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Developing an android-based interactive multimedia tool for improving news writing skills

(Pengembangan multimedia interaktif berbasis android untuk meningkatkan keterampilan menulis)

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Abstract: The background of this research is the advancement of technology in the use of intructional media, which helped students overcome the difficulties they experienced in news writing. This study aims to develop an interactive multimedia tool using brainwriting to improve students' news writing skills. The research design was devised as research and development (R&D). This research stage consists of three stages: the first pre-research stage, a needs analysis used to determine the initial conditions for learning, planning, and preparing research instruments. Second, the development stage entailed creating the initial product format, validating the initial product, testing the product, and making the final product revisions. In the meantime, product implementation and distribution were carried out at the implementation stage. Data collection was carried out by expert validation and testing on students. The validation results with experts obtained an average score for the media design aspect 4.4, the graphic aspect 4.5, and the material aspect 4.5. Overall, the average rating is 4.5 in the category of "very good". Meanwhile, the results of trials on 17 test subjects obtained an average score of 4.4 in the "very good" category. Thus, this interactive multimedia is feasible and can be implemented to teach news writing in class VIII.

Keywords **Android, Brainwriting, Development, Interactive, Multimedia**

Abstrak: Penelitian ini berlatar belakang dari perkembangan teknologi dalam dunia pendidikan khususnya penggunaan media pembelajaran yang mampu mengatasi kesulitan yang dialami siswa dalam menulis berita. Tujuan penelitian ini untuk menghasilkan multimedia interaktif berbasis metode *brainwriting* untuk pembelajaran menulis berita. Rancangan penelitian yang digunakan adalah penelitian dan pengembangan atau *Research and development (R&D)*. Tahapan penelitian ini dimulai dari tahap analisis kebutuhan untuk mengetahui kondisi awal pembelajaran, perencanaan, penyusunan instrumen penelitian, tahap pengembangan dilakukan pengembangan bentuk awal produk, validasi produk, uji coba produk, dan revisi produk. Sementara, pada tahap implementasi dilakukan penerapan dan penyebaran produk. Pengumpulan data dilakukan dengan validasi ahli dan uji coba kepada siswa. Hasil validasi dengan ahli diperoleh skor rata-rata aspek desain media sebesar 4,4, aspek grafis sebesar 4,5, dan aspek materi sebesar 4,5. Secara keseluruhan rata-rata penilaian tersebut adalah 4,5 dengan kategori sangat baik. Sementara, hasil uji coba terhadap 17 subjek uji coba didapat skor rata-rata sebesar 4,4 dengan kategori sangat baik. Dengan demikian, multimedia interaktif ini layak dan dapat dimplementasikan dalam pembelajaran menulis berita di kelas VIII.

Kata Kunci ***android, brainwriting*, interaktif, multimedia, pengembangan**

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INTRODUCTION

Receptive and productive language abilities make up the majority of language skills. Speaking and writing are considered productive skills, while listening and reading are regarded as receptive skills (Pamuji & Setyani, 2021). Students must master these four aspects in an integrated manner so that

they are skilled in speaking. Teaching language skills in class is not limited to theory alone, but must be accompanied by practice so students can speak well and in context.

Likewise in writing skills, writing is the ability to express an idea in written form (Susanto, 2016). The owned ideas must be poured into writing so that the ideas do not just disappear. One of the language skills that pupils need to learn is how to write (Hardiana & Dewi, 2019). One language skill that demands a lot of practice is writing. Writing is a complex language skill that involves multiple components. In addition, in writing skills, the role of educators is needed to guide students in the writing process. Writing assignments don't require any particular abilities because those will come naturally. What matters is that you follow the guidelines specific to the type of writing you are doing (Hardiana & Suyata, 2018). Through writing activities, students can convey ideas or ideas related to something that can be useful for readers so that writing becomes meaningful for both writers and readers.

Report writing is one of the writing abilities that eighth graders need to have down pat. The following results were obtained based on observations and interviews with Indonesian language teachers at MTs Darul Ulum Pasinan. First, writing news articles is a challenge for students. Second, pupils struggle to come up with the original concept for a news article. Thirdly, pupils find it challenging to formulate concepts based on the events that need to be recorded. Fourth, pupils struggle with proper grammar, spelling, and sentence construction. These challenges necessitate the use of a teaching tool that may guide students toward writing proficiency. The media that will be produced as an alternative in this learning is android-based interactive multimedia with the brainwriting approach.

