Development of Digital Handouts on Pancasila Education Subjects Using the Ricosre Learning Model in Elementary Schools

Windy Zaurotun Izdayana Salsabila¹, Ellianawati², Nuni Widiarti³

¹Master Program, Student of Primary Education,^{2,3}Master Program, of Primary Education Semarang State University, Semarang City, Indonesia

Corresponding Author: Windy Zaurotun Izdayana Salsabila

DOI: https://doi.org/10.52403/ijrr.20241011

ABSTRACT

Digital handouts help enrich material, increase reading interest, and support learning outcomes according to the characteristics of the learning environment. The aim of this research is to produce and develop a suitable and effective digital handout for Pancasila Education Phase B using the RICOSRE learning model in elementary schools. The study also aims to determine the practical impact of developing digital handouts on student learning outcomes for this subject. The research method employs the 4D development model, consisting of four stages: Define, Design, Develop, and Disseminate. This method and model were chosen to produce a digital handbook media. Data sources include 22 fourth-grade students and their teacher from SD Negeri Dateng. Data collection instruments include observation sheets, interview sheets, expert validation forms, written tests, and questionnaires. Data validity was processed using Aiken's V. The data analysis technique employed is quantitative analysis. Results show that the RICOSRE-based handout is designed to meet student needs, presented online with a flipbook. and relevant to students' environment. Its validity is high according to language, media, and content experts, with percentages of 0.83%, 0.92%, and 0.94%, respectively. Questionnaire results indicate that 93.5% of students and 92.2% of teachers strongly agree with the use of this handout in fourth-grade classes

Keywords: Development, Digital Handouts, Literacy, Reading, RICOSRE Learning Model

INTRODUCTION

Digital handouts are non-printed teaching materials that present important and relevant learning material to the curriculum in a complex way but are easy to understand and use. Its advantages include flexibility, brevity, and a wealth of literature that supports the learning process (Ermawati et al., 2022). Its use can increase students' interest in reading and learning outcomes by increasing study hours without the element of compulsion, in accordance with the characteristics of independent teaching materials. Digital handouts ideally fulfill components such as suitability of content, language, and presentation according to the student's level of development (Siti et al., 2018). This makes it easier to create teaching materials that encourage interest in learning and reading and form long-term memories connected to surrounding phenomena. Research by Sari & Yoenanto (2019) found that creative thinking, creative learning, and creative teaching by teachers have a significant effect on student learning especially creativity outcomes, the of

teaching materials that support students' needs. Evaluation of the effectiveness of digital handouts is important to ensure improved learning outcomes in affective, cognitive, and psychomotor aspects. Mahadiraja & Syamsuarnis, 2020).

Observations and interviews show that students in fourth grade elementary school still have low interest in reading, affecting learning outcomes. The need for interactive teaching materials arises because currently the only teaching materials are textbooks from the government. It is hoped that digital handouts can increase students' interest in reading, character, and love of their homeland. The teacher's ability to use learning media is good, and students are able to operate laptops. This digital handout is designed for effective independent learning using the RICOSRE model, which includes reading, identifying, constructing, solving, reviewing, and extending.

This model aims to increase student interest in reading, critical thinking power, and learning outcomes. Previous research shows that the RICOSRE model is significant in improving students' cognitive abilities, with an increase in pretest to posttest results of 26.9%. This model's learning activities include reading texts, identifying problems, reviewing, creating. designing, and explaining problem solving (Sumiati, Mhanal, et al., 2018). This research aims to create RICOSRE-based digital handouts for learning Pancasila Education at SD Negeri 1 Dateng Lamongan. It is hoped that it can encourage interest in reading, increase critical thinking power, and improve student learning outcomes in accordance with the Merdeka Curriculum.

MATERIALS & METHODS

This research method uses a 4D development model. The 4D development model consists of 4 stages, namely: define, design, develop, and disseminate. This method and model were chosen because it aims to produce a product in the form of digital handbook media. Sources of data collected in this research included 22 class IV students at Dateng State Elementary School and class IV teachers at Dateng State Elementary School. The data collection instruments used in this research were observation sheets, interview sheets, expert validation test sheets, written tests, and questionnaire sheets. Validity value data processing uses Aiken's V validity. The data analysis technique used in this research is quantitative analysis techniques.

