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Development of pop book media with augmented reality features in improving students' creative writing skills in elementary schools

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Abstract

Decrease in Indonesia's PISA scores in 2015, 2018 and 2022. Creative competence can be improved through creative writing skills. This research aims to develop and test the feasibility of pop-up book media with augmented reality features in improving elementary school students' creative writing skills. The subject of this research is the assessment of media and material practitioners. The method used is the ADDIE model. The data collection techniques are observation, interviews, questionnaires, and scoring. The assessment instrument is a validation sheet from media and material experts. Using quantitative data analysis techniques. The results of the validation and assessment of media and material practitioners obtained a score from media experts of 70% in the appropriate category and from material experts of 85% in the very appropriate category. Thus, it can be concluded that pop-up book media with augmented reality features is very suitable as an alternative solution to support the creative writing skills of elementary school students. Future researchers should be able to use the results of this research as a basis for testing the effectiveness of the augmented reality pop-up book media feature in improving elementary school students' creative writing abilities.

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1. Introduction

In the current era of disruption, change is happening so quickly and massively. Various technology-based innovations have emerged as a concrete form of global change amid globalization. This massive change affects all lines of life, one of which is education. Education is the main foundation that creates and forms individuals who are knowledgeable and have character. This is guaranteed by the state in Article 28C paragraph (1) of the Constitution of the Republic of Indonesia, which states that "every individual has the right to receive education and benefits from science and technology, arts and culture, to maximize the quality of life and for the welfare of the people" (Rais, 2000). This shows that technology can also influence and be helpful in education.

The rapid development of technology is the background for increasing competence and facing competition amid globalization. In line with this, the Ministry of Education and Culture stated that the competencies needed in the 21st century are no longer just 4C but are developing into 6C

competencies. This competency adapts and realizes the importance of character and citizenship as interpersonal skills in the hyper-globalization era. Governments and policymakers recognize the need to prepare students to become global citizens, so training students only with the 4Cs will not be enough to shape their character. Therefore, character and citizenship are needed, which are also essential values in 21st-century skills. In this context, the six skills of the 21st century are known as 6C, namely character, citizenship, critical thinking, creativity, collaboration, and communication (Kemdikbud, 2022).

One can improve competence, namely creativity, with creative writing skills. According to Anggraeni, creative writing describes and explains information and contains writing that originates from ideas or feelings the writer puts into writing (Anggraeni, 2017). Creative writing means producing work based on or originating from the writer's creativity, intellect, and imagination. Therefore, learning creative writing skills is focused on teaching how to express ideas that are owned to be then poured into the form of creative writing. Thus, creative writing can increase students' imagination and support the competencies needed in the 21st century, namely creativity.

The results of observations and interviews that researchers conducted show that literacy in Indonesia still needs to be improved. The interviews that the researchers conducted at one of the elementary schools in Semarang City, precisely SDN Tambak Aji 01, showed that the learning of creative writing skills still needed to be improved, as evidenced by the fact that some students still challenging to develop their innovative ideas and ideas in written form, such as writing descriptive stories, write essays on summative assessments, and more. Therefore, this shows that there is a need for improvement in achieving creativity (creative) competence through creative writing.

Regarding Indonesian education, the latest Program for International Student Assessment (PISA) score data for 2022, as quoted from the OECD, experienced a decline in PISA scores in 2022. The following OECD data shows similar results: Indonesia's PISA scores for 2015, 2018, and 2022 have decreased significantly compared to the previous year (Gurria, 2014; Schleicher, 2019; OECD, 2023)

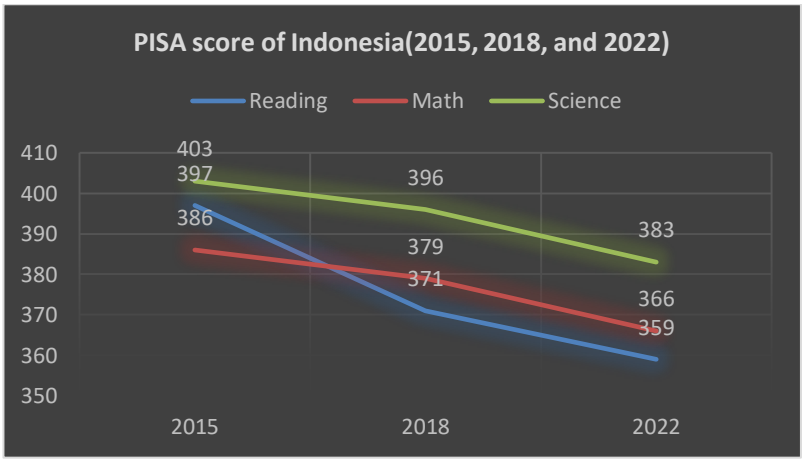

Figure 1. PISA score of Indonesia (2015, 2018, dan 2022)

