

## Development of E-Module Using Book Creator Application on Writing Material: A Development of Digital Teaching Material at Elementary School

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### Abstract

Research This aims to develop material learning in the form of e-modul assisted by *the book creator* application on writing material for grade 6 elementary school students. Type study This use study and development or R&D (*Research and Development*) modification based on a combination of Borg & Gall and Aleesi & Trollip. Stages of research on the development of e-modules based on the Book Creator application on this writing material includes: (1) Introduction Study (Borg & Gall); (2) Planning ( *Planning Allies & Trollip*); (3) Design ( *Design Allesi & Trollip*); (4) Analysis of teacher need and student; and (5) expert validation. The data that analyzed in this study are quantitative and qualitative data. Quantitative data in the form of data from questionnaire, while qualitative data in the form of interviews and observation. The data sources in this study were 150 students and 30 teachers who took English lessons. Indonesia in grade 6 at 15 elementary schools/Islamic elementary schools throughout South Sumatra . The data were analyzed qualitatively and quantitatively. Quantitative data analysis was carried out by calculating the average value of the Likert scale for each statement, then interpreted in relation to the tendency of respondents (teachers and students, and validators) on the choices. Qualitative data analysis used coding, in the form of open responses into the same theme or category according to the criteria , involving expert validation, limited trials, and data triangulation. The results of this study indicate that 28% student state very need , 42% need , 22% No need , And 8% very No need .Analysis of teacher needs shows that 58% of teachers stated that they really needed it , 42% need , 0% no need , and 0% very unnecessary . The validation results show that the percentage of language validation results with a score of 88 (very valid), material validation with a score of 90 (very valid), and media validation with a score of 90 (very valid). The conclusion of the validation analysis results is very valid with an average of 89 (very valid) . The practicality test shows that the average product is in the very practical category with a score of 89. This study concludes that e-module teaching materials assisted by the book creator application on writing material are suitable for use in elementary school.

**Keywords:** Book Creator, Digital Teaching Material, Electronic Module, Writing Skill

### Abstrak

*Penelitian ini bertujuan mengembangkan bahan pembelajaran berupa e-modul berbantuan aplikasi book creator pada materi menulis bagi siswa kelas 6 SD. Jenis penelitian ini menggunakan penelitian dan pengembangan atau R&D (Research and Development) modifikasi berdasarkan gabungan antara Borg & Gall serta Aleesi & Trollip. Tahapan penelitian pengembangan e-modul berbasis*

*aplikasi Book Creator pada materi menulis ini meliputi: (1) Studi pendahuluan (Borg & Gall); (2) Perencanaan (Planning Allesi & Trollip); (3) Perancangan (Design Allesi & Trollip); (4) Analisis kebutuhan guru dan siswa; dan (5) validasi ahli. Data yang dianalisis dalam penelitian ini adalah data kuantitatif dan kualitatif. Data kuantitatif berupa data dari angket, sedangkan data kualitatif berupa wawancara dan observasi. Sumber data pada penelitian ini adalah 150 siswa dan 30 guru yang mengikuti pelajaran Bahasa Indonesia di kelas 6 pada 15 SD/MI se-Sumatra Selatan. Data dianalisis secara kualitatif dan kuantitatif. Analisis data kuantitatif dilakukan dengan melakukan penghitungan rata-rata nilai dari skala likert untuk setiap pernyataan, lalu diinterpretasikan terkait kecenderungan responden (guru dan siswa, serta validator) pada pilihan. Analisis data kualitatif menggunakan koding, berupa tanggapan terbuka menjadi tema atau kategori yang sama sesuai kriteria, melibatkan validasi ahli, uji coba terbatas, dan triangulasi data. Hasil penelitian ini menunjukkan bahwa 28% siswa menyatakan sangat butuh, 42% butuh, 22% tidak butuh, dan 8% sangat tidak butuh. Analisis kebutuhan guru menunjukkan bahwa 58% guru menyatakan sangat butuh, 42% butuh, 0% tidak butuh, dan 0% sangat tidak butuh. Hasil validasi menunjukkan bahwa persentasi hasil validasi bahasa dengan skor 88 (sangat valid), validasi materi skor 90 (sangat valid), dan validasi media 90 (sangat valid). Kesimpulan hasil analisis validasi ialah sangat valid dengan rerata 89 (sangat valid). Uji kepraktisan menunjukkan rerata produk dengan kategori sangat praktis dengan skor 89. Penelitian ini menyimpulkan bahwa bahan ajar e-modul berbantuan aplikasi book creator pada materi menulis layak digunakan di sekolah dasar.*

**Kata kunci:** *Bahan ajar digital, Book Creator, Modul Elektronik, Keterampilan Menulis*

## INTRODUCTION

The digital era has an important role in the world of education, including basic education (children). Children's education can be increasingly developed in terms of knowledge (cognitive), attitude (affective), and skills (psychomotor) (Andriyani & Suniasih., 2021; Hisby & Kosasih., 2020; Winoto & Prasetyo., 2020; The Pakpahan et al., 2020). In addition, the success of an education can be seen through a fun learning process (Estiani et al., 2015; Sudiarta & Sadra., 2016). The connection between the digital era and the development of education (especially at the elementary level) is the use of innovative digital-based teaching materials that are expected to answer educational needs.