RESULT AND DISCUSSION

This research aims to develop digital handouts to support and support the process of learning activities on Pancasila material in class IV elementary schools. The handout developed is wrapped in the RICOSRE learning model, which has stages (reading, identifying, constructing, solving, reviewing, and extending). The results of this research refer to the problem formulation, including: 1) feasibility of digital handouts; 2) effectiveness of digital handouts; and 3) characteristics of digital handouts in Pancasila phase B education subjects with the RICOSRE learning model in elementary schools. This research was conducted at SDN Dateng, Lamongan Regency, East Java. Handout

Characteristics Handout

Characteristics have several stages in the development process, including:

Define Stage Results

The define stage begins with carrying out an analysis to find out and determine the basic problems in learning obtained by conducting observations and interviews. The define stage aims to find out the facts that occur in the field based on the opinions of teachers and students. Next, analyze students' learning needs based on existing problems.

a. Curriculum Analysis

The curriculum used in schools uses the Independent Curriculum. The application of the Merdeka Curriculum is only carried out in classes I and IV; the other classes are still applying the 2013 curriculum. In the

observation process, there were obstacles experienced in applying the Merdeka Curriculum because there were regulations from the government that were not in accordance with the conditions for its implementation.

external obstacle The obtained from implementing the Independent Curriculum is that students are not used to looking for independent learning resources and are required to be active in learning. Students experience a lack of learning resources that support them in carrying out learning activities. The assessment or examination process is the pattern of examination questions that is standardized by the center, whereas in the Independent Curriculum the assessment is adjusted to the students' abilities so that the school makes changes to several questions so that they are in accordance with the material that has been provided. Information was obtained about problems in learning Pancasila education, material on values in the application of Pancasila, and a lack of learning resources in learning activities, which are still dominated by teachers.

b. Analysis of Teaching Materials

Analysis of teaching materials is an important part of the implementation of education. Through teaching materials, teachers will find it easier to carry out learning, and students will be more helped and easier to learn. Teaching materials can be made in a form according to the needs and characteristics of the material presented. Based on the results of observations in elementary schools, the teaching materials used have not developed students' reading literacy. This makes it difficult for students to understand the material, so there is a need for innovation to develop teaching materials that suit students' needs.

The analysis results obtained show that the learning resources used by students are still limited, where the books used do not contain existing applications in the surrounding environment. The learning resources owned by teachers and students are still inadequate. Students often use books in the form of student worksheets, where in their learning the teacher plays the main role using the lecture learning method; apart from that, the material is not much related to daily life in the environment where students live. Therefore, information related to the values in Pancasila is still limited. This results in low student literacy.

c. Learning Process Analysis

The results of the analysis of the learning process carried out in the classroom show that teachers still often use the lecture method and there are no supporting media during the learning process. This makes students inactive during learning activities. In fact, in implementing the Independent Curriculum, it is the students themselves who must be active. Based on existing problems, teaching materials are needed that are more innovative and can support students to improve reading literacy by developing digital handout teaching materials on the values of implementing Pancasila.

Results of the Design

Stage The next stage is design. This stage is carried out by designing a product design for teaching modules that will be developed in accordance with the problem analysis that has been carried out previously. This stage includes the design of digital handouts and student response instruments.

a. Digital Handout Design

The handouts in this research are packaged in flipbook form, which includes: cover, foreword, instructions for use, table of contents, elements of learning outcomes, learning objectives, materials, and table of contents. The following displays the teaching module in flipbook form. Handout design in Table 1.