Figure 1 shows that Indonesia's PISA score has decreased significantly. In 2015, the reading score was 397; in 2018, it decreased to 371. This indicates that the percentage of Indonesia's reading score is only around 30% of school-age children can reach a level of reading literacy comprehension and write at level 2 and above, which is very far from the average target set by the OECD of 77%. A decrease followed this in math scores of 379 and science scores of 396. Thus, this international survey strengthens field data, which shows that efforts are still needed to find alternative solutions to improving creative writing skills in Indonesia.

Indonesia's National Data on Illiteracy Rate also shows similar results in line with the PISA score. Based on data from BPS (Central Statistics Agency) in the Profile of Indonesian Children for 2018-2022,

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individual disabilities in reading and writing in Indonesia show scores that tend to increase from the previous year (Windiarto et al. 2018; Windiarto et al. 2019; Tanziha, Utomo, Mu'arifatunnisa, Fitriani, and Lukitasari 2020; Utomo, Tanziha, Arifin, and Noegroho 2021; Riany, Dewi, and Raisa, 2022). The percentage of the illiteracy rate of children aged 5-17 years by province from 2017-2021 is presented in **Figure 2** below.

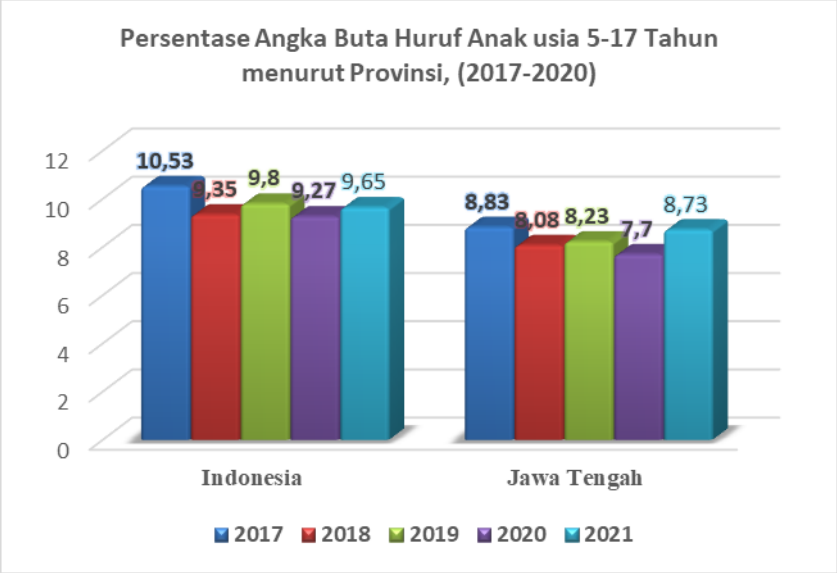

Figure 2. Percentage of Illiteracy rate of children aged 5-17 years

Figure 2 shows that the national illiteracy rate in 2020 was 9.27%, increasing in 2021 by 9.65%. Referring to Central Java Province, which also gave similar results, the percentage of illiteracy has risen from 2020 to 7.7%, increasing in 2021 to 8.73%. This reinforces the need for solutions and practical efforts to improve literacy competence in Indonesia. Thus, increasing literacy can be done one way through creative writing skills.

Learning to write creatively can be stimulated by using learning media. Learning media can be a tool that can help encourage students to improve their creative writing skills. According to Gina, teachers in elementary schools do not use and utilize more varied learning media, which can affect the lack of development of students' creative writing skills (Gina, Iswara, and Jayadinata, 2017). This shows that learning media is still needed that can stimulate students to improve their creative writing skills.

Learning media, according to Aqib. Z is an intermediary in the form of a tool that can bridge the understanding of abstract concepts to become more concrete for students, stimulate students' thinking power, and increase student interest in learning with attractive visuals given in the learning process (Wahyudi and Doyin, 2015). The current era of digitalization requires learning media to adapt to technological developments to be relevant to the needs and developments of the times.