Indonesia's response to the need for digital-based education is reflected in the independent curriculum which emphasizes learning that supports students to be creative and innovative. This is marked by habits, pleasure, interest talent, adjustment with environment, skills, desire as well as ideals (Sugiantini et al., 2019; Widayanti et al., 2020). So far, the process learning Which in a way conventional can make student not enough interest and less motivated to learn (Mustaqim & Wijayanti., 2019; Widiana., 2016). Therefore, this will more meaningful If added with Teacher use media learning Which functioning as support learning so that participant educate more interested And interest in follow learning And participant educate can more understand the material presented by the teacher clearly. That is, in activity learning, needed teaching materials for support process teaching and learning activities in the classroom. This teaching material will be a medium for conveying message (Dewi & Handayani., 2021; Suryana & Hijriani., 2021).

The novelty of this study can be seen from the differences and similarities with other studies. Research by Sukirman et al. (2023) which also emphasizes the use of technology in writing learning using the Canva application, shows that a visual-based approach can increase students' interest in learning. However, this study does not focus enough on content personalization, which is the advantage of Book Creator. In addition, Sari and Hidayat (2022) who developed a gamification-based digital module, showed that the integration of game elements is effective in increasing motivation, but is less than optimal for descriptive writing materials that require structure. Other studies such as

those conducted by Rahmawati (2021) on project-based learning -based teaching materials found that project-based assignments improve students' writing skills. This study is in line with the use of Book Creator which supports student collaboration and creativity. On the other hand, compared to research by Yusuf et al. (2020) which emphasizes interactive multimedia-based teaching materials, this study is superior in terms of ease of access and flexibility of use.

Based on the results of initial interviews with 12 grade 6 teachers in 9 elementary schools/Islamic elementary schools throughout South Sumatra, the use of teaching materials with the book creator application has not been implemented. Some teachers are aware of this application. However, Teacher in The school has not optimally utilized the equipment digital teaching and not own media best learning to teach writing, especially writing material. As a result, this has an impact on learning outcomes. In fact, the results Study Assessment has an important role in looking at abilities student Which determined in numerical form after undergoing the learning process (Sahiu, S., & Wijaya, 2017). The use of numbers in certain test results is intended to determine students' absorption capacity after receiving the lesson material (Bungsu et al., 2018; Wali et al., 2020). Therefore, teaching materials are needed which are expected to improve student learning outcomes, especially writing.

Election Topic study This based on on implementation learning based on technology Which supported facility Internet Which adequate so that participant educate can access with easy on smartphone each. However, for optimization, collaboration with gamification elements and multimedia technology can enrich students' learning experience. Therefore, research This aims to develop teaching materials assisted by the book creator application on writing material for grade 6 elementary school students. Specifically, this study aims to (1) describe the design of teaching materials assisted by the book creator application on writing material for grade 6 elementary school students; (2) analyze the needs of teachers and students for teaching materials assisted by the book creator application on writing material for grade 6 elementary school students; (3) test the feasibility of teaching materials assisted by the book creator application on writing material for grade 6 elementary school students in the form of expert validation tests on media, language, and materials , as well as practicality tests. Thus, the novelty in this study provides a significant contribution to the development of digital teaching materials with a practical, collaborative, and supportive approach, especially in the curriculum in elementary school.

## **METHOD**

This study uses a development research model known as the R&D (Research and Development) model. Development generally refers to growth and change that occurs gradually. In this context, development has a broader connotation when used to produce an analysis of the development needs of learning media in the form of e-modules based on the Book Creator application on writing material. In an effort to realize the analysis of the development needs of learning media in the form of e-modules based on the Book Creator application on writing material for grade VI, the researcher chose to use a modified research focus based on research needs, namely a combination of Borg & Gall., 2003) and Alessi & Trollip (Alessi & Trollip., 2001). The stages of product development research based on the Book Creator application include: (1) Preliminary study (Borg & Gall); (2) Planning (Planning Allesi & Trollip); (3) Design (Design Alessi & Trollip); and (4) Analysis of teacher and student needs; (5) expert validation.