Developing original and creative learning materials in the form of interactive multimedia based on Android using the brainwriting method is the problem-solving approach used in this study. With the aid of a computer, mouse, keyboard, and other devices, media can interact with media users. This is what interactive multimedia is all about. Previously delivered in digital files, multimedia is now presented on smartphones, where consumers have complete control over the application, thanks to technological advancements (Hasyim et al., 2020). Students need media in the learning process. Learning media is utilized as a communication mediator between a teacher and students (Wati, 2016). Interactive multimedia refers to an integration of a wide range of media, such as text, graphics, images, photos, audio, video, and animation, that enables a dynamic from of communication between users and computers (Fikri & Madona, 2018). Different student learning styles, such as kinesthetic, auditory, and visual learning styles, will be accommodated through the utilization of interactive multimedia. To ensure that all students learn effectively, teachers must be able to adapt learning activities to the various learning styles of their pupils (Suaib, 2017).

Furthermore, the brainwriting method is a learning method that provides students with the opportunity to write down their ideas or thoughts on a piece of paper, either in the form of columns or rows (Tifanni & Julianto, 2018). Students are allowed to express their ideas in writing so that students can explore the knowledge and experience they have. This method is highly recommended for learning to write and is integrated into the interactive multimedia that is developed. In addition to individual learning, this method can also be applied to group learning (Budiani, 2018). Everyone can benefit from the brainwriting method when it comes to writing down their ideas and thoughts (Sumartini & Hernawan, 2019). This method can encourage students to solve a problem because this method can produce more ideas. This method can be applied in learning Indonesian, especially in writing news texts. Through this method, students will be able to report an event clearly and easily accepted by the audience.

Based on the results of a preliminary study which stated that students had difficulty constructing ideas based on events, this multimedia development became an alternative to learning. The multimedia was developed by utilizing the brainwriting technique, which involves a collaborative learning prcess where participants share their ideas and thought with each other. Students can provide input and suggestions on ideas constructively through the paddle platform. With its engaging features, this multimedia will help students learn how to write news articles more quickly. It also includes

features for distributing content, news articles, and subjects that can be used as writing prompts, writing frameworks, assignment reviews, and student feedback. This interactive multimedia can be accessed using gadgets so that students can more easily utilize it. Thus, this media can be employed as an innovative learning media in developing the learning process of writing news in class VIII.

This research refers to previous research regarding the development of interactive multimedia in news writing conducted by Gurusinga (2016); Wismanto (2021); and Hayati (2022) concluded that interactive multimedia is an effective learning media to be applied in writing news texts. The application of interactive multimedia can also be used in individual and group learning. The three studies discuss the responses of expert validators and students as users of interactive multimedia. The study's findings indicate that using interactive multimedia to teach journalistic writing is appropriate. With this research, researchers are comparable to earlier researchers in that they have created interactive multimedia that is based on Android. This research differs in that it uses the paddle platform in conjunction with the brainwriting method to facilitate student idea exchange.

The research is relevant to this study because they share the concept of generating interactive multimedia, as can be inferred from the description given above. This study differs from earlier research in that it incorporates the brainwriting approach. In order to address the challenges students, face when writing news articles, this project will produce interactive multimedia based on Android by incorporating the brainwriting approach. This is so that pupils can receive writing instructions from the brainwriting method's phases.

This study aims to address these challenges by creating an interactive multimedia tool that utilizes the brainwriting method. The created learning material satisfies the requirements for approval, which include validation from subject matter experts, subject matter teachers, and student trials in news writing.

The study's findings contribute to the field of education by demonstrating the application of a technology-based learning material that was created. News text authoring uses interactive multimedia as a teaching tool. Instructors can offer writing projects that require students to use this material at any time or place. This is due to the fact that Android handsets or student gadgets can access this media. Once students have gathered their writing assignments, teachers can also offer remarks via the media's comments section.

METHOD

This research is a research and development (R&D) study (Sugiyono, 2019). The product generated in this research is interactive multimedia based on an Android application employing the brainwriting approach. In class VIII, students use this instructional resource to practice writing news articles. According to Borg and Gall (2003), development research requires the following procedures to be taken.

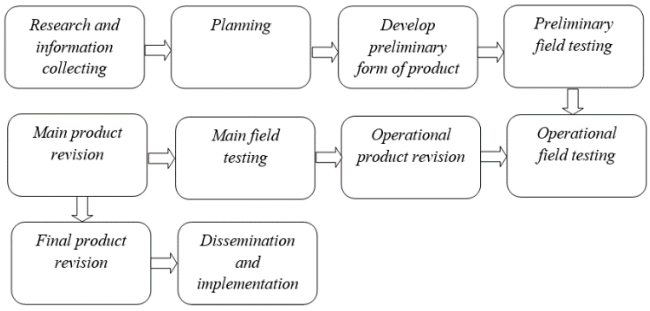

Figure 1. Research and Development Steps

The research and development process can be broken down into the following simpler steps: (1) research and data collection; (2) planning; (3) product development in its initial form; (4) product validation; (5) revision of validation results; (6) field trials; (7) final product refinement; and (8)

dissemination and implementation. Both qualitative and quantitative data are used in the study. Experts' validation questionnaire findings and students' trial questionnaire results are two examples of quantitative data. In the meanwhile, expert ideas and comments on the validation questionnaire are included in notes that represent qualitative data.