Component	Description	Picture
Cover Cover	Description The front cover page contains the title, title of the material There are elements of learning	Picture
elements of learning outcomes and learning objectives	outcomes and learning objectives that will be implemented.	<section-header><section-header><section-header><section-header><section-header><section-header><section-header><section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header></section-header>
The contents of the handout consist of material and syntax for the RICOSRE learning model.	There is material content and syntax for the RICOSRE learning model which consists of; Reading, Identifying, Constructing, Solving, Revising, Extending	<image/> <image/> <image/> <image/>
The closing section contains profiles of the author and supervisor	Digital handout author profile on Pancasila education subjects Phase b with learning model Ricosre in elementary schools to improve reading literacy	DOSEN PEMBIMBING FUNDER 1 TOTAL 2012 TOTAL 2012 TO

Table 1 Handout Design

Develop stage results

The stages are carried out by media experts, language experts, and material experts. Data obtained:

a. Media Expert Test

The media expert test aims to test the feasibility of the handout design using the RICOSRE learning model. Comments and suggestions from media experts will be improved and developed so that the handout is better.

b. Language expert test

The linguist test aims to test the appropriateness of the language used in developing handouts using the RICOSRE learning model. Comments and suggestions from language experts are used as improvements so that students can understand the product.

c. Material Expert Test

The material expert test aims to test the suitability of the handout with the RICOSRE learning model. Material experts provide comments and suggestions for improvements regarding the products being developed. Comments and suggestions from material experts are used as corrective teaching material to obtain handouts that are appropriate to the material.

Results of the Dissemination Stage

At the dissemination stage, handouts with the validated RICOSRE learning model were distributed to Dateng Elementary School schools. Product distribution is carried out through providing links and through workshops for grade 4 teachers in Laren.

Handout Eligibility

Product feasibility testing in the form of handouts using instruments that have been validated by experts and small-scale tests. The feasibility test aims to determine the feasibility and implementation of the product given by media experts, language experts, and material experts and is a small-scale test given to class V students.

a. Expert Validation

Handout validation was carried out by 3 experts, namely media experts, language experts, and media experts. Validation was carried out with Semarang State University lecturers and visiting elementary school teachers. Aspects assessed by validators can be seen in Table 2.

	Table 2. Aspects Assessed by Valuators				
Validator	Rated aspect				
Media	Appropriate placement of layout elements, handout cover design, and handout content design				
Language	Conformity with Indonesian language rules and communicative and interactive				
Material	Suitability of material with CP, TAPI, and characteristics of learning materials.				

Table 2. Acreate Accessed by Validators

Product development in the form of handouts using the RICOSRE learning model to increase the reading literacy of elementary school students. Before carrying out a trial of the product being developed, validation needs to be carried out by an expert validator in the field. Validation is carried out by providing an initial product accompanied by research instruments. In the media expert instrument there are 15 statements, in the language expert instrument there are 6 statements and in the material expert instrument there are 13 statements.

Handout validity tests include validation tests from media experts, language experts and material experts. The validator test was carried out by Siti Herlina Dewi, M. Pd, a lecturer at Semarang State University and Sri Handayani, S. Pd, a teacher at SDN Dateng Istiqomah Magfiroh, S. Pd, a teacher at SDN Keduyung who was an expert in her field. The validation results assessed by the validator can be seen in Table 3.

Statement	Item	Skor		
Statement	Number	1	2	3
Handouts are used in the form of existing software	1	3	4	4
Digital handouts are easy to use	2	3	4	4
The instructions in the handout are easy to use 3			3	4
Handouts are easy to use in a variety of lessons	4	2	4	4
There are clear instructions for using the handout				
The letters used are attractive and easy to read	5	2	3	3
Don't use too many fonts	6	4	4	4
Handout coloring does not interfere with understanding the entire material	7	4	4	3
Handout coloring helps understand concepts	8	4	4	4
Consistent placement of layout elements	9	3	4	4
The title level is clear, consistent and proportional	10	4	4	3
Each display is a combination of components that work together so that the			4	4
handout appears clear	11	-	-	-
The images used are appropriate to the material	12	3	3	4
Accurate form according to reality 13			4	4
Handouts use more than one representation 14			4	4
Handouts are easy to use in a variety of lessons 15			2	3
Amount			55	56
Aiken's V Value				

Table 3 Media expert validation results

The validation results assessed by language expert validators can be seen in Table 4.