This research is divided into two components, namely needs analysis and validation tests and practicality tests. The needs analysis was carried out in 15 elementary schools/Islamic elementary schools spread across South Sumatra. To obtain information on the needs of students and teachers regarding e-modules based on the book creator application on writing material, a printed questionnaire was then created and distributed to students and teachers in the Indonesian language

subject. The needs analysis questionnaire was distributed in the form of a gform to 150 students in 15 elementary schools/Islamic elementary schools spread across South Sumatra.

Meanwhile, the questionnaire was also distributed to 30 teachers in 15 elementary schools/Islamic elementary schools spread across South Sumatra. The data analyzed in this study were quantitative data and qualitative data. Quantitative data in the form of data taken from questionnaires, while qualitative words came from interviews. The data sources in this study were 150 students and 15 grade 6 teachers who participated in writing learning in 15 elementary schools/Islamic elementary schools spread across South Sumatra. The analysis of student and teacher needs was carried out qualitatively and quantitatively. Data from observations and interviews were analyzed qualitatively. Meanwhile, the results of the questionnaire were analyzed quantitatively. The needs analysis questionnaire used a Likert scale. The conclusions of the data obtained were determined with interpretation criteria as seen in the table below.

**Table 1.** Criteria Need Students and Teacher

<b>Presentation Average</b>	<b>Category</b>
<26%	Very No need
26-49%	No need
50-75%	Need
76-100%	Very much needed

Expert validation covers three aspects. First, validation of the language field to Mrs. AYP (lecturer/language expert), covering (1) construction development; (2) content of teaching materials covering language skills/knowledge; (3) clarity of language; (4) suitability of language to elementary school reader level; (4) use of correct grammar; (5) avoidance of biased language; (6) coherence; (7) consistency; (8) avoidance of stereotypical language (non-SARA); (9) use of illustrations that support language; (10) use of relevant language. Second, validation of the material field to Mr. ART (lecturer/writing expert), covering (1) relevance to the curriculum; (2) truth of data/information in teaching materials; (3) relationship between concepts and substance; (4) depth and breadth of material; (5) suitability of material to teaching methods in elementary school; (6) suitability of material to technological developments; (7) appropriateness of use of questions as feedback from elementary school students; (8) suitability of material to educational values; (9) suitability of evaluation to material; (10) accuracy of references/literature. Third, validation of the media/design field to Mr. DES (lecturer/expert in educational technology), including (1) relevance of media to the material; (2) suitability of media to elementary school level; (3) accessibility and ease of use; (4) visual quality of teaching materials; (5) suitability of teaching materials to learning styles; (6) suitability of teaching materials in the process of student interactivity; (7) suitability of technology to student level; (8) compatibility with school infrastructure; (9) appeal and appropriate media design; (10) media diversity.

Data analysis was conducted by calculating the average value of the Likert scale for each statement, then interpreted in relation to the tendency of respondents (teachers and students, as well as validators) on the choices. Qualitative data analysis used coding, in the form of open responses into the same theme or category according to the criteria. involving expert validation, limited trials, and data triangulation. The following is a table of the range of validation test scores according to Alessi & Trollip (2001) used in the development of teaching material.

**Table 2.** Validation Test Score Range

<b>Score Range (%)</b>	<b>Validation Category</b>
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90–100	Very Valid
80–89	Valid
70–79	Quite Valid
60–69	Less Valid
< 60	Invalid

The practicality test was conducted on a small group at SDN 21 Tugumulyo. The data results were grouped into a range of practicality test scores that could be adjusted based on Sugiyono's (2021) categorization:

**Table 3.** Validation Test Score Range

Score Range	Category
81–100	Very Practical
61–80	Practical
41–60	Quite Practical
21–40	Less practical
0–20	Not Practical

Score categorization based on a range of values to assess the effectiveness and ease of use of a product or tool. A score of 81–100 indicates that the product is very practical to use without significant obstacles, while a score of 61–80 indicates a practical product with few improvements. A score of 41–60 indicates a sufficient level of practicality, but requires significant improvement. A score of 21–40 indicates a product that is impractical and requires major revision, while a score of 0–20 indicates a product that is not suitable for use without a complete overhaul.

## RESULTS AND DISCUSSION

### Assisted Teaching Materials Design *Book Creator* on writing material

At this stage is the first stage that can be used To obtain existing data on students, there are several step as Opener studies introduction between other covering analysis needs which include distributing questionnaires, interviews and observations. In addition, researchers have carried out several stages in this preliminary study. both in class VI and class VI teachers. The data obtained after conducting preliminary study, will be identified by researchers to obtain conclusions or results end, as well as ensure whether use of teaching materials based on Book Creator on writing materials that has developed researcher Already can understood for participants class VI education at school or research location.

Planning stage this covers a number of steps namely determining the scope and linking it to the curriculum. The steps taken are curriculum analysis, preparation of lesson plans, and design of book creator-based modules on writing material. The design phase is carried out in the form of techniques that facilitate a creative approach to a project and its requirements include the look, feel and flow of the program media. At the stage planning This, attention directed on planning Details all over media projects, with particular emphasis on media documents. Design documents that both are very important and include a number of procedures for design, content, and making document design Which in a way effective to communicate all details required to complete a media project. Some steps in process this is as following.