Field trial and validation questionnaires were used as the primary data gathering methods in this investigation. Assessments pertaining to media design, visuals, and materials used in learning media are included in the expert validation questionnaire. Student opinions about the usage of interactive multimedia in the classroom are included in the trial questionnaire. Furthermore, qualitative study data analysis with data reduction, presentation, and conclusion (Miles et al., 2014). Data in the form of recommendations, input, and reactions are analyzed using qualitative descriptive data analysis. In the meantime, qualifying criteria are used in quantitative data analysis in accordance with (Sugiyono, 2019).

Table 1
Validation Test Result Categories

Score	Criteria	Range Value
5	Very Worthy Product	$4{,}2 < x$
4	Worthy Product	$3{,}4 < x \leq 4{,}2$
3	Quite Worthy Product	$2{,}6 < x \leq 3{,}4$
2	Less Worthy Product	$1{,}8 < x \leq 2{,}6$
1	Very Less Worthy Product	$x \leq 1{,}8$

RESULTS AND DISCUSSION

This interactive multimedia application" or "The Karyawarta application teaches students how to compose news texts by utilizing the brainwriting technique. Students must participate in interactive learning activities with this media. The name "Karyawarta" for this media is derived from the words "warta," which means news, and "karya," which denotes results or creations. This Karyawarta application for teaching news text writing represents the objectives and methods for assisting students in honing their writing abilities.

Product Design

This interactive multimedia was developed using PowerPoint, Ispring suite, and app builder. Ispring suite is software used to create learning media by adding various forms of elements, such as images, videos, and audio so that the resulting learning media becomes more interactive and interesting (Firdha & Zulyusri, 2022). The first product design is created using Powerpoint, which has been integrated with the Ispring suite. It lists all of the contents according to learning objectives. Moreover, PowerPoint is formatted into HTML5. Using an app builder, HTML5 is transformed into the app once the PowerPoint has been converted to that format. Next, it will be saved on the desktop and can be moved to a smartphone. The application can be installed by students. The development of an Android app for learning greatly supports virtual learning activities (Laseinde & Dada, 2023). The design of the product is as follows.

Figure 2. Home Page

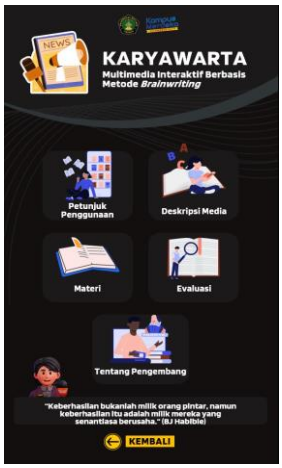

Figure 3. Main Menu Display

This newsletter consists of five main menus, namely 1) instructions for use; 2) media description; 3) materials; 4) evaluation; and 5) about the developer. On the initial menu, students can click the "enter" button to connect to the main menu. Additionally, this media has instrumental music on the first page that may be turned on or off based on the needs of the students. Students with an auditory learning style are catered for by this. Pupils with an auditory learning style typically use their sense of hearing to study (Gilakjani, 2012). One example is that students are more comfortable when studying while listening to music or recordings. Furthermore, the display of the media and material description menu can be seen in the image below.

Figure 4. Media Description Menu Display

Figure 5. Material Menu Display

The media description menu contains the philosophy of the media name, objectives, and benefits briefly. Furthermore, the material menu consists of several news text materials that include expected learning outcomes, understanding of news texts, structure, elements, language rules, writing stages, brainwriting methods, and text examples. Before students enter the explanation of the meaning of the text, a news delivery video is presented. This aims to build students' initial schemata related to the material. The application of concepts in videos can improve critical thinking skills (Sholihah et al., 2020). Here is the video display.