Technology has two sides: it can have positive and negative impacts. Based on data obtained by researchers from observations and interviews at SDN Tambak Aji 01, continuously used technology will significantly affect student saturation in learning. Even though the application of technology attracts attention, if it is constantly used, it will give the impression of being bored and bored, making it less attractive to students. In addition, several elementary schools also have problems with limited facilities, such as gadgets and the internet.

Based on this, researchers offer an innovative learning media that comes from a form of collaboration between physical learning media and technology, namely Pop-up books with augmented reality technology features. Pop-Up is a book that has folds so that it can be opened and moved, while Augmented Reality is a technology that can visualize 2D objects into 3D in cyberspace (Ulfa and

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Nasryah, 2020; Riskiono, Susanto, and Kristianto, 2020). This collaboration will stimulate students' imagination and visual memory and improve their creative writing skills. Thus, this study aims to test the feasibility of pop-up book media featuring augmented reality (AR) as an alternative solution for improving elementary school students' creative writing skills.

2. Method

This study uses the Research and Development (RnD) development research method of the ADDIE model as a product development framework in the form of Pop-up Book media with Augmented Reality (AR) features. The ADDIE model has five stages for developing practical teaching designs and learning media (Tegeh and Kirana, 2013). The ADDIE model is used in teaching media development to produce effective and efficient products to support learning. The stages of the ADDIE model used in this study are (1) analysis, (2) design (design), (3) development (development), (4) implementation (implementation/execution), and (5) evaluation (evaluation/feedback) (Zahid, 2018). Sugiyono. (2013) In practice, each cycle stage must be completed before the following cycle stage. The stages of the ADDIE method are presented in **Figure 3** below.

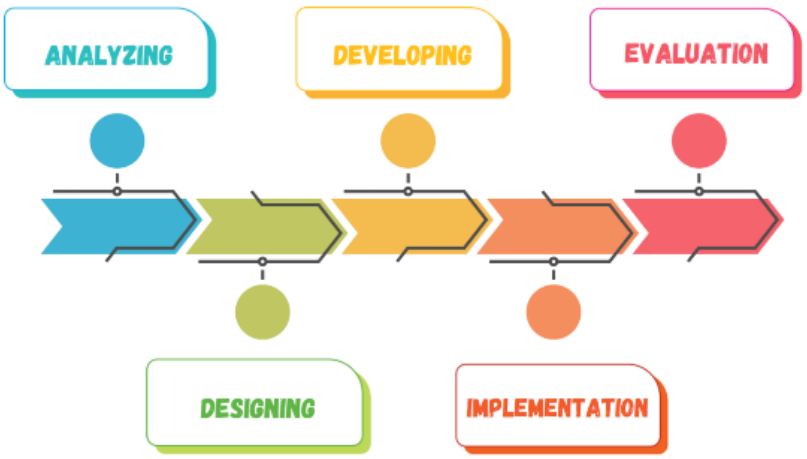

Figure 3. ADDIE model stages

However, in this study, the cycle or stages of the method used were limited to the third stage, namely (1) analysis, (2) design, and (3) development, because this research focuses on the initial preparation for instructional development of learning media both in terms of content and materials used. In addition, these three stages provide space for flexibility and creativity in the instructional development process to suit and meet the needs of students.

The ADDIE Stage is a systematic designing, designing, and developing method. Each stage in the process has a different role and purpose. In the analysis stage (analysis), analysis is carried out according to the needs and to identify problems—analysis in the form of observations, interviews, and questionnaires conducted at SDN Tambak Aji 01. In addition, an analysis of relevant international and national data surveys was carried out, and the field data was supported. Thus, obtained problems and ideal conditions that must be achieved. After the problem analysis, a needs analysis is carried out to find a practical solution that can solve the problem.

Furthermore, at the design stage, a product design is carried out that is used as a solution to the problem, adjusted to the characteristics of the intended user. This stage also designs the product, namely the content and the materials used. Thus, a product can be produced that can be used as a solution to overcome problems and meet the needs of students. The final stage of this research, namely

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the development stage, is the validation stage of media and material experts or experts to be used as a reference in the development and feasibility of augmented reality pop-up book media products. The stages of the research are presented briefly in **Table 1**.

