



## Development of Digital Comic Media Based on Education for Sustainable Development (ESD) to Improve Cultural and Citizenship Literacy of Elementary Students

**Eka Putri Ramadhany, Mela Darmayanti\*, Kurniasih, Tatang Syaripudin**

Elementary School Teacher Education, Faculty of Education,  
Universitas Pendidikan Indonesia.

\*Corresponding Author. Email: [meladarmayanti@upi.edu](mailto:meladarmayanti@upi.edu)

**Abstract:** This research aims to develop digital comics media to increase students' cultural and citizenship literacy based on Education for Sustainable Development (ESD). This research used the design and development research method with the ADDIE model, which includes five research stages: design, development, implementation, and evaluation. Participants in this research were material experts, media experts, learning experts, and fourth-grade elementary school students. Data collection techniques were carried out using expert validation and tests. Data was analyzed qualitatively and quantitatively. The expert validation results from the three experts are categorized as excellent. The N-Gain result of students' cultural literacy and citizenship is 0.75 in the high category. The digital comic media developed was feasible and could be used by educators and students as a learning medium for cultural diversity material to increase cultural literacy and citizenship for Elementary School students.

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## Introduction

During the pandemic these past two years, educational backwardness in Indonesia is one reason for implementing the Kurikulum Merdeka at the elementary and middle school levels. This backwardness occurs not only in the cognitive aspect but also in students' skills and attitudes aspect, so it becomes one of the problems that occurs widely among students, especially at the elementary school level. In response to this problem, applying the Kurikulum Merdeka in elementary schools allows teachers to develop various teaching tools so that learning can be adapted to students' learning needs and interests (Kementerian Pendidikan, 2022). Learning flexibility for teachers is given while still paying attention to students' competencies achievement at the educational unit level to recover the learning activities to achieve national education goals while being implemented in line with the demands of 21st-century education.

In preparing future active world citizens, elementary school students must participate in sustainable world development. In the educational context, students' understanding of sustainable development is applied with Education for Sustainable Development (ESD), a learning process or learning approach developed based on sustainable principles by focusing on all levels and types of learning to provide good quality education while improving skills and understanding of sustainable human development (Matitaputty et al., 2022). Education for Sustainable Development strives to provide people of all ages with the skills, values, attitudes, and knowledge necessary to take on the responsibility of creating and maintaining a sustainable future (Araujo et al., 2005). The integration between sustainable goals in



Education for Sustainable Development is divided into three schemes: 1) horizontal integration, namely the relationship between one goal and another sector (not specific to the goal). 2) vertical integration, linkages with implementing levels (national and international). 3) lateral integration, relations between countries or state figures (Persaud, 2017). To gain knowledge to participate in sustainable development in the future, students must first know about the environment and the complexity of the society itself.

Literacy is one of the mediums to achieve 21st-century skill competency through education (Rosfiani et al., 2022). The mastery of six basic literacies is required at the elementary school level. These six literacies include read-and-write literacy, numeracy literacy, science literacy, digital literacy, financial literacy, and cultural citizenship literacy (Rosfiani et al., 2022). Cultural and citizenship literacy is one of the six basic literacies students must have nowadays to support life and 21st-century skills. Cultural literacy is the process of a person's engagement with culture and co-creation in expressing cultural identity and values (Maine et al., 2019). Citizenship literacy can be interpreted as a democratic attitude in education, inviting students to participate in a diverse world (Wahlström, 2022). From these two definitions above, we know that cultural and citizenship literacy is a person's ability to take a stand and become involved democratically with the culture and diversity that exists in the world.

Research conducted by Yusuf et al. (2020) states that students' understanding of cultural and citizenship literacy tends to be low because it is only focused on mastery of material without the knowledge of cultural and civic values. Literacy activities are also only defined as reading books without the teacher's participation in guiding and providing reinforcement according to the given theme. In achieving an understanding of cultural and citizenship literacy, reading material with long paragraphs sometimes becomes an obstacle for students to comprehend the contents of the paragraphs. Also, learning that only focuses on students' books without using learning media provides an uninteresting learning experience. Based on the interview results with the teacher, it was found that the reading books used were not developed to be integrated with the learning material, so the comprehension of information by students was carried out randomly.

