reaffirmation of opinion [24]. The statement of opinion (thesis) section contains the opinions expressed by the author of the text. The argumentation section contains the arguments (reasons) that support the author's statement, while the reaffirmation contains the repetition of statements that are used to convince the reader of the truth of the statement (thesis).

Flip book-based electronic modules can be one of the media used in learning to write exposition texts. Flip books will help teachers to present modules with a more interactive and attractive appearance than printed books. The use of interactive learning media makes the material more interesting and easy to understand, makes a stressful learning atmosphere fun, and helps teachers create interactive presentation patterns [25]. Digital book created using the kvisoft flipbook maker application also features with multimedia facilities, so that the packaging of digital books becomes more attractive and interactive [26]. Flipbooks that use animation, video, and music technologies are different from ordinary printed books [27].

Electronic modules based on flipbooks might be one of the media used to teach students how to construct exposition texts. Flipbooks will assist teachers in presenting modules more engagingly and appealingly than printed books. The electronic module is also self-instructional, which means it only includes one learning material so that learners are able to concentrate on the lesson's content, self-contained, which means it contains all components of the material listed in the module, and stand-alone, which means it can be used without the use of other media [28]. The advantages of e-modules are: i) The small physical size; ii) The digital format is not easily damaged; iii) It is easy to process; iv) The distribution is easy; and v) The presentation is more creative [19]. Therefore, students' opinions, perceptions, and suggestions through questionnaires are useful for finding answers to students' needs in developing a computer program that allows you to create flip book-style exposition texts. It is also an alternative to increasing the provision of learning media in junior high schools for teachers and students, especially in Dumai.

2. RESEARCH METHODS

2.1. Reasearch design

This study is a step toward the creation of an e-module for creating flip book-based exposition texts for the secondary students. The survey method was used for the investigation [29]. These options are useful for gathering information about preferences, attitudes, opinions and behaviours [30]. Through needs analysis, this method is utilized to describe the material's demands on students for writing exposition texts.

2.2. Research instrument

A questionnaire was used to collect data in this study. Students' attitudes, opinions, and/or perceptions of the developed electronic module are measured using a Likert scale in this study [31]. This study used a checklist-style questionnaire with a rating scale of 1 to 5 for each item [32]. The questionnaire that was prepared was addressed to students in five junior high schools in Dumai, Indonesia. Distribution of survey questionnaires is done by online [33]. The category used refers to the opinion of Riduan and Sunarto as shown in Table 1 [34].

Table 1. Category level of need by percentage

Percentage (%)	Description		
0% - 20%	Very unnecessary		
20,1% - 40%	Unnecessary		
40,1% - 60%	Enough need		
60,1% - 80%	Need		
80,1% - 100%	Necessary		

Adaptation of Riduan and Sunarto [34]

222 ISSN: 2089-9823

2.3. Data collection technique

The schools are State Junior High School 4 Dumai, State Junior High School 5 Dumai, State Junior High School 21 Dumai, Kalam Kudus Junior High School Dumai, and Al Huda Islamic Junior High School Dumai, Indonesia. The sample in this study amounted to 208 students. This sampling method is based on quota sampling, which the researcher determines [35]. In addition, the research sample was adjusted to students who were experiencing the process of learning to write expository texts online. The results of the needs analysis in the development of the electronic module for writing expository texts are expected to improve the quality of the electronic module following the expected suggestions and criticisms. The data analysis technique was carried out by altering the classification values converting assessment scores to numerical values and analyzing the results to be further categorized based on the necessary, sufficient, and unnecessary categories.

3. RESULTS AND DISCUSSION

This study is based on 12 statements used to complete the preparation of an electronic module on writing flipbook-based exposition texts at the junior high school level. The statement includes the concept of explaining the material in the learning process and the concept of presenting material for writing exposition texts in junior high school. Statements are presented to identify the weaknesses and needs of learning materials for writing expository texts. Based on the data obtained, Table 2 shows the responses of respondents to the statement of the need for the electronics module to write flipbook-based explosive texts as a whole.