Table 1. Summary of ADDIE model activities

Development Stage	Activity
Analysis	1) Analysis of needs and problems in the field, as well as ideal conditions that must be achieved. 2) Analyze the competencies you want to develop. 3) Analysis of the characteristics of elementary school students.
Design	1) Instructional Design 2) Preparation of storyboards 3) Visualization of scripts/scenarios 4) Display design 5) Multimedia components 6) Navigation and support elements 7) Programming (Assembler studio)
Development	1) Prototype multimedia components (animation and simulation) 2) Results of expert validation or media and material experts

The subjects in this study used the Alpha Testing procedure to test the feasibility of the product. This test was carried out to test the sensitivity of practitioners in the field of media and material experts to the pop-up book media featuring augmented reality. Data collection techniques used are observation, interviews, questionnaires, and scoring. Observations, interviews, and questionnaires are used to analyze needs and problems. Scorecarding is used in the product development stage. The instrument used in the scoring stage is a media and material experts validation sheet.

The data analysis technique used in this study is quantitative data analysis. Furthermore, data analysis or judgments are converted using a qualitative descriptive analysis with the percentage of data measured by a Likert scale. The Likert scale is several positive or negative statements regarding an attitude object (Wagiran, 2013). The research data obtained is used as a reference for revising the product to produce a feasible product.

The feasibility assessment refers to the assessment instrument from the Learning Object Review Instrument (LORI) version 2.0 (Mardapi, 2008). Analysis of media expert instrument data and material obtained to assess the weight of each response and calculate the average score using the following formula.

$$\bar{x} = \frac{\sum x}{n}$$

Information:
$\bar{x}$: average score
n : number of items
$\sum x$: total score, respectively

Then, the data from these calculations can be translated qualitatively with the Greigry Lawshe formula to measure feasibility by converting using the category scale in **Table 2** below.

Table 2. Category scale

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Score	Category
$4{,}20 \leq \overline{X} \leq 5{,}00$	Very feasible
$3{,}40 \leq \overline{X} \leq 4{,}20$	Feasible
$2{,}60 \leq \overline{X} \leq 3{,}40$	Feasible enough
$1{,}80 \leq \overline{X} \leq 2{,}60$	Not feasible
$1{,}00 \leq \overline{X} \leq 1{,}80$	Very not feasible

(Mardapi, 2008)

Furthermore, the media feasibility data results were measured using the percentage relative to the whole using the following formula.

$$Results = \frac{Total\ score\ obtained}{Maximum\ score}\ x\ 100\%$$

Eligibility categories can be converted based on the following criteria (Arikunto, 2006).

Table 3. Media Eligibility Criteria

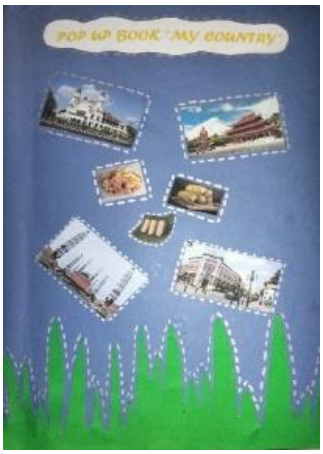
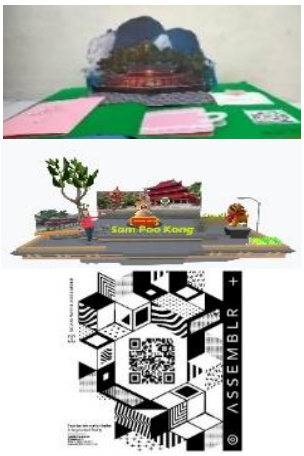
Score (%)	Eligibility Category
< 21%	Very Not Feasible
21-40%	Not Feasible
41-60%	Feasible Enough
61-80%	Feasible
81-100%	Very Feasible

(Arikunto, 2009)

3. Results

The results of the development of innovation and collaboration between pop-up book media and augmented reality produce learning media in physical forms with features in augmented reality, namely digital versions of pop-up books.

Table 4. Media pop-up book with augmented reality features

Cover	Page 1 (Sam Poo Kong)	Page 2 (Lawang Sewu)
		

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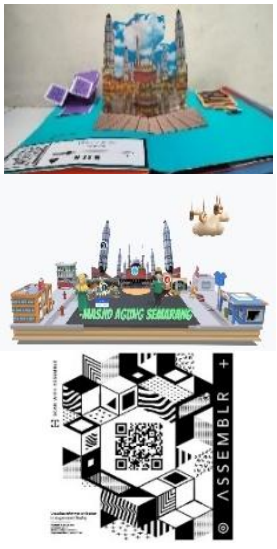
Page 3 (Typical Semarang Food)	Page 4 (Semarang Grand Mosque)	Page 5 (Old City of Semarang)
		