One type of learning media that can summarize and simplify reading text material without reducing the information is comics (Lo et al., 2022). An educational comic is a comic designed to entertain and educate at the same time (Wulandari & Hapsari, 2020). As technology develops, traditional comics used in book form have shifted to digital form, better known as digital comics. According to Gene, there are several strengths of educational comic media: (1) motivating, (2) interesting story visualization, (3) permanent visual component, (4) intermediary to simplify the material, (5) popular with students, and (6) develop thinking skills (Marianthi et al., 2008). That statement is reinforced by the opinion of Mardiyah (2016), who explains that comic media impacts students' environmental care attitudes and reasoning abilities so that the use of comics as a learning medium can be used without reducing the effectiveness of learning.

This research was conducted based on student comprehension problems to develop digital comic learning media by integrating subject matter, aspects of sustainable development, and cultural and citizenship literacy indicators. Digital comics as a learning medium refer to the Learning Outcomes for Phase B Science and Technology subjects set by the Ministry of Education, Culture, Research and Technology number 033/H/KR/2022 with Learning Outcomes "Students describe biodiversity, cultural diversity, local wisdom, and conservation efforts." Therefore, this research aims to develop digital comic media to



increase students' cultural literacy and citizenship based on Education for Sustainable Development (ESD).

### Research Method

This research used the Design and Development (D&D) method (Richey & Klein, 2014) and focuses on developing learning media. The model used in research was the ADDIE model, which consists of five stages: Analysis, Design, Development, Implementation, and Evaluation (Branch, 2009). The analysis stage involves analyzing teaching tools, curriculum, and materials. At the design stage, the researcher prepared a media draft including a front cover page, learning objectives page, user instructions page, character introduction page, and content page. The development stage is realizing the design prepared in the previous stage. Implementation is carried out after getting the eligibility test value from the validator. The final stage is the evaluation stage, namely improvements from the input obtained during implementation.

This research involves several participants: media experts, material experts, learning experts, and 23 grade IV elementary school students in Bandung. Data collection techniques include filling in work logs, expert validation, and tests. Expert validation data was collected using an eligibility questionnaire with a Likert scale. The data analysis technique in this research was carried out in two ways: qualitatively and quantitatively. Qualitative data analysis in this research refers to the Miles and Huberman model (Sugiyono, 2015), which includes three stages, namely data reduction, data presentation, and conclusion drawing or verification. Quantitative data obtained through expert feasibility tests and test scores were analyzed using a Likert scale with four criteria. From the scoring data, the score data is then processed through the average percentage calculation process using the feasibility value formula (Ulya & Rofian, 2019). The assessment eligibility criteria are in **Table 1**.

**Table 1. Assessment Criteria Table**

No	Scale	Interpretation
1	81%-100%	Very Good
2	61%-80%	Good
3	41%-60%	Fair
4	21%-40%	Poor
5	0%-20%	Very Poor

### Results and Discussion

The results of this research were digital comic learning media based on Education for Sustainable Development to increase the cultural and citizenship literacy of phase B students by going through 5 stages of the ADDIE development model, namely the analysis, design, development, implementation, and evaluation stages. The analysis stage was undertaken by reviewing the *Kurikulum Merdeka*, precisely the learning outcomes. Learning outcomes under cultural and citizenship literacy achievement indicators were obtained at this stage. The materials that would be used to increase students' cultural and citizenship literacy were learning outcomes in phase B. The learning outcomes used in developing this learning media are as follows:

**Table 3. IPAS Phase B Learning Outcomes Table**

#### Learning Outcomes

Subject: IPAS

Phase: B

Students describe biodiversity, cultural diversity, local wisdom, and conservation efforts.

At the design stage, a design for each component of the comic learning media was produced. The digital comic learning media that is being developed has four chapters. The

components in each comic include learning objectives, learning experiences, and storyboards for each chapter so that the material contained in each chapter does not overlap.