3. Development idea. Step This develop idea beginning on digital book based on Book Creator and create a design document in a digital book that contains all material information that necessary for learning.
4. Do analysis draft and task. Step This set order Which effective And create cycle effective learning

from existing ideas for digital books based on Book Creator to writing materials.

5. Make flowchart and storyboard. At this stage This, flow chart can manage large scale images and follow the storyboard visually to fill in the details. In addition created in several formats that are increasingly used for make it easier understanding media learning in the form of e-modul for student.

### **Analysis Need Student**

The needs analysis was carried out in the form of distributing a questionnaire given to students containing 29 items which were used to find out the learning achievement of the Indonesian language subject, the writing material needed (5 items), the teaching materials for the writing material needed (8 items). items), evaluation questions needed (4 items), learning materials based on Book Creator required (5 items), Book Creator based teaching materials on writing material (7 items). The following is explained in detail detailed.

#### **1. Achievements Learning Eye Lesson Language Indonesia Writing material**

In this component, students are given 5 questions containing... standard achievement Which must obtained student on eye lesson Language Indonesia. The results of the study showed that students answered that they did not need it and very much did not need it. need on items achievement learning Which offered in The average questionnaire presentation obtained was 45-75%.

Based on the results of data analysis related to the need for learning outcomes, the majority of respondents tend not to experience difficulties in certain aspects of writing. In the first statement, as many as 50% of respondents do not need that they have difficulty determining the type of writing, while only 15% really need it and 25% need it, with 10% really do not need it. Furthermore, 75% of respondents do not need that they have difficulty knowing the function of writing, and no respondents really need it (0%).

In the third statement, the majority of respondents (55%) do not need that they have difficulty in knowing the elements of writing, while only 10% really need it and 15% need it. The fourth statement reveals that 75% of respondents do not need that they have difficulty in making proper writing by paying attention to the type and elements of writing, although 20% really need it. Finally, in the fifth statement, 45% of respondents do not need that they have difficulty in knowing the message in a writing, while 20% need it and 35% really do not need it. In general, the data shows that most respondents felt able to overcome difficulties in various aspects of writing, although there were some minor challenges faced.

#### **2. Material Teach on Writing Material that Needed**

In the components of the required writing teaching materials, students are given 8 statement items containing teaching materials on writing material. Research results shows students answered very much need and need on the items teaching materials offered in the questionnaire, therefore it is concluded Students already know a lot about writing material well, on average the percentage obtained is 30-40.

Based on the data obtained from the need for writing materials, respondents' responses to teaching materials on writing materials show various perceptions. In the first statement, as many as 40% of respondents really need it and 40% that teaching materials help them in determining writing elements, while 15% do not need it and 5% do not need it at all. A similar thing can be seen in the second statement, with 45% of respondents really needing that teaching materials help determine the type of writing presented, followed by 25% need it, 10% do not need it, and 20% do not need it at all.

Furthermore, in the third statement, as many as 35% of respondents really need and 35% need that teaching materials help them examine messages in writing, while 15% do not need and 15% do not need very much. The fourth statement reveals that 25% of respondents really need and 35% need that teaching materials help explain the meaning of a writing, but there are 25% do not need and 15%

do not need very much.

In the fifth statement, teaching materials are considered helpful in knowing the function of writing by 30% of respondents who really need it and 40% who need it, while 15% do not need it and 15% do not need it very much. The sixth statement shows that 40% of respondents really need it and 35% need it that teaching materials help them create writing, with 25% not needing it and none who do not need it very much (0%). The seventh statement shows that teaching materials help generate ideas for designing writing according to 25% of respondents who really need it and 40% who need it, while 25% do not need it and 10% do not need it very much. However, in the eighth statement, no respondents who really need it that teaching materials make them bored (0%), although 40% need it, 35% do not need it, and 25% do not need it very much with the statement. Overall, these data reflect that most respondents have a positive view of the teaching materials used, although there are certain aspects that still need improvement to maximize their effectiveness.

### 3. Evaluation Questions Which Needed

On component This, student given only 4 Items just Which containing about Evaluation questions on writing material used in language subjects Indonesia. The results of the study showed that students answered that they really needed it and need on the questionnaire. The average score obtained was 30-45%.

Regarding the need for evaluation questions, respondents gave positive responses to the evaluation questions in the writing materials used. In the first statement, 30% of respondents really needed and 30% needed that the questions made them think at a high level, although 25% did not need and 15% did not need it very much. The second statement showed that 30% of respondents really needed and 45% needed that the evaluation questions helped them analyze the structure and language of poetry, while only 15% did not need it and 10% did not need it very much.