The results of developing the augmented reality feature for the pop-up book media are presented in Table 4, which aims to stimulate visual memory and imagination to improve the creative writing skills of elementary school students. Utilizing technology attracts students' interest and enhances their learning motivation while addressing the limitations of technology and internet devices in schools by allowing more flexible access to the media. The expectation is that the pop-up book, supported by the augmented reality feature, will effectively and efficiently enhance students' creative writing abilities. The validity of this media will be assessed through an accuracy test conducted by experts, whose responses and assessments will guide necessary revisions and improvements to the product. The findings from media and material experts will serve as a reference for the media's eligibility standards, ensuring that the pop-up book integrated with augmented reality features meets educational requirements.

3.1 Media Expert Validation

Media expert validation is carried out to determine the validity of the media made; media experts carry out the validation process. In evaluating media by media experts, four aspects are presentation interaction accessibility (Mardapi, 2008). The results of the media expert's assessment of each aspect of the research are presented in **Table 5** and **Figure 4**.

Table 5. Recapitulation of media expert validation

Rated aspect	Total Score	Category
Aspects of presentation design (presentation design)	3,0	Decent Enough
Aspects of ease of use (interaction usability)	4,0	Worthy
Accessibility aspects	4,0	Worthy
Aspect of ease of reuse (reusability)	3,0	Decent Enough
Average earned score	**3,5**	
Category	**Worthy**	

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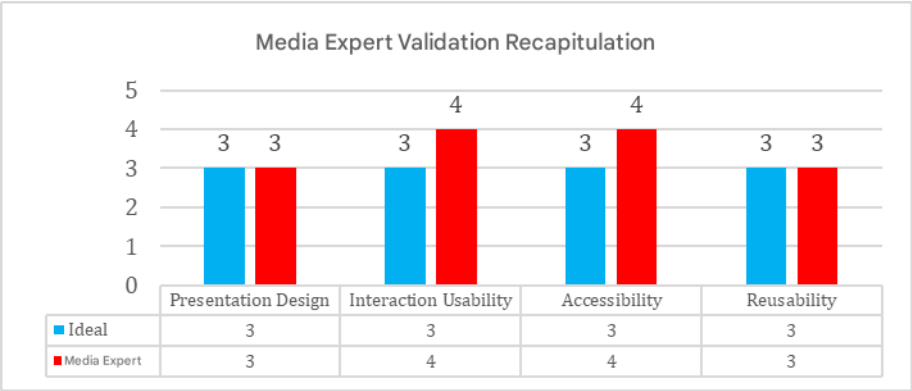

Figure 4. Media expert validation recapitulation bar chart

3.2 Material Expert Validation

Material expert validation is carried out by material experts to find out whether the material conveyed through the developed media is following the competencies to be achieved. Media experts evaluated four aspects: content quality, alignment of learning objectives, feedback and adaptation, and motivation (Mardapi, 2008). The results of the material expert's assessment of each aspect of the research are presented in **Table 6** and **Figure 5**.

Table 6. Material expert validation recapitulation

Assessment Indicators	Total Score	Category
Content quality	3,5	Worthy
Learning goal alignment,	4,0	Worthy
Feedback and adaptation	4,5	Very Worthy
Motivation	5,0	Very Worthy
Average score obtained	**4,25**	
Category	**Very Worthy**	

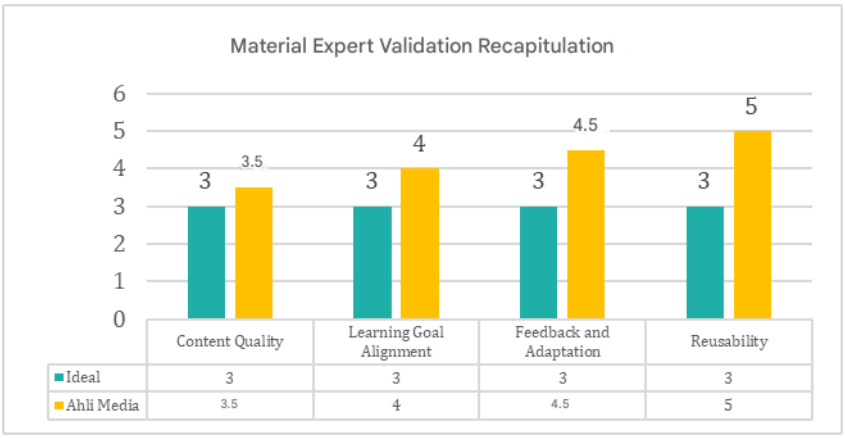

Figure 5. Bar chart of material expert validation recapitulation

Furthermore, the results of media feasibility data using the overall percentage are presented in **Figure 6** below.