Table 2. Questionnaire responses to the need for writing exposition texts

			l e				
No.	Statement	Strongly disagree	Do not agree	Doubtful	Agree	Strongly agree	Total
1	S1	4	53	85	55	11	208
2	S2	9	51	54	86	8	208
3	S3	12	64	55	69	8	208
4	S4	11	74	60	54	9	208
5	S5	10	55	52	78	13	208
6	S6	3	19	37	129	20	208
7	S7	5	8	22	119	54	208
8	S8	2	5	5	122	74	208
9	S9	6	10	28	115	49	208
10	S10	4	14	61	110	19	208
11	S11	3	22	59	107	17	208
12	S12	5	24	66	97	16	208

Details of the need for the learning process to write explanatory texts are presented in Table 3. Referring to the table, respondents stated that 61.5% of students had trouble grasping the material of producing exposition text during the learning process. Similarly, 63.2% of students had trouble generating writing that adheres to the format of the expository text. Students struggle with compiling paragraphs of expository text according to linguistic rules. It is known that 59.7% respondents agree with this statement, while 57.7% of respondents agree that students are not exposed to closely observable examples as a guide for writing expository texts. Hence, 62.8% of respondents also agree that students have difficulty in finding and determining materials to produce expository texts.

Table 3. The need for learning to write explanatory texts

Dognondonts total	Statement						
Respondents total	S1	S2	S3	S4	S5		
208 respondents	61.5	63.2	59.7	57.7	62.8		

Thus, students have difficulty in studying expository texts, difficulties in developing writing that is in accordance with the structure of exposition texts, difficulties in composing paragraphs, and students are not faced with examples that can be observed closely. They encounter difficulties in planning, organizing ideas, stating a clear purpose and choosing appropriate words to express their ideas while composing texts [36]. Furthermore, the aspect of presenting the material and the need for an electronic module in writing expository text can be seen in Table 4.

Table 4. The need for an electronic module for writing exposition texts based on flip books

Dogwandanta tatal	Statement						
Respondents total	S6	S7	S8	S9	S10	S11	S12
208 respondents	73.8	80.1	85.1	78.4	72.1	70.9	69.1

Students have already learned the material for creating expository writings using traditional media such as books. This statement has been agreed upon by 73.8% of respondents. This implies that, for the most part, teachers have relied on readily available texts, such as textbooks, to provide material. Printed textbooks are also often out of date [37]. As a result, 80.1% of students want the exposition text writing material delivered in an engaging, interactive, and innovative way. Students also want to learn media to write exposition texts using language that is easy to understand. A total of 85.1% of respondents agree with this statement. Likewise, 78.4% of students want learning media to write expository texts that make it easier for them to study independently. In line with that, 72.1% of students want learning media to write expository texts integrated with technology. Technology is an application of science to make the world more efficient [38]. There is 70.9% of students want exposition text writing material to be taught using special media such as electronic modules and 69.1% want flipbook-based electronic modules. Students have a curious attitude because the videos provided in the e-module can be studied further by students; questions that arise in the material and questions also increase the curiosity of students [39].

Based on the description of the data above, the indicator of the need for learning to write expository text and the need for a flipbook-based exposition text writing module are in the category of need. This is in accordance with the table Category level of need by percentage 60.1%-80%. The highest need that students want is the need for learning media that is easy to understand. As many as 85.1% of students agree. The need for these two indicators can be seen based on the Figure 1.

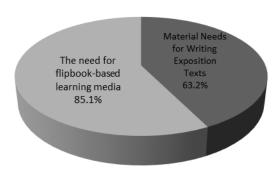


Figure 1. Student needs for flipbook-based electronic modules

4. CONCLUSION

Based on the analysis of students' needs in learning to write expository texts, there are two needs underlie the preparation of the e-module for writing flip book-based exposition texts. These needs include material for writing exposition texts delivered through engaging, interactive, and cutting-edge educational media. Students expect this need to be met through the development of an electronic module based on a flipbook. This is in accordance with previous studies that interactive media developed with the latest developments in computer technology. Of course, this is something that supports education.