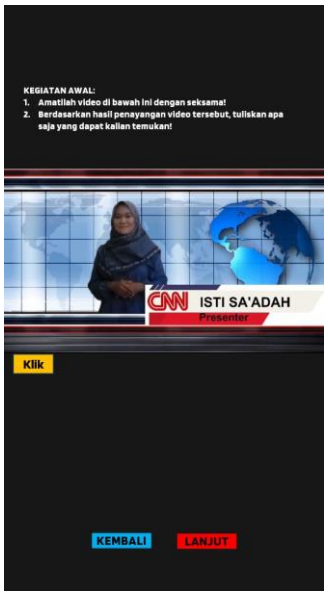

Figure 6. Video Display

This interactive multimedia page aims to develop pupils' preliminary schemata concerning news texts. Students are invited to watch and explain what they see in the news delivery video that is displayed in this medium. Because students are confronted with an object directly in video-based learning, they are more motivated to study because they are not just imagining the material to be studied (Liao & Wu, 2023). Multimedia technology can be used in educational activities to assist students in developing context for the material they are studying (Zhang et al., 2023). Thus, students have a meaningful initial picture before studying the material in the next menu.

Figure 7. Enrichment Menu Display

Figure 8. Writing Assignment Menu Display

This newspaper also presents a learning evaluation. Learning achievement is measured with this assessment. Assessment exercises are conducted to gauge the degree of academic achievement of students (Rahmayantis, 2016). There are two forms of evaluation used, namely enrichment which is an objective test, and news writing assignments which are student performance tests. In this performance test, students are asked to write news using the brainwriting model. Brainwriting is an alternative learning method that requires students to exchange ideas or concepts (Deckert & Mohya, 2020). Learning to write news integrates the brainwriting method's phases. In order to respond to events around them, students can express thoughts or concepts in this step and then pour them into the form of news content (Sidebang & Herlina, 2023). This test also utilizes the interactive Padlet

platform, where students can provide input, suggestions, and constructive comments regarding their friends' work results. In addition, teachers can also provide feedback to students by utilizing the comments menu. Teachers play a critical role in guiding and enhancing students' learning abilities so that pupils grasp the core concepts of learning (Gutierrez, Mendez, Centeno, & Osorio, 2018).

Product Validation

Product validation is used to measure the level of product feasibility to be implemented in learning (Rahmayantis & Nurlailiyah, 2020). The purpose of this validation test is to verify the developed Karyawarta application. Three knowledgeable validators have certified this material. The following is a summary of the media design validation data.

Table 2
Summary of Data from Validation Results for Media Design Aspect

Aspect	No	Observed Aspect	Average	Category
Media Design	1	The color scheme and design are tastefully done	4,7	Very Good
	2	Selection of fonts used	4,3	Very Good
	3	Selection of font size	4,3	Very Good
	4	Spacing (letters, lines, characters)	4	Good
	5	Layout settings	4	Good
	6	Layout settings	4,3	Very Good
	7	Neatness of design	4,7	Very Good
	8	Attractiveness of design	4,7	Very Good
		Average	4,4	Very Good

The media design aspect contains aspects related to appearance, color selection, font selection, layout, and design attractiveness. Based on the data above, interactive multimedia in terms of design is very good. The three validators' average validation score of 4.4 is proof of this. Here is a graphical summary of the validation data after that.

Table 3
Summary of Graphic Validation Result Data

Aspect	No	Observed Aspect	Average	Category
Graphic	1	Instructions for using media should be clear	4,3	Very Good
	2	Usability of the menus for navigation	4,7	Very Good
	3	Text readability	4,3	Very Good
	4	Suitability of images that support the material	4,7	Very Good
	5	The animations presented are interesting	5	Very Good
	6	Illustrations are presented, interestingly, and easily understood	4	Good
	7	Suitability of audio or video selection	5	Very Good
	8	Interactive level of media	4	Good
		Average	4,5	Very Good

The graphic aspect contains aspects related to instructions for use, text readability, image suitability, animation attractiveness, video selection suitability, and media interactive level. Based on the data above, interactive multimedia in terms of design is very good. The three validators' average validation score of 4.5 demonstrates this. Additionally, the validation data from the material aspect is summarized here.

Table 4
Summary of Validation Results in Data in Material Aspects

Aspect	No.	Observed Aspect	Average	Category
Material	1	The content's alignment with the learning objectives	5	Very Good
	2	Logical arrangement of the content	4,7	Very Good
	3	Material can be easily understood by students	4,7	Very Good
	4	Use of easy-to-understand language	5	Very Good
	5	Providing examples that are relevant to students' lives	5	Very Good
	6	Instructions on the use of learning methods are easy to understand	4,3	Very Good
	7	Learning evaluation instructions are easy to understand	4,3	Very Good
	8	Providing feedback on evaluation results	4	Good
Average			4,6	Very Good

The material aspect includes elements pertaining to how well the content aligns with learning objectives, how learning methods are applied, how assessments are conducted, and how teachers can provide feedback. An average value of 4.6 was obtained for the summary of media validation data for the substance. This indicates that learning to create news texts can benefit greatly from the usage of interactive multimedia based on the brainwriting method.