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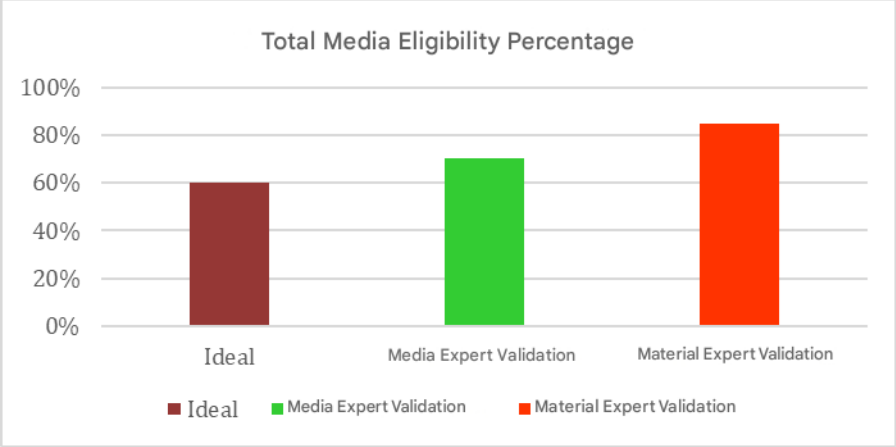

Figure 6. Bar chart of the total percentage of media and material experts

Figure 6 shows the total acquisition or percentage of media experts worth 70% in the Eligible category. The result of the percentage of material experts is 85% with the Very Eligible category. Thus, it can be concluded that the development of pop-up book media featuring augmented reality is categorized as suitable as an alternative learning media solution to improve elementary school students' creative writing abilities.

4. Discussion

Learning media will continue to be developed to achieve learning objectives. According to the NEA (National Education Association), media refers to tools or objects that can be seen by the five senses to support the learning process (Arsyad, 2011). In addition, the media, according to Sanjaya (2011), is an intermediary in conveying messages or information in various fields. Thus, it can be concluded that learning media is an introductory or intermediary tool educators use to convey information in the form of subject matter during the learning process.

Learning media is expected to be a facilitator who helps students to more quickly accept and understand the concepts of the learning material provided. This aligns with Hasan, who explained that learning media includes everything that can be used to transfer knowledge or clarify abstract concepts to be more concrete so students can more easily understand them (Hasan, Milawati, Darojat, and Harahap, 2021). Whereas Aqib (Hasan, Milawati, Darojat, and Harahap, 2021) explains that learning media can function as a channel of information, a stimulus for thoughts, attention, and feelings of students to encourage student interest in the learning process.

Criteria for learning media must be able to attract attention and adjust student characteristics so that they are more optimal and have the potential to increase student interest in learning in the learning process. Therefore, learning media is in the form of a tool or any object that can be used as an intermediary to help convey the concept of subject matter effectively and efficiently while at the same time attracting students' attention to help increase student understanding—interest, and motivation to learn in the learning process.

The pop-up book is an innovative learning media book with a three-dimensional design and content that uses several techniques, including folding, scrolling, and rotating (Umam, Afakhrul, and Hardian, 2019). Joko Muktiono and Dzuanda stated that a pop-up book contains elements that are then operated so that they can stand, move, and display beautiful objects (Rahmawati, 2014). Pop-up book media, according to Monicha Hastuti and Apsari, is a book that has folds of various shapes, can be opened, and can be moved so that it attracts attention (Monicha and Hera, 2020; Apsari, Ardana, and Kartini, 2019). Thus, it can be concluded that pop-up book media is a book-type learning media in which each

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page has an appearance, content, and various three-dimensional shapes that can move by utilizing folds, rolls, and rotations that attract attention.

In the current era of disruption, technological developments provide updates to learning media. Learning media must adapt to the characteristics of students and the times. Therefore, effective learning media must also adapt to technological advances. Augmented reality can be used as a learning medium following current student characteristics. Augmented reality applications allow users to experience new experiences by combining real and virtual worlds simultaneously in 2D or 3D (Mustaqim, 2017). According to Aditama's view, augmented reality is a technology that combines virtual objects in two or three dimensions into realistic images and can be connected to the world so that they can be connected in real-time (Aditama, Adhiyana and Aringingsih, 2019). Augmented reality also has advantages because it is interactive and real-time with the 3D form it presents (Kaufirman, 2002). Thus, augmented reality can be used effectively in education as a learning medium to achieve the desired competencies.