**Table 4. Materials Linkages**

No	Indicators	Cultural and Citizenship Literacy Indicators	ESD Aspect	Linkages
1	1.1 Define 2 types of natural resources. 1.2 Identify 2 types of biodiversity. 1.4 Analyze ways to conserve biodiversity.	-	2.1 Natural resources (water, energy, agriculture, biodiversity) 2.2 Climate Change	Material regarding biodiversity and resources in Indonesia and how to preserve them.
2	1.14 Analyze the factors that cause diversity in Indonesia.	-	1.1 Human Rights 1.2 Peace and human security 1.3 Gender Equality 1.4 Cultural diversity & intercultural understanding	Material regarding factors that shape the diversity and complexity of society in Indonesia
3	1.5 List 3 examples of ethnic groups in Indonesia 1.6 List 3 examples of traditional houses in Indonesia 1.7 List 3 examples of traditional arts in Indonesia 1.8 List 3 examples of traditional clothes in Indonesia 1.9 List 3 examples of regional languages in Indonesia 1.10 List 5 religions approved by the Indonesian government. 1.12 List the example of local wisdom in Indonesia.	Know their own culture	1.4 Cultural diversity & intercultural understanding	The material contains cultural diversity and local wisdom in Indonesia
4	1.3 Categorize applicable economic activities according to geographic location.	-	3.1 Corporate responsibility and accountability	Material regarding economic activities according to geographic location and how society is responsible for managing natural resources.
5	1.11 Analyze efforts to preserve cultural activities. 1.13 Analyze the effort to	Concern about culture.	1.4 Cultural diversity & intercultural understanding	Material for cultural preservation

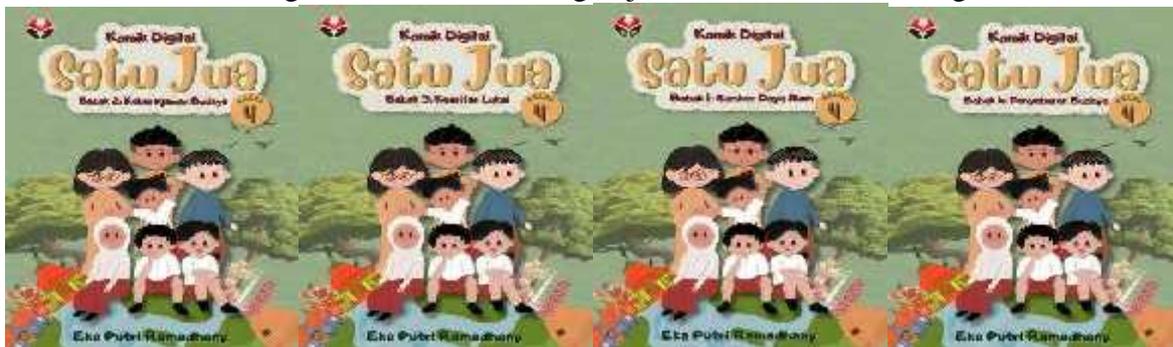
	preserve local wisdom.		efforts is related to aspects of cultural awareness.
6	-	Understand the complexities of culture and citizenship	-
7	-	Know civic obligation	-

The products that have been developed then go through a validation testing stage by material experts, media experts, and learning experts. The results of the validation test for digital comic media can be seen in **Table 5**.

**Table 5. Final Media Eligibility Test Result Table**

No.	Validator	Feasibility Test Results
1	Material Expert	100
2	Media Expert	93,75
3	Learning Expert	100
<b>Total Eligibility Test Result</b>		293,75
<b>Average Eligibility Test Result</b>		97,91

Referring to the learning outcomes, the comic chapter development is divided into four chapters. Each chapter contained one topic that was derived from learning outcomes. Chapter One focuses on natural resources, Chapter Two examines cultural diversity, Chapter Three discusses local wisdom, and Chapter Four discusses the spread of culture. Five components in each digital comic media developed are the front cover page, learning objectives, instructions for use, character introduction page, and contents page. The comic cover can be seen in Figure 1, and the learning objectives can be seen in Figure 2.



**Figure 1. Digital Comic Cover Page**



**Figure 2. Learning Objectives Page**

The usage instructions page contains how to use the media in learning activities, devices that can be used to read the digital comic, how to read the digital comic, and the order in which to read comic panels. The character introduction page contains character images accompanied by each character's name. There are seven characters in this digital comic; four characters have the role of fourth-grade elementary school students, two have the role of teachers, and one character has the role of the neighbor's grandfather. The visualization of the characters in this comic refers to the daily lives of elementary school students in Indonesia. The user manual and character introduction page can be seen in **Figure 3**.



**Figure 3. Usage Instructions And Character Introduction Page**

The contents page is the main point of developing digital comic media because it contains learning material and information to help students achieve learning goals. The contents page contains the elements that make up digital comics, such as panels, trenches, words/text, word balloons, and images/illustrations. Excerpts of the content pages for each chapter can be seen in **Figures 4, 5, 6, and 7**.