In the third statement, 35% of respondents really need and 40% need that the evaluation questions help them assess and determine the accuracy of the use of words, sentences, and spelling in writing, with 25% not needing and no respondents really not needing (0%). The fourth statement shows that the majority of respondents feel motivated, with 40% really needing and 50% needing that the evaluation questions inspire them to create interesting writing, while only 10% do not need and none really do not need (0%).

Overall, the data shows that the evaluation questions used in writing materials are generally effective in helping students develop high-level thinking skills, analysis, evaluation, and creativity in writing.

### 4. Material Teach on Digital book based on Book Creator Which Needed

In the teaching material components in the media needed by students and teachers given 5 Items statement. Results study show that student answering very much need and need to the items on the questionnaire, by because That can concluded that There is Lots student Which know digital books based on Book Creator . The average score obtained is 40-45%. Based on the data, the majority of respondents showed a high need for Book Creator- based teaching materials for various purposes in learning to write. In the first statement, as many as 45% of respondents really need and 50% need that they need the teaching materials for writing materials, with only 5% not needing and none who really do not need. The second statement revealed that 40% of respondents really need and 35% need that Book Creator- based teaching materials are needed for evaluation practice questions with technological devices, although 25% do not need.

In the third statement, 30% of respondents really need and 55% need that Book Creator- based teaching materials with the support of technological devices are needed, while only 20% do not need it. The fourth statement shows that 40% of respondents really need and 50% need the need for Book

Creator- based teaching materials with several choices of technological devices, and only 10% do not need it. The fifth statement confirms that 50% of respondents really need and 45% need that Book Creator- based teaching materials can make the classroom atmosphere more enthusiastic, with only 5% who really do not need it. Overall, the data shows that Book Creator- based teaching materials are considered very much needed to support a more interesting, innovative, and technology-based writing learning process.

#### 5. Teaching materials Based on Book Creator on Writing material

Book Creator- based teaching materials component, the writing material is... needed, students given 7 statement Which describe standard achievements that must be achieved by students. The results of the study show that students give the most need and need for items on the questionnaire, with an average presentation of 63%. Based on the data, the majority of respondents have high expectations for book- based teaching materials. Creator in supporting various aspects of writing learning. In the first statement, as many as 25% of respondents really need and 60% need that the teaching materials can help determine the type of writing presented, while only 5% do not need and none really do not need. The second statement shows that 30% of respondents really need and 60% need that the teaching materials can help examine the elements of writing, with only 5% not needing.

The use of e-module links in teaching materials is also expected to help examine the function of writing, as needed by 15% of respondents who really need it and 70% who need it, although 10% do not need it and 5% do not need it at all. In the fourth statement, the majority of respondents (65% need it) hope that Book Creator -based teaching materials can help explain the meaning of writing, although there are 5% of respondents who really need it, do not need it, and do not need it at all.

This teaching material is also considered important to help correct errors in the use of words, sentences, spelling, and punctuation in writing, as stated by 35% of respondents who really need it and 55% need it. In addition, 30% of respondents really need it and 70% need that Book Creator-based teaching materials can support writing by paying attention to word choice, elements, and language rules. The last statement shows that 35% of respondents really need it and 65% need that this teaching material can help generate ideas for planning writing, without any respondents who do not need it or do not really need it. Overall, the data reflects a high need for Book Creator- based teaching materials that can assist with various technical and creative aspects of writing learning.

### **Teacher Need Analysis**

Analysis of teacher needs seen from the results of the questionnaire Which given to Teacher Which containing 26 Items used to determine learning achievements and tools in the media Indonesian language lessons needed (4 items), development of teaching materials Book Creator - based teaching materials needed (17 items), digital books required (4 items).

#### 1. Achievements and Devices Learning Which Needed

In this component, teachers are given 4 statement items. Research results show Teacher answer very need And need on Items learning devices contained in the questionnaire, the average obtained was the most tall 100%. Based on the results of data analysis, the learning devices currently used are considered very appropriate to learning needs. In the first statement, all respondents (100%) really need that the learning devices used are in accordance with learning objectives. Similar things can be seen in the second and third statements, where 100% of respondents really need that the learning devices are able to increase student motivation and enthusiasm and improve their learning outcomes.

However, in the fourth statement, there is a variation in opinion regarding the effectiveness of learning devices as current teaching materials. As many as 50% of respondents really need and 50% need that the device is still effective. This shows that although learning devices are considered relevant and useful, there is room for further evaluation to ensure their effectiveness in facing modern learning challenges.



## 2. Material Teach Teaching material Based on Book Creator

On component This, Teacher given 17 Items statement Which containing development material teach on teaching materials based on Book Creator on eye lesson Language Indonesia. Results study show very need And need on Items Which There is in questionnaire, average presentation Which obtained the tallest 100% and 50%.