Augmented reality technology as a learning medium has undergone various considerations based on its advantages and disadvantages. The benefits of this technology are: 1) it is highly interactive, 2) it is effective in use, 3) it can be implemented in various media, 4) it provides simple examples with the objects displayed, 5) it minimizes costs, and 6) it is easy to operate. However, there are several drawbacks to Augmented Reality technology: a) it is sensitive to changes in viewing angles, b) there are not many developments that utilize this technology, and 3) it requires adequate storage space and electronic equipment.

By combining pop-up book media with augmented reality features, learning media will be produced in physical form with features in augmented reality, namely digital versions of pop-up books. This collaboration aims to overcome literacy problems and stimulate elementary school students to improve their creative writing skills. In addition, using technology also has the potential to attract students' interest and motivation to learn.

The data results show that the pop-up book media with the augmented reality feature is categorized as feasible and very feasible as a learning medium that supports elementary school students' creative writing skills. Thus, this study examines the feasibility of pop-up book media with augmented reality features to improve creative writing skills and motivate student learning. The results of this study can be used in further research regarding the effectiveness test of the media features of augmented reality pop-up books.

5. Conclusion and Recommendations

Based on the results of the study, it can be concluded that the pop-up book media featuring augmented reality has gone through three stages of the ADDIE method, namely analysis, design, and development; at the development stage, media and material experts are categorized as feasible and very appropriate to be used as learning media that can improve elementary school students' creative writing skills. The results of the validation and assessment of media practitioners and the material score obtained from media experts is 70% in the proper category. The score from the material expert is 85%, a very feasible category. Thus, it can be concluded that the pop-up book media with the augmented reality feature is ready and very suitable for teachers and students as an alternative solution to support the creative writing abilities of elementary school students. The results of physical media collaboration with the help of augmented reality technology can provide a 2D visual experience that can facilitate students' imaginations. Therefore, this media is very suitable for supporting students in improving their creative writing skills.

Suggestions that researchers can give regarding the development of pop-up book media with augmented reality features, namely the development of pop-up book media with augmented reality

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features, can be used as a reference for further research to test the effectiveness of media pop-up book media with augmented reality features in improving writing skills elementary school students.

References

Aditama, P. W., Adhiyana, I. W., and Aringingsih, K. A. (2019). Augmented reality dalam multimedia pembelajaran. *In SENADA (Seminar Nasional Manajemen, Desain dan Aplikasi Bisnis Teknologi)*, pp. 176-182.

Anggraeni, K. (2017). Efektivitas model menulis kolaborasi dengan media big book terhadap keterampilan menulis kreatif. *Jurnal Cakrawala Pendas,, 3*(2), 1-10.

Apsari, N., Ardana, I., and Kartini, N. (2019). Earthworm meal (Lumbricus rubellus) is given in feed for growth, morbidity, and mortality of male landrace piglets post-weaning. *Indonesia Medicus Veterinus, 8*(2), 255-263.

Aqib , Z. (2013). *Model-model, media, dan strategi pembelajaran kontekstual (inovatif)*. Bandung: Yrama Widya.

Arikunto, S. (2006). *Prosedur penelitian suatu pendekatan praktik*. Jakarta: PT Rhineka Cipta.

Arsyad, A. (2011). *Media pembelajaran*. Jakarta: PT. Rajagrafaindo Persada.

Gina, A. M., Iswara, P. D., and Jayadinata, A. K. (2017). Meningkatkan keterampilan menulis karangan narasi melalui model PWIM (picture word inductive model) siswa kelas IV B SD Negeri Ketib Kecamatan Sumedang Utara Kabupaten Sumedang. *Jurnal Pena Ilmiah, 2*(1), 141-150.

Gurria, A. (2018). PISA (Programme for International Student Assessment) 2015 Results in Focus. *OECD*.

Hasan, M., Milawati, Darojat, and Harahap, T. K. (2021). *Media Pembelajaran*. Klaten: Tahta Media Grup.

Kaufirman, H. (2002). Collaborative augmented reality in education. *Education and information technologies*, 263-276.

Kemdikbud, p. w. (2022). *Mengenal peran 6C dalam pembelajaran abad ke-21*. Jakarta: Kementerian Pendidikan dan Kebudayaan.