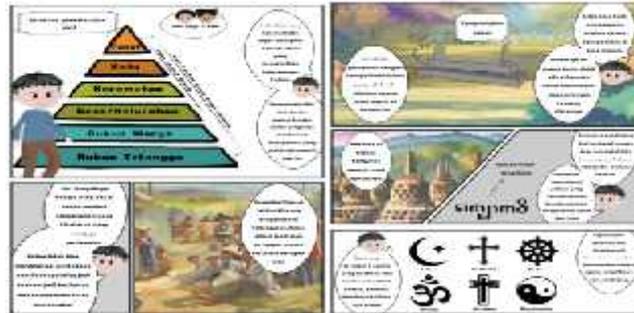
**Figure 4. Content Page with Learning Material in Chapter 1**



**Figure 5. Content Page with Learning Material in Chapter 2**

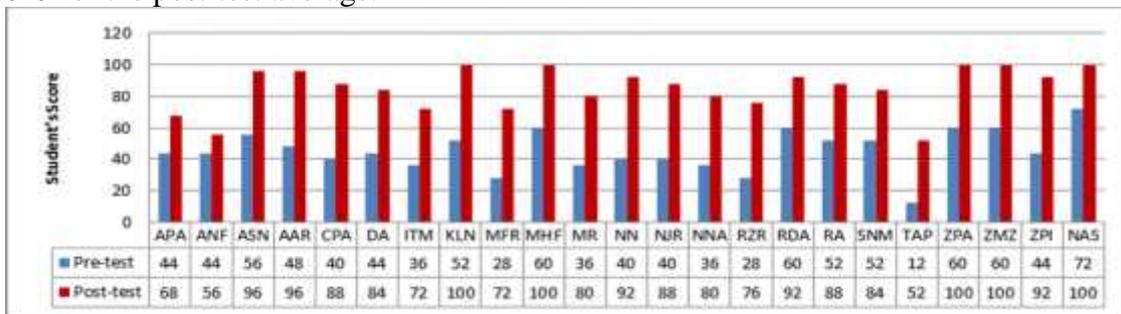


**Figure 6. Content Page with Learning Material in Chapter 3**



**Figure 7. Content Page with Learning Material in Chapter 4**

The fourth stage of digital comic development is the implementation stage, undertaken using digital comic media products developed for grade 4 elementary school students. The questions refer to the learning objectives given to students are made in multiple choice with two tests in the form of a pre-test and a post-test. The average pre-test score was 45.391, and 85.045 for the post-test average.



**Figure 8. Graphic of Class IV Students' Pre-Test and Post-Test Results**

This stage is undertaken by calculating the N-Gain value to determine the increase in the value of cultural and citizenship literacy skills. The N-Gain in the research resulted in a score of 0.75, which is categorized as high. The N-Gain can be seen in Table 6.

**Table 6. Students Cultural and Citizenship Literacy Abilities N-Gain**

Pre Test	Post Test	Ideal Score	N-gain
45,391	85,045	100	0,756504787

## Discussion

This research provides conceptual and practical implications. Conceptually, education for sustainable development can be integrated into social studies learning in elementary schools. Intracurricular activities or learning processes in the independent curriculum are carried out to achieve national education goals and the Pancasila student profile. Cultural and civic literacy, which is one of the profiles of Pancasila students, can be developed through



social studies learning. Furthermore, education for sustainable development and Pancasila student profiles can be taught simultaneously through comic media.

Practically, this research provides several implications. The development of character illustrations must be adapted to the characteristics and realities of elementary school students' lives. Comics are best developed with the vertical scrolling type because of their accessibility which is easier to apply to many platforms. If the scope of the material to be taught is complex, then the comic can be made in several rounds. Comics must not only contain material presentations, but must stimulate students to construct knowledge. Comic storylines must facilitate students from low-level thinking to high-level thinking hierarchically.

The learning objectives are a benchmark for determining students' abilities. Learning media that was developed referring to learning objectives will help mediate the learning material with students, following the principle of developing learning media, which must be appropriate and directed to achieve learning goals (Kristianto, 2016). The increase in students' cultural and citizenship literacy is related to the type of developed media, namely comics. The advantage of digital comic media as a learning medium is that comics can facilitate retrieving information in reading, which aligns with the statement that comics are a superior communication tool. It can convey scientific messages that are not stories but are presented like stories (Nurgiyantoro, 2018). Comics can make teaching and learning more effective, increase students' interest in learning, and generate interest in students' appreciation. Interest in learning and appreciation of material that arises will make it easier for students to process information to improve learning outcomes (Sudjana & Rivai, 2011).