In addition, this need will meet the needs of learning Indonesian subjects in schools. Meanwhile, the material presented in the basic competencies includes; i) 3.5 Identifying exposition text information in the form of popular scientific articles from newspapers/magazines) that are heard and read; ii) 4.5 Summarizing the contents of exposition texts (popular scientific articles from newspapers and magazines) that are heard and read; iii) 3.6 Identify the structure, linguistic elements, and oral aspects in the exposition text of popular scientific articles (environment, social conditions, and/or cultural diversity) that are listened to or read; and iv) 4.6 Presenting ideas and opinions in the form of expository texts of popular scientific articles (environment, social conditions, and/or cultural diversity) orally and in writing by paying attention to structure, linguistic elements, and oral aspects. Through electronic modules, subject matter can not only be read through printed books. This will make it easier for students to study anywhere in accordance with the conditions when online learning applies.

224 ISSN: 2089-9823

AKNOWLEDGEMENT

The authors would like to express their gratitude to the Faculty of Teacher Training and Education of the University of Riau for supporting the research team with PNBP FKIP grants for the fiscal year of 2021.

REFERENCES

- [1] F. R. Rahim, "Exploring the effectiveness of e-book for students on learning material: a literature review," IOP Conf. Series: Journal of Physics: Conf. Series, 2020, doi: doi:10.1088/1742-6596/1481/1/012105.
- Arianto, A. Adisaputra, and Sumarsih, "Development of Exposition Text Writing Material Based on Literation in Student Class X SMA," Journal of Education and Practice, vol. 8, no. 36, pp. 72-77, 2017.
- D. L. Yee, "Images of school principals' information and communications technology leadership," Journal of Information Technology for Teacher Education, vol. 9, no. 3, pp. 287–302, 2000, doi: 10.1080/14759390000200097.
- R. Eliyasni, M. Habibi, Rahmatina, and N. F. Azima, "E-Module Flipbook Model for Designing E-Learning Materials in Higher Education," Proceedings of the 2nd Progress in Social Science, Humanities and Education Research Symposium (PSSHERS 2020), vol. 563, no. Psshers 2020, pp. 17-23, 2021, doi: 10.2991/assehr.k.210618.004.
- M. A. Al Mamun, G. Lawrie, and T. Wright, "Instructional design of scaffolded online learning modules for self-directed and inquiry-based learning environments," Computers and Education, vol. 144, no. May 2019, p. 103695, 2020, doi: 10.1016/j.compedu.2019.103695.
- [6] A. L. Madrazo and R. V. Dio, "Contextualized learning modules in bridging students' learning gaps in calculus with analytic geometry through independent learning," Journal on Mathematics Education, vol. 11, no. 3, pp. 457-476, 2020, doi: 10.22342/jme.11.3.12456.457-476.
- M. Yandra and N. M. Sari, "Development of E-Modules Based on Project Based Learning Model for Highway and Bridge Construction Subject at Vocational High Schools," vol. 464, no. Psshers 2019, pp. 184-187, 2020, doi: 10.2991/assehr.k.200824.043.
- [8] F. S. Irwansyah, I. Lubab, I. Farida, and M. A. Ramdhani, "Designing Interactive Electronic Module in Chemistry Lessons," Journal of Physics: Conference Series, vol. 895, no. 1, 2017, doi: 10.1088/1742-6596/895/1/012009.
- D. J. S. and S. Ministry of Education and Culture, Practical Guide to E-Module Preparation (in Indonesian). Jakarta: Direktorat Pembinaan SMA, Ditjen Dasar dan Menengah, 2017.
- [10] S. Mandal, A. Chakrabarti, and S. Maji, "Integration of PDF Flip Book Reader in Koha OPAC for Easy Access and Dissemination of Fulltext Library Resources among the Users," Journal of Library & Information Science, vol. 7, no. 4, pp. 620-625, 2017.
- [11] S. C. Yogiswara, "E-Book-Based Module Development Using Kvisoft Flipbook Maker Application to Increase Interest and Cognitive Learning Outcomes of Senior High School Students (in Indonesian)," Universitas Negeri Yogyakarya, 2019.