Three components were evaluated in the validation test: media design, visuals, and material aspects. The validation results showed that the media design feature had an average score of 4.4, falling into the very good category. On the other hand, the material aspect received an average score of 4.6 and the graphic aspect received an average score of 4.5, both of which fell into the very good category. There are eight indicators for every aspect. With a very good category, the average assessment is 4.5 overall. The media can be used as a learning tool for news writing in class VIII, since the assessment results fall into the 4.2.

Product Revision

Product revision is a fix for product weaknesses that have been developed so that the product needs to be improved (Nugroho et al., 2019). Based on the results of product validation to experts, there were several inputs and comments for product improvement. Among the inputs are those pertaining to the menu with the less comprehensive user instructions. The validator offers suggestions for enhancements that should be accompanied with a screenshot of the menu page that includes a synopsis. This is how it looks.

Figure 9. Before Revision

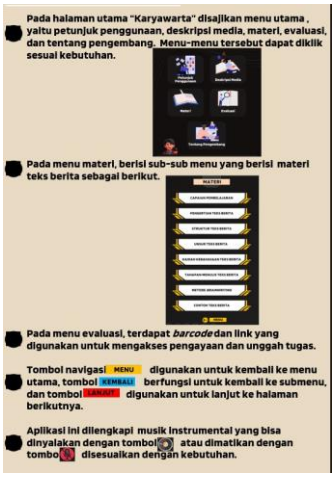

Figure 10. After Revision

Next, in the material menu, the validator provides input for news elements and news structures

to be given examples in the news text. The validator provides suggestions for improvement for examples of each news element and structure (pieces of news text). The display is as follows.

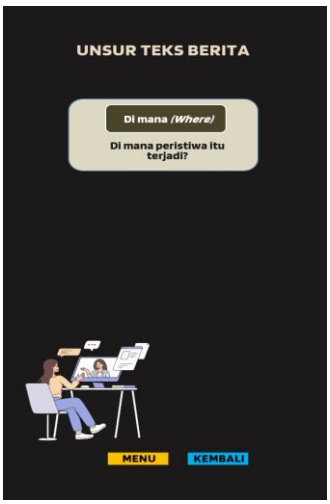

Figure 11. Before Revision

Figure 12. After Revision

The validator also provided notes regarding the integration of the brainwriting method in the media. The interaction of exchanging ideas, comments, and suggestions has not been highlighted in the application. Brainwriting is a learning method for generating ideas that can be used to generate ideas from other individuals (Helgstrand, 2021). Through this media, students write news based on events in their surroundings by paying attention to the news structure. An inverted pyramid is used to organize the news, with a news headline, news lead, and news body (Saputra, 2015). Furthermore, students are directed to be interactive in conveying their input/ideas on their friends' writing results so that there is a process of exchanging ideas between the two students. The validator provided suggestions for improvements to utilize the pallet media so that students can provide each other with suggestions and input on their friends' writing results. The use of this pallet is adjusted to the steps of the brainwriting method. In addition, teachers can also provide feedback on students' writing results. Here's how it looks.

Figure 13. Before Revision

Figure 14. After Revision

Field Trial

A field trial was conducted to obtain comprehensive information about product quality by product users (Nugroho et al., 2019). In order to gauge student reactions to the utilization of this

interactive multimedia, MT's Darul Ulum Pasinan's class VIII-A pupils served as product users for this test. A questionnaire was given to all participants to conclude the field trial. The pupils were handed a questionnaire with sixteen statement components. Here is a summary of the trial data.