Mardapi, D. (2008). *Teknik penyusunan instrumen tes dan non tes*. Yogyakarta: Mitra Cendika Press.

Monicha, I., and Hera, A. (2020). Pengaruh media pop-up book terhadap hasil belajar sejarah indonesia Kelas X SMA Negeri 6 Padang. *Jurnal Kronologi, 2*(2), 1-11.

Mustaqim, I. (2017). Pengembangan media pembelajaran berbasis augmented reality. *Jurnal Edukasi Elektro, 1*(1).

OECD, PISA 2022 Results (Volume I): The state of learning and equity in education, PISA, Paris: OECD Publishing, 2023.

Rahmawati, N. (2014). Pengaruh media pop-up book terhadap penguasaan kosakata anak usia 5-6 tahun di TK Putera Harapan Surabaya. *Universitas Negeri Surabaya, 3*(1).

Rais, A. (2000). *Perubahan kedua undang-undang dasar negara republik indonesia tahun 1945*. Jakarta: Majelis Permusyawaratan Rakyat Republik Indonesia.

Riany, Y. E., Dewi, B. M., and Raisa, S. E. (2022). *Profil Anak Indonesia Tahun 2022*. Jakarta: Kementerian Pemberdayaan Perempuan dan Perlindungan Anak (KPPPA).

Riskiono, S. D., Susanto, T., and Kristianto. (2020). Rancangan media pembelajaran hewan purbakala menggunakan augmented reality. *CESS (Journal of Computer Engineering System and Science), 5*(2), 2502-7131.

Sanjaya, Wina. (2011). *Strategi pembelajaran berorientasi standar proses* . Jakarta: Prenada Media Group.

Schleicher, A. (2019). PISA (Programme for International Student Assessment 2018 Insights and Interpretations. *OECD*.

Sugiyono. (2013). *Metode penelitian kuantitatif kualitatif dan R&D* . Yogyakarta: Alfabeta.

Tanziha, I., Utomo, H., Mu'arifatunnisa, I. A., Fitriani, N., and Lukitasari, I. (2020). *Profil Anak Indonesia 2020*. Jakarta: Kementerian Pemberdayaan Perempuan dan Perlindungan Anak (KPPPA).

Tegeh, I. M., and Kirana, I. M. (2013). Pengembangan bahan ajar metode penelitian pendidikan dengan ADDIE model. *Jurnal Ika, 11*(1).

 [e-**ISSN 2598-5949** | p-**ISSN 2303-1514**]

Ulfa, M. S., and Nasryah, C. E. (2020). Pengembangan media pembelajaran pop–up book untuk meningkatkan motivasi belajar siswa kelas IV SD. *Edunesia : Jurnal Ilmiah Pendidikan, 1*(1), 2722-5194.

Umam, N. B., Afakhrul, M. B., and Hardian, I. (2019). Pengembangan pop-up book bahasa Indonesia berbasis budaya Slempitan. *Jurnal Pendidikan Dasar, 1*(02), 1-11.

Utomo, H., Tanziha, I., Arifin, J., and Noegroho, S. (2021). *Profil anak indonesia 2021*. Jakarta: Kementerian Pemberdayaan Perempuan dan Perlindungan Anak (KPPPA).

Wagiran. (2013). *Metodologi penelitian pendidikan (teori dan implementasi)*. Yogyakarta: Deepublish.

Wahyudi, F. A., and Doyin, M. (2015). Pengembangan buku pop-up tiga dimensi sebagai media pembelajaran menulis puisi. *Lingua: Jurnal Bahasa dan Sastra, 11*(2).

Windiarto, T., Yusuf, A. H., Nugroho, S., Latifah, S., Solih, R., and Hermawati, F. (2019). *Profil Anak Indonesia 2019*. Jakarta: Kementerian Pemberdayaan Perempuan dan Perlindungan Anak (KPPPA).

Windiarto, T., Yusuf, A. H., Santoso, A. D., Nugroho, S., Latifah, S., Solih, R., . Rahmawatiningsih, A. (2018). *Profil Anak Indonesia 2018*. Jakarta: Kementerian Pemberdayaan Perempuan dan Perlindungan Anak (KPPPA).

Zahid, M. Z. (2018). Aplikasi Berbasis Android untuk Pembelajaran: Potensi dan Metode Pengembangan. *PRISMA, Prosiding Seminar Nasional Matematika*.

 [e-**ISSN 2598-5949** | p-**ISSN 2303-1514**]