Indicator	Statement	Item Number	Validation Score		
		INUILIDEL	1	2	3
Conformity withLanguage conforms to Enhanced SpellingIndonesian language(EYD)		1	4	4	4
rules	Grammatical correctness	2	4	4	4
	There is no double interpretation of the words used	3	4	3	4
Communicative and interactive	The language used is easy to understand	4	4	4	4
	Suitability of the language used with elementary school students' language abilities	5	4	4	4
	The language used is communicative	6	3	4	3
Amount 23 23 23					
Aiken's V Value 0,94					

Table 4 Linguist Expert Validation Results

The validation results assessed by the material expert validator can be seen in Table 5.

Indicator	Indicator Statement		Vali Scor	Validation Score		
			1	2	3	
Learning	Material is appropriate to learning outcomes	1	4	4	4	
	The material is appropriate to the learning objectives	2	4	4	3	
	The content of the handout is appropriate to the student's level of cognitive development	3	3	4	3	
	Handouts according to student characteristics	4	3	4	4	
	Handouts are easy to use in learning	5	3	4	3	
	Learning topics are presented clearly	6	3	3	4	
	Handouts make learning easier for students	7	3	3	3	
Material	The material content is clear	8	3	4	3	

Table 5 Table of Material Expert Results

Important material studied by students	9	4	4	4
The contents of the handout make it easier for students to understand the material	10	3	3	4
The use of text in the handout is appropriate to the material	11	3	4	3
The text is presented clearly	12	3	4	3
Handouts can motivate students	13	3	3	4
Amount	42	48	45	
Aiken's V Value				

The assessment results from media experts were 0.83, language experts 0.94, and material experts 0.82. Thus, the average value of the expert validation assessment of 0.86 is included in the "Very Valid" criteria. A recapitulation of product assessment results from validators is shown in Table 6.

 Table 6 Recapitulation of Product Assessment

 Results from Validators

No.	Validator	mark	Validity Criteria
1	Media	0,83	very valid
2	Bahasa	0,94	very valid
3	Materi	0,82	very valid
Aver	age value	0,86	very valid

b. Small Scale

Test On a small scale, there are 10 class V students. This activity began by introducing a handout of material on the values of applying Pancasila principles in everyday life. Explain what is in the handout and how to use it. The activity continued with each student being given a barcode to access the handout so they could read and study it. After reading, students are given a response questionnaire to the handout using the RICOSRE learning model. The results obtained from the small-scale test results can be seen in Table 7.

|--|

No.	Assessment	Criteria	Kriteria	
-	Aspects			
1.	Interest	Very good	Sangat baik	
2.	Language	Very good	Sangat baik	
3.	Material	Very good	Sangat baik	
Average		93,56	Very good	

The average value of students' responses to handouts with the RICOSRE learning model during small-scale trials was 93.56% with very good criteria, which means the handouts with the RICOSRE learning model are suitable for use.

Effectiveness of Handouts

The effectiveness test used to test the effectiveness of handouts using the RICOSRE learning model is using the n-gain score test. The n-gain test aims to determine the increase in students' learning outcomes after being given handouts using the RICOSRE learning model.

The effectiveness of handouts using the RICOSRE learning model can be seen through students' cognitive learning outcomes. The effectiveness of handouts was carried out on class IV students by giving multiple choice tests. The initial step of the research was to provide pretest questions to students without providing handouts using the RICOSRE learning model. Then the learning process is carried out by providing handouts using the RICOSRE learning model to students, and they are given posttest questions. The results of the students' pretest and posttest data are in Table 8.

No.	Pretest	Posttest	n-gain	Category			
1	60	90	0,75	Quite effective			
2	50	85	0,7	Quite effective			
3	50	85	0,7	Quite effective			

4	70	100	1	Effective
5	80	100	1	Effective
6	55	90	0,777778	Quite effective
7	50	85	0,7	Quite effective
8	60	90	0,75	Quite effective
9	50	85	0,7	Quite effective
10	50	100	1	Effective
11	65	90	0,714286	Quite effective
12	55	95	0,888889	Effective
13	60	95	0,875	Effective
14	50	90	0,8	Effective
15	60	100	1	Effective
16	75	100	1	Effective
17	50	80	0,6	Quite effective
18	60	95	0,875	Effective
19	50	85	0,7	Quite effective
20	50	90	0,8	Effective
21	55	85	0,666667	Quite effective
22	50	85	0,7	Quite effective
Average	58,08	91,54	0,81	Effective

The average score on the students' pretest results was 58.08, while the posttest was 91.54. The average n-gain obtained was 0.81, which is included in the "effective" category. So it can be concluded that the handout using the RICOSRE learning model is declared effective for class IV students.