The creation of character designs in this research refers to the characteristics of fourth-grade elementary school students. According to Piaget, grade 4 students are in the concrete operational stage, where describing a situation in a comic will be easier for students to absorb if they feel attached to the facts (Desmita, 2015). Apart from referring to the characteristics of students, design-making also refers to several aspects, such as the silhouette approach, color, posture/gesture, costume, unique parts of the character, and simplicity of the character (Musnur & Faiz, 2019). The choice of panel shape is not limited to square or rectangular shapes because the type of comic developed is not a strip comic but a vertical scrolling comic. The choice of this type of vertical scrolling digital comic is due to its accessibility, which is easier to apply to many platforms and devices (Lamerichs, 2020).

The development of character illustrations is adapted to the characteristics of elementary school students who tend to be interested in images that are close to reality. The characteristic is in line with the visual preferences of students aged 10-12 years, who tend to like cheerful and realistic illustrations (Brookshire et al., 2002). According to House and Rule, children tend to like illustrations that have familiar objects, settings, and activities involved (Beni & Kali, 2019).

The development of the story content in digital comic media refers to the characteristics of ESD according to UNESCO by developing stories with sustainable elements in three sectors (Environmental, Socio-Cultural, and Economic). Content regarding sustainable development is integrated with existing learning outcomes, and this is done because not all curricula explicitly contain the principles of sustainable education. However, these learning outcomes can still be developed into indicators that apply the principles of sustainable development (Supriatna et al., 2018). The characteristics of ESD in question are focused on students, holistic education, education using various methods, education based on a deep thinking approach, education that brings out values or essentials, an approach that prioritizes local culture, local issues alongside global issues, and uses different languages can be understood by all parties, as well as lifelong learning (Mochtar et al., 2014).



At the end of each chapter, there is a stimulus for students to learn about the diversity of the material being discussed. Teachers can use the finding-out activity to adapt to the environment and characteristics of each student so that students' knowledge is not limited to only the material available in the media. In this way, this digital comic media has fulfilled the character of ESD, which focuses on students and allows each student to find out more. This learning experience follows the “focusing on students” principle, namely that students get the opportunity and facilities to discover and explore their knowledge to gain deep knowledge (deep learning) within themselves (Antika, 2014). Using ESD as a basis for development, sustainability in education is also emphasized to encourage students to understand the importance of lifelong learning.

The development of digital comics not only focuses on students' cognitive domains but also supports the development of affective and psychomotor domains. The storyline shows the affective and psychomotor domains, which support students' ability to develop thinking to determine attitudes regarding biodiversity, cultural diversity, and local wisdom. Student exploration activities also support students' physical development by utilizing the existing environment. According to Miller et al., holistic education develops all students' potential harmoniously (integrated and balanced), including intellectual, emotional, physical, social, social potential, aesthetic, and spiritual. In this way, this digital comic media fulfills the characteristics of ESD, namely being holistic and generating value (Widyastono, 2012).

Learning objectives are ordered hierarchically from the lowest to the highest competency according to the student's cognitive domain. By ordering learning objectives according to the level of their cognitive domain, students can move from a lower level of material to a more complex level of material (Qasrawi & Beniabdelrahman, 2020). The learning objectives achieved using comic media are divided into two types: in LOTS and HOTS domain. The two levels of the cognitive domain are a single unit because to achieve HOTS competency, students must first achieve LOTS competency (Tikhonova & Kudinova, 2015). HOTS competency in this media shows that students use a high and deep level of thinking that follows the characteristics of ESD, namely education based on a deep thinking approach (Mochtar et al., 2014).

The material developed from learning outcomes is divided into three materials: biodiversity, cultural diversity, and local wisdom, which are linked to indicators of cultural and citizenship literacy achievement. The examples of the three materials in this comic refer to culture and issues currently occurring locally and globally. This is done to support the achievement of cultural and citizenship literacy skills, precisely behavioral skills in national culture as national identity, as well as understanding the rights and obligations as citizens, which include the ability of individuals and communities to behave towards their social environment as part of a culture and nation. Students' participation skills can be improved by depicting situations in comics; this aligns with previous research explaining that comic media impacts students' attitudes toward environmental care and reasoning abilities, so comics can be used as a learning medium without reducing learning effectiveness (Mardiyah, 2016).