Table 5
Summary of Trial Result Data

Students	Aspect																Total	Average	Category
	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16			
1	5	4	2	4	4	3	5	4	4	3	4	5	4	2	5	4	62	3,8	Good
2	5	5	5	5	5	5	4	4	5	5	4	5	5	5	5	5	77	4,8	Very Good
3	5	5	5	5	4	5	5	5	5	5	3	3	5	4	3	2	67	4,2	Good
4	5	5	5	4	5	5	5	4	5	5	5	4	5	5	5	5	77	4,8	Very Good
5	5	4	5	5	5	5	3	5	3	1	3	3	5	5	5	5	67	4,2	Good
6	5	3	5	3	5	5	1	5	3	4	5	3	4	5	3	5	64	4	Good
7	4	5	5	5	3	3	5	3	5	5	5	5	5	4	5	5	72	4,5	Very Good
8	4	5	3	4	5	5	5	5	4	5	5	5	5	5	5	4	74	4,7	Very Good
9	5	4	4	4	4	5	4	4	5	5	4	5	4	5	5	5	72	4,5	Very Good
10	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	5	80	5	Very Good
11	5	4	5	4	2	5	5	5	3	2	5	4	3	4	4	5	65	4	Good
12	4	5	5	5	4	3	4	2	5	5	4	3	5	3	2	5	58	3,7	Good
13	5	4	3	3	4	5	4	3	4	3	4	4	5	4	5	4	64	4	Good
14	5	5	4	5	5	5	5	5	5	5	5	5	5	5	5	5	79	4,9	Very Good
15	5	5	5	5	5	5	5	5	5	4	4	4	5	5	4	5	76	4,7	Very Good
16	5	5	5	5	5	5	4	5	5	5	5	5	5	5	5	5	79	4,9	Very Good
17	4	5	5	5	5	5	5	5	5	4	5	5	4	4	5	5	76	4,7	Very Good
Total																	**71**	**4,4**	**Very Good**

With an average score of 4.4, the trial phase was carried out in a classroom setting with 17 kids serving as test participants. Based on student assessments, the degree of media feasibility was in the good category, as indicated by the conversion table, where the average trial on students was in the range of 4.2.

One kind of media that can help with news writing education is interactive multimedia. With interactive multimedia, the material provided becomes clearer so that the learning process can flow properly (Dewi et al., 2021). In addition, students can access the material anytime and anywhere. Android-based multimedia can eliminate space and time limitations, and students can learn anywhere and anytime according to their needs (Chachil et al., 2015). With the features available in the media, it can increase student motivation to understand the material, carry out enrichment, and evaluate interactively. Students will also get feedback regarding the results of the learning evaluation work. One of the cutting-edge approaches to education will be the utilization of Android-based applications. Android apps are fascinating tools that can be utilized for education (Kartini et al., 2022).

Both individual and group learning can benefit from the use of this interactive multimedia. You can utilize this multimedia in place of individual study at home. Teachers only keep a virtual eye on their students' learning progress. Students may learn more easily with this interactive multimedia, which is great for use in educational activities. It facilitates both independent and collaborative learning (Lasfika et al., 2022).

Another relevant study conducted by Gurusinga (2016) produced a media that is effective and efficient for use in learning. The advantages of interactive multimedia, apart from being effective and efficient, interactive multimedia features can increase student learning motivation, and learning with interactive multimedia features can be done both classically and individually. Further relevant research conducted by Wismanto (2021) produced android-based mobile learning that is feasible and effective for use in learning to write news for PBSI study program students. Further relevant research conducted by Hayati (2022) produced learning media with PowerPoint products that are said to be feasible to be applied in learning news texts.

The three previous studies have produced interactive multimedia based on Android for

learning to write news so they have similarities with this study. The difference or novelty of previous studies with this study is the integration of the brainwriting method. In this study, interactive multimedia was produced based on Android by integrating the brainwriting method in learning to write news to address the problems experienced by students in writing news. Brainwriting is a method that allows you to write down all of your ideas on the main issue, which might lead to brainstorming (Azizah, 2015). This is because the steps in the brainwriting method can provide instructions to students in writing. Furthermore, the application of the brainwriting approach is paired with the use of the Padlet platform, which serves as a forum for student idea exchange and teacher feedback. Giving and getting comments is facilitated by Padlet and is a very helpful exercise for improving writing abilities (Sari, 2019).

This study focuses on writing skills, namely writing news. Further research can be done to develop interactive multimedia for reading, listening, or speaking skills. It will be fascinating to design or study interactive multimedia based on Android that uses a learning approach for speaking, listening, and reading comprehension.

CONCLUSION

An interactive multimedia learning tool built on the Android platform was created as a result of this research and development. Installing this multimedia app on an Android phone allows you to learn how to produce news articles by integrating the brainwriting technique. The average score for the media design element was 4.4, the graphic aspect was 4.5, and the material aspect was 4.5, according to the validation results with experts. The very good category had an average assessment of 4.5 overall. In the meantime, the trial's outcomes for the 17 test subjects yielded an average score of 4.4 in the category of very good. Thus, this interactive multimedia is suitable for use as a learning medium for writing news in class VIII.