Teacher Response and Student Response to Handouts

Response test analysis was carried out on 2 teachers and 22 experimental students with a questionnaire totaling 16 questions for teachers and 11 questions for students, both 4 scale questionnaires.

 $P = \frac{f}{N} \times 100\%$ Information: P = percentage numberf = score obtained $N = overall \ score$

Response Test Criteria Table

No	Tingkat Pencapaian (%)	Kualifikasi	Keterangan			
1	84 < x ≤ 100	Sangat menarik	Sangat menarik, tidak perlu direvisi			
2	68 < x ≤ 84	Menarik	Menarik, namun perlu direvisi			
3	52 ≤ x ≤ 68	Kurang menarik	Kurang menarik, perlu revisi			
4	36 < x ≤ 52	Tidak menarik	Tidak menarik, perlu direvisi			
5	$20 \le x \le 36$	Sangat tidak menarik	Sangat tidak menarik, perlu revisi			
		Sumber: Arikunto (201)	9:35)			

Teacher Response Results

User responses from teachers can be seen in Table 9.

Table 9 Teacher Responses								
No Oraction	Skor Instrumen							
No. Question	Teacher 1	Teacher 2						
1	4	4						
2	4	3						
3	4	4						
4	3	3						
5	4	4						
6	4	4						
7	3	4						
8	4	3						
9	4	4						
10	4	4						
11	4	4						
12	4	4						
13	3	3						
14	3	4						
15	3	4						
16	3	4						
Amount	58	60						
Max score	64	64						

 $P = \frac{118}{128} \times 100\% = 92,2\%$

The teacher response results were 92.2% with very interesting criteria, no need for revision, so handouts with the RICOSRE learning model can be used in learning.

Student Response Results

User responses from teachers can be seen in Table 10

	Table 10 Student Responses											
Student	Instrument score									Total		
	1	2	3	4	5	6	7	8	9	10	11	Total
1	4	4	4	3	4	4	4	3	4	4	3	41
2	4	4	4	4	4	3	4	3	3	4	4	41
3	4	3	4	4	4	4	4	4	4	4	4	43
4	4	4	3	4	4	4	4	3	3	4	4	41
5	4	4	3	4	4	3	4	3	4	4	4	41
6	4	4	4	4	4	4	4	4	4	4	3	43
7	4	4	4	3	4	4	4	3	4	4	4	42
8	4	3	4	4	3	3	4	4	3	4	3	39
9	4	4	4	3	4	3	4	2	4	4	4	40
10	4	4	3	4	4	4	4	3	3	4	3	40
11	4	4	4	3	4	3	4	4	4	4	3	41
12	4	4	4	4	3	4	4	4	3	4	3	41
13	4	3	4	3	4	3	4	4	3	4	4	40
14	4	3	4	4	3	4	4	4	4	4	4	42
15	4	4	4	3	3	4	4	3	4	4	4	41
16	4	4	4	4	4	3	3	4	4	4	4	42
17	4	3	4	4	3	4	4	4	4	4	4	42
18	4	4	3	4	4	3	4	3	3	4	4	40
19	4	3	4	4	4	3	3	4	4	4	4	41
20	4	4	4	3	4	3	4	3	2	4	4	39
21	4	4	4	4	4	4	4	4	4	4	4	44
22	4	4	3	4	3	4	4	3	4	4	4	41
	88	82	83	81	82	78	86	76	79	88	82	905

 $P = \frac{905}{968} \times 100\% = 93,5\%$

The teacher response results were 93.5% with very interesting criteria, no need for revision, so handouts with the RICOSRE learning model can be used in learning.