- V. O. Bano, "Development of Authentic Assessment Management Training Module for Middle School Science Teachers (in Indonesian)," *Kelola: Jurnal Manajemen Pendidikan*, vol. 5, no. 2, pp. 139–151, 2018, doi: 10.24246/j.jk.2018.v5.i2.p139-151.
- [13] Irwanto, "Analysis of Industry Based Microprocessor Learning," Asian Journal of EducationTechnology, vol. 1, no. 1, pp. 1–14,
- [14] D. D. Swastika, "Development of Islamic Integrated Learning Module for Higher Plant Botany Course Material for Angiosperms
- for Liliopsida Class (in Indonesian)," *Journal of Biology Learning*, vol. 2, no. 1, pp. 23–32, 2020, doi: 10.32585/v2i1.560. [15] K. Squire, "Mobile media learning: Multiplicities of place," *On the Horizon*, vol. 17, no. 1, pp. 70–80, 2009, doi: 10.1108/10748120910936162.
- [16] S. Nasution, Various Approaches in the Learning and Teaching Process (in Indonesian). Jakarta: Bumi Aksara, 1992.
- [17] Suparno dan Muhamad Yunus, Basic Writing Skills (in Indonesian). Jakarta: Universitas Terbuka, 2002.
- [18] Z. Aqib, Becoming a National Standard Professional Teacher (in Indonesian). Bandung: Yrama Media, 2013.
- [19] S. Riyanto, Lukman, and B. Nugroho, "Development of Three-Dimensional Book System Framework for Information Dissemination (in Indonesian)," in *e-INDONESIA INITIATIVES (eII) Forum ke VIII*, 2012, no. April, pp. 1–10, doi: 10.13140/2.1.4829.2165
- [20] A. Muhyidin, "Does the writing exposition text ability correlate to reading habit and discourse markers mastery?," Journal for the Education of Gifted Young Scientists, vol. 8, no. 2, pp. 885-895, 2020, doi: 10.17478/JEGYS.682065.
- [21] A. I. Moreno, "The role of cohesive devices as textual constrains on relevance: A discourse-as-process view," International Journal of English Studies, vol. 3, no. 2, pp. 111–165, 2003.
- [22] W. Setyaningrum, Summary of Indonesian Language Materials for SMP/MTs Class VII, VIII, IX (in Indonesian). Malang: Javalitera 2017
- [23] M. Hebert, J. J. Bohaty, J. R. Nelson, and M. C. Lambert, "Identifying and discriminating expository text structures: An experiment with 4th and 5th grade struggling readers," Reading and Writing, vol. 31, no. 9, pp. 2115-2145, 2018, doi: 10.1007/s11145-018-9826-9.
- [24] S. dan S. Djumingin, Exposition Text Textbooks and Tools (in Indonesian). Makasar: Badan Penerbit UNM, 2021.
- [25] N. D. Shalikhah, "Lectora Inspire Interactive Learning Media as Learning Innovation (in Indonesian)," Warta LPM, vol. 20, no. 1, pp. 9-16, 2017, doi: 10.23917/warta.v19i3.2842.
- [26] D. G. H. Divayana, P. W. A. Suvasa, I. P. W. Ariawan, I. W. E. Mahendra, and G. A. D. Sugiharni, "The Design of Digital Book Content for Assessment and Evaluation Courses by Adopting Superitem Concept Based on Kvisoft Flipbook Maker in era of Industry 4.0," in Journal of Physics: Conference Series, 2019, vol. 1165, no. 1, doi: 10.1088/1742-6596/1165/1/012020.
- [27] S. Andini, L. Fitriana, and B. Budiyono, "Geometry in flipbook multimedia, a role of technology to improve mathematics learning quality: The case in Madiun, East Java," in Journal of Physics: Conference Series, 2018, vol. 1008, no. 1, doi: 10.1088/1742-6596/1008/1/012077.
- [28] S. Yulando, S. Sutopo, and T. Franklin Chi, "Electronic Module Design and Development: An Interactive Learning," American Journal of Educational Research, vol. 7, no. 10, pp. 694-698, 2019, doi: 10.12691/education-7-10-4.
- [29] C. Y. Chang, C. L. Lai, and G. J. Hwang, "Trends and research issues of mobile learning studies in nursing education: A review of academic publications from 1971 to 2016," Computers and Education, vol. 116, pp. 28-48, 2018, 10.1016/j.compedu.2017.09.001.
- [30] E. M. Ikart, "Survey Questionnaire Survey Pretesting Method: An Evaluation of Survey Questionnaire via Expert Reviews
- Technique," Asian Journal of Social Science Studies, vol. 4, no. 2, p. 1, 2019, doi: 10.20849/ajsss.v4i2.565.
 [31] H. A. E. Lao, E. Tari, I. Nahas, H. Wijaya, and I. P. A. Darmawan, "The use of e-learning in motivating students to excel towards