Based on the data, the majority of respondents have a good understanding of teaching materials and the development of book- based learning media. Creator . In the fifth statement, 50% really need and 50% need that they know what is meant by teaching materials. All respondents (100%) also know the difference between conventional and digital teaching materials, and always use teaching materials in learning.

As many as 50% of respondents really need and 50% need that they use teaching materials to explain learning materials and are accustomed to making teaching materials to support the teaching and learning process. In addition, all respondents (100%) stated that they had no difficulty in making and using teaching materials and knew what e-module-based teaching materials were using Book Creator , and even used them often.

Respondents also stated that Book Creator -based teaching materials can improve students' motivation, enthusiasm, and learning outcomes, with 50% really needing it and 50% needing it. All respondents (100%) stated that the development of Book Creator -based teaching materials is in accordance with current needs and is an innovation in learning media.

This teaching material is also considered necessary to be developed to be relevant to the curriculum and current developments (100% need). As many as 50% really need and 50% need that e-module-based teaching materials Book Creator need to be designed according to learning outcomes, while all respondents stated that this teaching material was designed according to learning objectives. Overall, the data shows the high acceptance and enthusiasm of respondents towards the development and use of Book Creator- based teaching materials as relevant and innovative learning media.

## 3. Digital Book Content Book Creator Based Which Needed

In this component, teachers are given 5 statements containing concepts. And skills on digital book based on Book Creator . Results study shows 100% of teachers chose very much need. For more details, you can seen on table below. Based on the data, digital books based on Book Creator is considered very useful and relevant to support writing learning. All respondents (100%) really need e-modules based on Book Creator can be an interesting tool to introduce more varied writing concepts, help improve students' skills in creating interesting writing, and present information well according to the type of writing to be created.

In addition, all respondents also really need that Book Creator provides many interesting features that can enrich the learning experience. This platform is considered to be able to accommodate various learning styles, both visual and auditory, thus increasing effectiveness in the learning process. Overall, the analysis of teacher needs shows that the majority of respondents gave a very positive response to the use of Book Creator with 58% very much need, 42% need, and no respondents stated that they did not need or did not need very much. This confirms the great potential of Book Creator as an innovative tool in the development of digital-based teaching materials and learning media.

### **Product Validation Result**

Product validation is carried out to find weaknesses in the design of digital teaching materials based on book creators , material, language, and media experts must test the content of the teaching materials from the designed design. In the product evaluation process, material experts evaluate the suitability of learning outcomes, content quality, presentation suitability, and material integrity, as

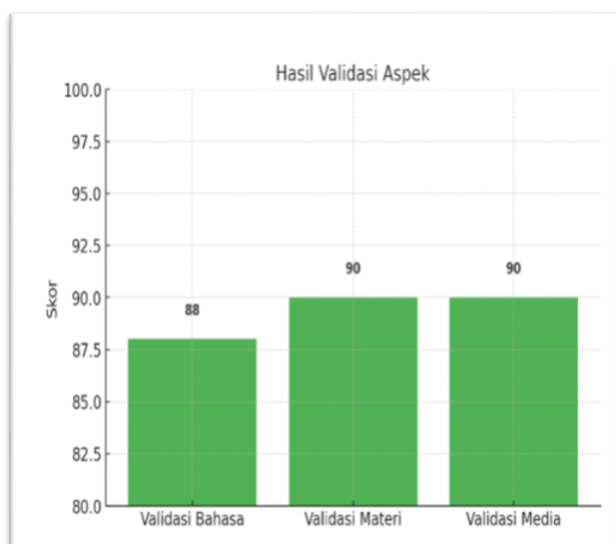
well as language.

The validation results show that the percentage of language validation results scored 88 (very valid). For the language field, the assessment aspects include clarity, communicativeness, suitability to the development of students (students), and suitability to language rules. From this validation, a percentage score of 88 was obtained, which indicates that the teaching materials are categorized as very valid or can be used without revision from the aspect of language suitability. However, the validator suggests paying attention to the use of consistent words because there are still typing errors in the teaching materials.