Handout with the RICOSRE learning model, which has been developed by researchers based on the define or preliminary analysis stage and the design or drafting stage. Researchers in the preliminary stage have carried out a needs analysis at SD N Dateng Lamongan and SD N Keduyung. From both schools, it was found that the problem of using learning models carried out by teachers was still not optimal. In these two schools, teachers still do not use many learning models and teaching materials during the teaching process. The impact of less than optimal use of learning models and teaching materials is low achievement of learning objectives in the learning process.

Based on the needs analysis, researchers conducted analytical studies to provide

solutions in learning through the development of handouts. This digital handout will help students carry out learning independently, either with or without educators, guidance from indirectly increasing learning time and increasing interest in reading, so that the learning outcomes achieved are in accordance with the learning objectives, or KKM. The product is in the form of teaching materials with a digital handout type based on Canva with the Reading, Identifying, Constructing, Reviewing Solving, & Extending (RICOSRE) learning model. The RICOSRE learning model was chosen as the syntax in this digital handout to make it easier for students to carry out learning activities. Apart from that, this learning model has the advantage of encouraging critical thinking in students. This learning model guides students directly and indirectly in solving problems. This advantage is what helps students develop high-level thinking skills

rather than just memorizing material (Manisa, Mahanal, & Rohman, 2020).

The handout is designed by selecting the media, the format, and the initial design. The handout medium was chosen because it saw the elements of convenience, interactiveness, and interest in learning; on the other hand, handouts can be used digitally. An important stage is choosing the format. From preliminary studies and design, researchers conducted studies on using the Canva application and appearance applications via Flipbook. The main reason for using this application is because it is easy to get; it is easy to create visual content such as handouts; you can design it yourself or use a design template (Rahmasari & Yogananti, 2021; Rosmalinda, Risdalina & Pamela, 2023). On the other hand, the display uses a flipbook because it is more dancing, practical, user-friendly, and interactive (Anggraini, 2022; Wangi Fakhrudin & Lubis, 2024). The handout design using the RICOSRE learning model consists of 21 pages, including the cover page.

The handout design on the cover displays the easy-to-understand title "PANCASILA." The material to be studied is "values of applying Pancasila principles," and the users of the handout are class IV SD/MI students. The emphasis on the cover sheet is by choosing a picture of the Garuda bird; this picture is used to stimulate students that they will study Pancasila. This handout can be accessed via devices, laptops, and computers. The handout design is given an appearance that is easy to understand in accordance with the characteristics of the rest of class VI, which does not require a lot of buttons, thereby reducing student concentration. To make the sharing process easier because the handouts are accessed online, the researchers created a OR code. This is in line with Jaenudin et al.'s (2017) finding that combining technology development and learning provides new learning experiences and builds students' knowledge. The validation results of media experts and material experts are a benchmark that the handouts developed have been

adapted to students' learning needs and show that the handout media is ready to be used as material for research and learning. The media expert validation results showed a percentage of 0.83%, the language expert validation results were 0.94%, and the material expert validation results were 0.92%. This result shows that the recapitulation from the validator is 0.86% and means that the handout is very valid.

Measurement of student and teacher responses is carried out to determine whether the product being developed is interesting or not. This can also measure student interest in the learning process by using handouts with the RICOSRE learning model. This research also measured student responses by involving 22 experimental class students and teachers by filling out response 2 questionnaires. The measurement of student responses obtained a percentage of 93.5% with the category of strongly agree. Meanwhile, measuring teacher responses obtained a percentage of 92.2% with the strongly agree category. So it can be concluded that the handout with the RICOSRE learning model is suitable for use in the learning process, especially in grade IV elementary school.

CONCLUSION

Based on the results and discussion of the research that has been carried out, the conclusions that can be put forward in the handout with the RICOSRE learning model have characteristics in accordance with the needs of students in the learning process. Some of the characteristics of handouts are: 1) handouts are presented online using a flipbook model; 2) handouts are developed using the RICOSRE model syntax; and 3) the content of the handout material is linked to the students' environment. Handouts using the RICOSRE learning model are considered valid by several experts, including language experts, media experts, and material experts. Analysis of media experts with a percentage of 0.83%, material experts at 0.92%, and language experts at 0.94%. Handouts with the RICOSRE learning model are suitable for

use in the learning process, especially in grade IV elementary school. This is proven by the results of the student response questionnaire, with a percentage of 93.5% in the strongly agree category. Meanwhile, measuring teacher responses obtained a percentage of 92.2% with the strongly agree category.