- learning outcomes," Journal of Education and Learning (EduLearn), vol. 15, no. 3, pp. 458-464, 2021, doi: 10.11591/edulearn.v15i3.19368.
- [32] N. B. Robbins and R. M. Heiberger, "Plotting Likert and Other Rating Scales," Survey Research Methods, no. October 2005, pp. 1058-1066, 2011.
- [33] D. H. Granello and J. E. Wheaton, "Online data collection: Strategies for research," Journal of Counseling and Development, vol. 82, no. 4, pp. 387–393, 2004, doi: 10.1002/j.1556-6678.2004.tb00325.x.
- [34] H. Riduwan dan Sunarto, Introduction to Statistics for Research. Bandung: Alfabeta, 2014.
- [35] H. Taherdoost, "Sampling Methods in Research Methodology; How to Choose a Sampling Technique for Research," SSRN Electronic Journal, vol. 5, no. 2, pp. 18–27, 2018, doi: 10.2139/ssrn.3205035.
 [36] Ö. Koç, E. Altun, and H. G. Yüksel, "Writing an expository text using augmented reality: Students' performance and perceptions,"
- Education and Information Technologies, vol. 27, no. 1, pp. 845-866, 2022, doi: 10.1007/s10639-021-10438-x.
- [37] S. Maynard and E. Cheyne, "Can electronic textbooks help children to learn?," Electronic Library, vol. 23, no. 1, pp. 103-115, 2005. doi: 10.1108/02640470510582781.
- [38] M. Amin, A. Andayani, J. Nurkamto, B. Setiawan, and N. Ngadiso, "The Development of Video Compact Disk Media Using a Scientific Approach for Expository Writing: A Case in Indonesian Senior High Schools," Anatolian Journal of Education, vol. 3, no. 1, pp. 1–20, 2019, doi: 10.29333/aje.2018.311a.
- [39] Leny, K. Husna, Rusmansyah, M. Kusasi, Syahmani, and H. Zuwida, "Development of flipbook e-module problem-based learning (PBL) learning model to increase students' learning outcomes in oxidation-reduction reaction material," Journal of Physics: Conference Series, vol. 2104, no. 1, 2021, doi: 10.1088/1742-6596/2104/1/012024.

BIOGRAPHIES OF AUTHORS



Charlina (D) SS SS (P) currently serves as a head lector; head of the Department of Language and Arts Education, Faculty of Teacher Training and Education, University of Riau. The main research directions are the development of teaching materials; linguistics. In her field of study, she has written and published ten books as well as more than fifty articles in major journals and conference proceedings. She can be contacted at email: charlina@lecturer.unri.ac.id.



Elvrin Septyanti D S S D is a lecturer at the Indonesian Language and Literature Education Study Program, Department of Language and Arts Education, Faculty of Teacher Training and Education, University of Riau. Her primary research interests include the creation of teaching materials and the instruction of the Indonesian language. Since 2016, she has had 20 publications published in journals and proceedings. She can be contacted at email: elvrin.septyanti@lecturer.unri.ac.id.



Tria Putri Mustika (D) 55 S (P) is a lecturer at the Indonesian Language and Literature Education Study Program, Department of Language and Arts Education, Faculty of Teacher Training and Education, Riau University. She can be contacted at email: tria.putri@lecturer.unri.ac.id.



Annisa Rahmi (D) 🔀 🚾 (P) is a student of the Indonesian Language and Literature Education Study Program, Department of Language and Arts Education, Faculty of Teacher Training and Education. She is in her final semester and is working on her final project. She can be contacted at email: annisa.rahmi0295@student.unri.ac.id.