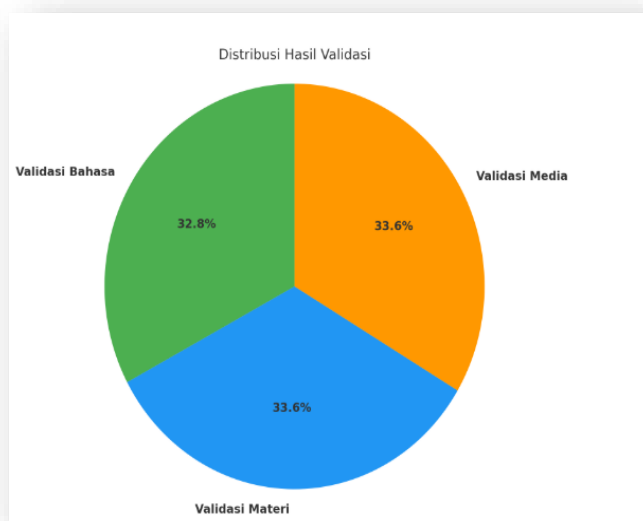
The results of the validation of the material, which were evaluated included the suitability of the teaching materials with the learning objectives. The teaching materials for each chapter include the learning objectives to be achieved. Based on the calculation results, a score of 90 from this validation was obtained, so the teaching materials were categorized as very valid with some revisions. In this case, the revisions made were to correct typing errors.

The media validation results showed a score of 90 (very valid). At the beginning of the validation process, the product was said to be not yet feasible so that it needed a fairly large revision. In other words, the product that has been developed is not considered feasible for use in the real world. However, there are differences in what must be done to ensure that the product is suitable for use. Improvements are based on comments and recommendations about the appearance of the story text example including, (1) creating numbers for each discussion, (2) changing the title of each episode to follow the plot shown, (3) adding additional images as additional stories. after being repaired, validated, both validated get a percentage result of 90%, according to the validity criteria, the score is included in the criteria that meet the requirements to be tested and experimented with students in class. Based on the validation of the three areas above, it can be said that the book creator teaching material product is categorized as very valid.

A comparison of the validation results from the three experts above can be seen in the following charts and diagrams.



**Figure 1.** expert validation results chart



**Figure 2.** expert validation results chart

Next, the validated product is continued to the trial stage. Here are some excerpts that can be shown from the teaching material.



**Figure 3.** Module Elements

### Practicality Test Result

The results of the practicality trial were conducted in small-scale groups. The following is a table of the results of the practicality test for e-module teaching materials assisted by the Book Creator application on writing material at the elementary school/MI level.

**Table 4.** Practicality Test Result

Assessment Aspects	Assessment Indicators	Maximum Score	Score Obtained	Category
Suitability of Needs	Ease of use by teachers and students	20	18	Very Practical
Appearance and Design	Clarity of layout, color and graphics	20	17	Very Practical
Content and Material	Suitability of material with curriculum	20	18	Very Practical
User Engagement	The ability of teaching materials to motivate students to learn independently	20	18	Very Practical
Ease of Use	Ease of navigation and instructions	20	18	Very Practical
Total Score		100	89	Very Practical

Based on the table above, the evaluation of the teaching materials shows that overall, the developed products are very practical to use. The aspect of Suitability to Needs scored 18 out of a maximum score of 20, indicating that these teaching materials have greatly supported the needs of teachers and students in the learning process. This reflects that the product has been designed by considering practical needs in the field, both in terms of accessibility and functionality.

In the Appearance and Design aspect, the teaching material scored 17 out of 20. This score indicates that the layout, use of color, and graphics are quite attractive and support users to understand the material more easily. In addition, the Content and Material aspects scored high, namely 18 out of 20, indicating that the material presented is relevant to the applicable curriculum and is able to meet learning needs optimally.

In terms of User Engagement and Ease of Use, each aspect scored 18 out of 20. This shows

that this teaching material is able to motivate students to learn independently and provide clear and easy-to-follow navigation and instructions. With this, this teaching material is categorized as very practical, making it an effective and efficient learning tool to use in the educational process.

Based on the evaluation results, the developed teaching materials are included in the very practical category with a total score of 89 out of 100. This shows that the teaching materials have met the needs of teachers and students, have an attractive appearance, materials that are in accordance with the curriculum, are able to motivate students to learn independently, and are easy to use. Thus, these teaching materials can be relied on as effective learning media and support the learning process optimally.

The results of this study answer the development of education, namely being able to follow development era (Holmes, 2020; Jhonson & Jhonson, 2020). Era digital like Now This, use media in learning very much important so that students can better understand the subject. The role of information technology and communication (ICT) in education, namely the use of educational media with help ICT very necessary (Puntambekar, 2020; Benek&Akçay, 2022). Environment learning based on ICT can make learning easier and more interesting (Novalia & Anum., 2022). One of them is the learning environment, and the learning environment is used as environment learning (Gabaldon, 2020). Besides That, environment Study Also can understood as the ability to communicate or share messages systematically from one source, create environment Study Where the recipient can carry out learning effectively and efficiently (Mellisa et al., 2022).

This research offers innovation in the development of technology-based teaching materials using the Book application. Creator for writing materials at the Elementary School (SD) level. Different from previous studies, this study specifically integrates interactive features from Book Creator with the principles in the Independent Curriculum, which emphasizes flexibility, independence, and differentiation of learning. As a result of the validation of the material field, material experts recommend that this teaching material be designed not only to function as a learning medium, but also as a means to accommodate the visual and kinesthetic learning styles of elementary school students. The use of e-modules from the links provided, for example, can help audio-type students to be more interested and easier to grasp the lessons.