Further research is suggested to focus on research and development (R&D) methods and trials on 2 or more schools to obtain stronger results. In addition, it is necessary to conduct research on the effectiveness test of the use of android-based interactive multimedia using the brainwriting method in learning to write news in class VII. By conducting an effectiveness test, it can be seen whether android-based interactive multimedia is effective in learning to write news or not. The implication of this study is that android-based interactive multimedia using the brainwriting method is an alternative learning media to improve students' news writing skills in class VII.

DECLARATIONS

Author contribution	:	Maulidia Tifani Alfin Nur Hardiana, as the main author, is responsible for the research project entitled "Development of Android-Based Interactive Multimedia Using Brainwriting Methods for Learning to Write News". He wrote the entire manuscript in collaboration with the second and third writers. The second author, Risnawati, was responsible for collecting data and analyzing the data. Isti Sa'adah contributed in translating the manuscript and formatting the manuscript according to the journal template.
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REFERENCE

Azizah, A. (2015). Pembelajaran Menulis Puisi dengan Memanfaatkan Teknik. *Jurnal Ilmiah "Pendidikan Dasar, 2*(2), 1-15.

Budiani, S. A. (2018). Peningkatan Ketrampilan Menulis Teks Eksposisi dengan Menggunakan Metode Brainwriting. *Paedagogie*, 13(1), 26-37. https://doi.org/10.31603/paedagogie.v13i1.2086

Chachil, K., Engkamat, A., Sarkawi, A., & Shuib, A. R. A. (2015). Interactive multimedia-based mobile application for learning Iban language (i-mmaps for learning Iban language). *Procedia - Social and Behavioral Sciences*, *167*, 267–273. https://doi.org/10.1016/j.sbspro.2014.12.673

Deckert, C., & Mohya, A. (2020). Innovation without creativity? -teaching creative problem innovation without creativity? – teaching creative problem. *Future Engineering Skills and Talent Management, Niche & Novel Engineering Education Topics*, (September), 1–11.

Dewi, I. P., Akbar, H., Jalinus, N., Waskito, & Irfan, D. (2021). Development of android-based interactive learning media using ispring suite application. *Jurnal Teknologi Informasi dan Pendidikan*, *14*(3), 49–55. https://doi.org/10.24036/tip.v14i1

Fikri, H., & Madona, A. S. (2018). *Development of interactive multimedia-based learning media.* Yogyakarta: Samudra Biru.

Firdha, N., & Zulyusri, Z. (2022). Penggunaan iSpring dalam Pengembangan Media Pembelajaran Interaktif. *Diklabio: Jurnal Pendidikan dan Pembelajaran Biologi*, *6*(1), 101–106. https://doi.org/10.33369/diklabio.6.1.101-106

Gilakjani, P. A. (2012). Visual, auditory, kinaesthetic learning styles and their impacts on English language teaching. *Journal of Studies in Education*, *2*(1), 104–113. https://doi.org/10.5296/jse.v2i1.1007

Gurusinga, L. (2016). *Pengembangan pembelajaran berbasis multimedia interaktif dalam Menulis Teks Berita pada Siswa Kelas VIII SMP Primbana Medan.* Tesis tidak Diterbitkan. Universitas Negeri Meda. Medan.

Gutierrez, M. del C. V., Mendez, M. del R. L., Centeno, B. Z., & Osorio, L. A. B. (2018). The styles visual, auditory, kinesthetic, and competences in the classroom. *International Journal of Recent Scientific Research*, *9*(6), 27679–27682. https://doi.org/10.24327/IJRSR

Hardiana, M. T. A. N., & Dewi, P. K. (2019). Pengaruh Teknik Hypnoteaching terhadap Kemampuan Menyusun Teks Cerpen Siswa Kelas VII SMP. *Jurnal Pendidikan Edutama*, *6*(1), 19-30. https://doi.org/10.30734/jpe.v6i1.198

Hardiana, M. T. A. N., & Suyata, P. (2018). The effectiveness of VAK (visual, auditory, kinesthetic) model in learning of summary writing. *International Journal of Research & Review*, *5*(8), 43–49.

Hasyim, N., Gani, H. A., & Hatta, S. (2020). Android-based multimedia learning for vocational high schools. *Journal of Educational Science and Technology (EST)*, *6*(2), 193–204. https://doi.org/10.26858/est.v6i2.14275

Hayati, N. (2022 *Pengembangan Media Pembelajaran Interaktif Teks Berita Siswa SMPN 1 Pulau Hanaut*. Tesis tidak Diterbitkan. Universitas Islam Malang. Malang.