## Conclusion

Based on the results of the research findings, it was concluded that the expert validation results from the three experts are categorized as excellent. The N-Gain result of students' cultural literacy and citizenship is 0.75 in the high category. The digital comic media developed is feasible and can be used by educators and students as a learning medium for cultural diversity material to increase cultural literacy and citizenship for Elementary School Phase B students.



## Recommendation

Teachers in teaching should not only focus on cognitive aspects. It is necessary to integrate the Pancasila Student Profile and sustainability as an effort to achieve the SDGs. Teachers can use comics as a learning medium. Further researchers can also develop digital comic media to improve cultural and citizenship literacy for other phases and grades.

## References

- Antika, R. R. (2014). Proses Pembelajaran Berbasis Student Centered Learning (Studi Deskriptif di Sekolah Menengah Pertama Islam Baitul 'Izzah, Nganjuk). *Jurnal Biokultur*, 3(1), 251–263.
- Araujo, M. V., Ramirez, E. R., Rojas, L. H., & Lobo, C. B. (2005). *Teaching Sustainable Lifestyle with the Earth Charter: Guideline for Second Cycle Teachers of Basic General Education*. Earth Charter Initiative.
- Beni, M. Ž., & Kali, K. (2019). Explaining preferences for illustration style and characteristics in early childhood. *Journal of Elementary Education. Revija Za Elementarno Izobraževanje*, 12(2), 215–228. <https://doi.org/10.18690/rei.12.2.215-228.2019>
- Branch, R. M. (2009). *Instructional Design: The ADDIE Approach*. Springer US. <https://doi.org/10.1007/978-0-387-09506-6>
- Brookshire, J., Scharff, L. F. V., & Moses, L. E. (2002). The influence of illustrations on children's book preferences and comprehension. *Reading Psychology*, 23(4), 323–339. <https://doi.org/10.1080/713775287>
- Desmita. (2015). *Psikologi Perkembangan* (9th ed.). PT. Pemuda Rosdakarya.
- Kementerian Pendidikan, K. R. dan T. (2022). *Perubahan Atas Keputusan Kepala Badan Standar, Kurikulum, dan Asesmen Pendidikan Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi Nomor 008/H/KR/2022 Tahun 2022 tentang Capaian Pembelajaran Pada Pendidikan Anak Usia Dini, Jenjang Pendidikan Dasar dan Jenjang Pendidikan Menengah pada Kurikulum Merdeka*. Kementerian Pendidikan, Kebudayaan, Riset dan Teknologi.
- Lamerichs, N. (2020). Scrolling, swiping, selling: Understanding Webtoons and the data-driven participatory culture around comics. *Participations: Journal of Audience & Reception Studies*, 17(2), 211–229.
- Lo, P., Lyu, Y.-P., Chen, J. C., Lu, J.-L., & Stark, A. J. (2022). Measuring the educational value of comic books from the school librarians' perspective: A region-wide quantitative study in Taiwan. *Journal of Librarianship and Information Science*, 54(1), 16-33. <https://doi.org/10.1177/0961000620983430>.
- Maine, F., Cook, V., & Lähdesmäki, T. (2019). Reconceptualizing cultural literacy as a dialogic practice. *London Review of Education*, 17(3), 383–392. <https://doi.org/10.18546/LRE.17.3.12>
- Mardiyah, D. A. (2016). *Pengembangan Media Komik Pembelajaran Untuk Meningkatkan Penalaran Dan Dampaknya Terhadap Sikap Peduli Lingkungan Pada Konsep Pencemaran Lingkungan Di SMP*. [Universitas Pendidikan Indonesia]. <http://repository.upi.edu/25855/>
- Marianthi, V., Boloudakis, M., & Retalis, S. (2008). *From Digitised Comic Books to Digital Hypermedia Comic Books: Their Use in Education*.
- Matitaputty, J. K., Ufie, A., Ima, W., & Pattipeilohy, P. (2022). Implementasi Education For Sustainable Development (ESD) melalui Ekopedagogi dalam Pembelajaran di SMP