The validation results above are in line with research on the use of eBooks in academic libraries revealing that although printed books are still used, eBooks are preferred for their quick access and flexibility (Chou, 2016; Baglama, 2016). Other studies report that eBooks are effective for studies that require a lot of literature references in their development (Sheridan, 2020; Christ, 2019; Carol, et.al, 2019). Likewise, elementary school students who are part of children in society use mobile media and digital technology, even almost every day (Marsh et.al, 2015; Ridout, 2017); Paschek, et al, 2021).

Research on the benefits of digital literacy for children is still very new. This means that there is an impact of this digital shift on children's literacy (Bush, et.al, 2020). The results of the validation of media experts in this study showed that teaching materials assisted by book creators indicate the use of digital technology in learning. Media experts recommend the use of this application because it can be easily accessed using a mobile phone or cellphone. This means that students can also study it at home with their parents.

The results of the media field validation above show a connection with previous research which shows that the use of digital books plays a very important role in the learning process. One application that can be used in the development of digital books that can influence student engagement and learning outcomes, with a focus on classroom experience, is BookCreator (Koh, 2018). The BookCreator application is an application with simple tools that can be used to create attractive digital books (Pegrum, 2016; Ferguzon, 2018). An analytical review examines the effectiveness of digital books in supporting children's early literacy skills, especially in kindergarten and elementary schools. Research by Escribano et.al (2021) shows that eBooks can provide significant improvements in

vocabulary, reading comprehension, and phonological awareness. The use of interactive features, such as digital dictionaries accessed through "hotspots", plays an important role in improving children's language skills (Cadoret, et.al, 2018; Christakis , 2019; Swanson, et.al, 2020). According to other studies, eBooks are useful for studies that require a lot of literature references in their creation (Sheridan, 2020; Christ, 2019; Carol, et.al, 2019). The results of other studies (Lim, et.al, 2020) show a Comparison of the Performance of eBooks and Printed Books. E-Books are preferred because they are easy to use and quickly accessible, although printed books are still used in academic libraries (Chou, 2016; Baglama, 2016). The above studies show that digital books are very important for the learning process. BookCreator is an application with simple tools that can be used to create attractive digital books that focus on the classroom experience and can influence student engagement and learning outcomes (Koh, 2018). This digital-based application has also been shown to allow researchers to include various media such as audio, visual, audio-visual, and hyperlinks so that it is considered in accordance with the cognitive goals of students to improve language skills, namely speaking, writing, listening, and reading (Harris, 2019; Alshammari, 2020). Therefore, the use of book creator E-books that are carefully selected and presented on tablets can provide children with a highly independent learning experience. Thus, this study provides a new contribution in the use of digital technology as an innovative tool to improve students' writing skills within the framework of 21st century education. Book creators in this study as part of e-books play an important role in terms of their accessibility.

## CONCLUSION

This study shows important findings that Book Creator- based teaching materials are effective learning media in supporting writing skills. The percentage of student support (70% stated that they need or really need it) and teachers (100% stated that they need or really need it) confirm the appeal and relevance of this media in the learning environment. The high expert validation results (88% for language, 90% for material, and 90% for media) emphasize the quality of the teaching materials from various aspects. Likewise, from the practicality test, with a total score of 89 out of 100, this teaching material is categorized as very practical, making it an effective and efficient learning tool to use in the learning process. Therefore, the novelty of this study lies in the use of Book Creator as an interactive media that combines technology with language learning. This approach not only increases student motivation but also provides an interesting and adaptive learning experience. In addition, this study contributes to the implementation of the Merdeka Curriculum by emphasizing flexibility and personalization in presenting materials. The combination of empirical data from students, teachers, and expert validation makes the results of this study relevant to be applied more widely.

This study has several limitations. First , the teaching materials assisted by the Book Creator application were only designed for certain elementary schools, so the generalization of the results needs to be done carefully. Second , the level of teacher skills in using Book Creator -based technology varies, thus affecting the effectiveness of the implementation of teaching materials. Third, this study focuses more on writing materials, so it has not examined the effectiveness of teaching materials on other language skills. Finally , technological infrastructure such as devices and internet access in schools is a challenge in itself in the implementation of digital-based teaching materials. Further studies are recommended to cover a wider area and different language skills, for example web-based ones are highly recommended. The recommendation from the results of this study is the need to expand the application of Book Creator to various learning topics, as well as provide training to teachers so that they are able to maximize their potential. It is also necessary to consider input from students who are less in need to improve features or content to be more inclusive and adaptive to students' learning need.

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