Helgstrand, N. K. (2021). *Designing gamification to increase engagement for the software solution KLAR* (Lund University). Retrieved from https://lup.lub.lu.se/student-papers/record/9064256/file/9064262.pdf

Kartini, A., Sari, D. E., Youpika, F., Syihabuddin, & Damaianti, V. (2022). Pengembangan Instrumen Menulis Puisi melalui Aplikasi "PAP" Berbasis Android. *Kembara: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *8*(2), 349–361. https://doi.org/10.22219/kembara.v9i2.25756

Laseinde, O. T., & Dada, D. (2023). Enhancing teaching and learning in stem LABS: the development of an android-based virtual reality platform. *Materials Today: Proceedings*, (August), 0–6. https://doi.org/10.1016/j.matpr.2023.09.020

Lasfika, Y. T., Widyastono, H., & Yamtinah, S. (2022). Digitalization android-based interactive

learning media in geography for high school students. *Journal of Education Technology*, *6*(2), 207–216. https://doi.org/10.23887/jet.v6i2.44674

Liao, C. H., & Wu, J. Y. (2023). Learning analytics on video-viewing engagement in a flipped statistics course: relating external video-viewing patterns to internal motivational dynamics and performance. *Computers and Education*, 197 (April 2022), 104754. https://doi.org/10.1016/j.compedu.2023.104754

Miles, M. B., Huberman, A. M., & Saldana, J. (2014). *Qualitative data analysis a methods sourcebook (3rd Ed.)*. New York: SAGE Publications.

Nugroho, A., Lazuardi, D. R., & Murti, S. (2019). Pengembangan bahan ajar LKS menulis pantun berbasis kearifan lokal siswa kelas VII SMP Xaverius Tugumulyo. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya, 5*(1), 1-12. https://doi.org/10.22219/kembara.vol5.no1.1-12

Pamuji, S. S., & Setyani, I. (2021). *Language ability*. Bogor: Guepedia.

Rahmayantis, M. D., & Nurlailiyah, N. (2020). Pengembangan Bahan Ajar Membaca Indah Puisi untuk Siswa SMP Kelas VII. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, 6(2), 243–254. https://doi.org/10.22219/kembara.v6i2.14025

Saputra, A. W. (2015). Pengembangan blog menulis berita untuk majalah sekolah sebagai media pembinaan ekstrakurikuler jurnalistik bagi siswa SMA. *KEMBARA: Jurnal Keilmuan Bahasa, Sastra, dan Pengajarannya*, *1*(2), 117-126. https://doi.org/10.22219/kembara.v1i2.2609

Sari, A. B. P. (2019). EFL peer feedback through the chatroom in padlet. *LLT Journal: A Journal on Language and Language Teaching, 22*(1), 46–57. https://doi.org/10.24071/llt.v22i1.1701

Sholihah, N., Wilujeng, I., & Purwanti, S. (2020). Development of android-based learning media on light reflection material to improve the critical thinking skill of high school students. *Journal of Physics: Conference Series*, *1440*(1). https://doi.org/10.1088/1742-6596/1440/1/012034

Sidebang, R., & Herlina, R. (2023). Pengaruh model pembelajaran brainwriting terhadap keterampilan menulis mahasiswa. *Curere*, *7*(1), 17–26. http://dx.doi.org/10.36764/jc.v7i1.1027

Suaib, R. W. (2017). The use of visual auditory kinesthetic (VAK) learning styles to increase students' vocabulary. *Didaktika Jurnal Kependidikan*, 11(2), 239–253.

Sugiyono. (2019). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. Bandung: Alphabet.

Sumartini, S., & Hernawan, H. (2019). Model brainwriting dalam meningkatkan kemampuan menulis wawangsalan. *Lokabasa*, 10(2), 214–225. https://doi.org/10.17509/jlb.v10i2.21364

Susanto, A. (2016). *Teori Belajar & Pembelajaran di Sekolah Dasar*. Jakarta: Prenadamedia Group.

Tifanni, A. N., & Julianto. (2018). Pengaruh penggunaan metode brainwriting terhadap kemampuan pemecahan masalah pada materi IPA Kelas IV SDN Watesnegoro 1 Mojokerto. *Jurnal Penelitian Pendidikan Guru Sekolah Dasar*, *6*(6), 255085.

Wati, E. R. (2016). *Ragam Media Pembelajaran*. Jakarta: Kata Pena.

Wismanto, A. (2021). Pengembangan Media Mobile Learning Berbasis Android dalam Pembelajaran Menulis Berita pada Mahasiswa Prodi PBSI. *Seminar Nasional Literasi*, 472–481.

Zhang, Z., Li, H., & Zhou, J. (2023). Teaching with social context in instructional video facilitates second language vocabulary learning. *Heliyon*, 9(3), e14540. https://doi.org/10.1016/j.heliyon.2023.e14540