- Negeri 8 Ambon. *BUDIMAS: Jurnal Pengabdian Masyarakat*, 4(1).  
<https://doi.org/10.29040/budimas.v4i1.3532>
- Mochtar, N. E., Gasim, H., Hendarman, Indrastuti, N., Wijiasih, A., Suryana, C., Restuningsih, K., & Tartila, S. L. (2014). *Pendidikan untuk Pembangunan berkelanjutan (Education for Sustainable Development) di Indonesia: Implementasi dan kisah sukses*. (A. K. Seta & N. E. Mochtar, Eds.). Komisi Nasional Indonesia untuk UNESCO (KNIU)
- Musnur, I., & Faiz, M. (2019). Analisis Penyajian Karakter dan Alur Cerita pada Komik Vulcaman-Z. *Narada : Jurnal Desain Dan Seni*, 6(2), 339–360.  
<https://doi.org/10.22441/narada.2019.v6.i2.010>
- Nudiati, D. (2020). Literasi Sebagai Kecakapan Hidup Abad 21 Pada Mahasiswa. *Indonesian Journal of Learning Education and Counseling*, 3(1), 34–40.  
<https://doi.org/10.31960/ijolec.v3i1.561>
- Persaud, A. (2017). Integrated Planning for Education and Development. *European Journal of Education*, 52(4), 448–459. <https://doi.org/10.1111/ejed.12233>
- Richey, R. C., & Klein, J. D. (2014). Design and development research. In *Handbook of Research on Educational Communications and Technology: Fourth Edition* (pp. 141–150). Springer New York. [https://doi.org/10.1007/978-1-4614-3185-5\\_12](https://doi.org/10.1007/978-1-4614-3185-5_12)
- Rosfiani, O., Hermawan, C. M., & Sutisnawati, A. (2022). Developing 21st Century Skills and Literacy Skills for Elementary School Students Through Constructivist-Based Planning and Assessment of Critical Engagement Models. *Proceedings of the Sixth International Conference on Language, Literature, Culture, and Education (ICOLLITE 2022)*, 414–421. [https://doi.org/10.2991/978-2-494069-91-6\\_65](https://doi.org/10.2991/978-2-494069-91-6_65)
- Sudjana, N., & Rivai, A. (2011). *Media Pengajaran (Penggunaan dan Pembuatannya)*. (10th ed.). Sinar Baru Algensindo.
- Sugiyono. (2015). *Metode Penelitian Kombinasi (Mix Methods)*. Alfabeta.
- Supriatna, N., Romadona, N. F., Saputri, A. E., & Darmayanti, M. (2018). Implementasi Education for Sustainable Development (ESD) Melalui Ecopedagogy dalam Pembelajaran Tematik Terpadu di Sekolah Dasar. *Primaria Educationem Journal* /, 1(2), 80–86. <http://journal.unla.ac.id/index.php/pej/article/view/1077/748>
- Ulya, H., & Rofian, R. (2019). Pengembangan Media Story Telling Berbasis Montase Sederhana Sebagai Suplemen Bahan Ajar Tema Peduli Terhadap MakhluK Hidup Kelas IV Sekolah Dasar. *Jurnal Pendidikan Dasar Nusantara*, 4(2), 140.  
<https://doi.org/10.29407/jpdn.v4i2.12166>
- Wahab, A., Junaedi, J., & Azhar, Muh. (2021). Efektivitas Pembelajaran Statistika Pendidikan Menggunakan Uji Peningkatan N-Gain di PGMI. *Jurnal Basicedu*, 5(2), 1039–1045. <https://doi.org/10.31004/basicedu.v5i2.845>
- Wahlström, N. (2022). School and democratic hope: The school as a space for civic literacy. *European Educational Research Journal*, 21(6), 994–1008.  
<https://doi.org/10.1177/14749041221086721>
- Widyastono, H. (2012). Muatan Pendidikan Holistik dalam Kurikulum Pendidikan Dasar dan Menengah. *Jurnal Pendidikan Dan Kebudayaan*, 18(4), 467–476.
- Wulandari, A., & Hapsari, T. P. R. N. (2020). Local Wisdom Based Education Comics as a Media for Student Literacy Learning. *Prosiding ICoISSE*, 1(1).
- Yusuf, R., Sanusi, Razali, Maimun, Putra, I., & Fajri, I. (2020). Tinjauan Literasi Budaya Dan Kewargaan Siswa SMA Se-Kota Banda Aceh. *Jurnal Pendidikan Kewarganegaraan Undiksha*, 8(2), 91–99.  
<https://doi.org/https://doi.org/10.23887/jpku.v8i2.24762>