Declaration by Authors

Acknowledgement: None

Source of Funding: None

Conflict of Interest: The authors declare no conflict of interest.

REFERENCES

- 1. Agus Setiawan, Bahar, and Tri Endang Jatmikowati. 2021. "Pelatihan Pengembangan Bahan Ajar Handout Berbasis Aplikasi Canva Bagi Guru Di SMA Baitul Arqom." ADDI Indonesia 1(1): 1–8.
- 2. Aprilyani, Susrivati, and Sulisetijono Mahanal. 2020. "Does Ricosre Learning Have The Potential to Improve Students' Decision Making Ability?" Jurnal Pendidikan Sains 8(1): 7-11. http://journal.um.ac.id/index.php/jpsISSN:2 338-9117.
- Astuti, Puji, and Eko Setyadi Kurniawan. 2018. "Pengembangan Handout Fisika Berbasis Team Assisted Individualization Untuk Meningkatkan Kemampuan Berpikir Kritis Peserta Didik SMA." RADIASI: Jurnal Berkala Pendidikan Fisika 11(1): 11– 16.

http://ejournal.umpwr.ac.id/index.php/radias i.

- Astutik, Indah Budi, and Asri Susetyo Rukmi. 2015. "Pengembangan Handout Membaca Menulis Permulaan Berbantu Aplikasi Microsoft Office 365 SWAY Untuk Siswa Kelas 1 Sekolah Dasar." Jurnal Pendidikan Dasar Universitas Negeri Surabaya 1(1): 1–12.
- Astutik, Puji, and Siti Sri Wulandari. 2021. "Analisis Model Pembelajaran Number Head Together Dalam Meningkatkan Keaktifan Siswa." Jurnal Pendidikan Adminitrasi Perkantoran (JPAP) 9(1): 154– 68.

https://journal.unesa.ac.id/index.php/jpap.

6. Dewi, Dinie Anggraeni, Geovany Sabaritha Nimaisa, Syalwa Poetrie, and Chiekal Amalia. 2022. "Analisis Pemahaman Mahasiswa PGSD UPI Cibiru Terhadap Mata Kuliah Pembelajaran PKn Di Sekolah Dasar." Jurnal Cakrawala Pendas 8(1). https://doi.org/10.31949/jcp.v8i1.1912.

- Elvrina Revayani, Kinanthia Pramudiani, Puri. 2022. "Pengaruh Model Pembelajaran RIcosre Terhadap Keterampilan Berpikir Kreatif IPA Siswa Kelas V SD Negeri Jatirahayu II Bekasi." Dikdatik: Jurnal Ilmiah PGSD FKIP Universitas Mandiri 8(1): 366–74.
- Erlinda, Nelfi, and Lalfita. 2020.
 "Pengembangan Handout Model Sains Teknologi Maysrakat (STM) Di SMA Negeri Enam Lingkung Padang Pariaman." Jurnal Pendidikan dan Pembelajaran 1(1): 151–60.
- 9. Erlinda, Nelfi. 2016. "Penerapan Metode Pembelajaran Inkuiri Disertai Handout: Dampak Terhadap Hasil Belajar Fisika Siswa SMAN 1 Batang Anai Padang Pariaman." Jurnal Ilmiah Pendidikan Fisika Al-Biruni 5(2): 223–31.
- Ermawati, Erni, Retno Triwoelandari, & Abristadevi, and Riwayat Artikel. 2022.
 "Pengembangan Handout Pembelajaran IPA Berbasi STEM Untuk 58 Meningkatkan Kemampuan Berpikir Kritis Siswa Kelas 5 MI." VOX Edukasi: Jurnal Ilmiah Ilmu Pendidikan 13(2): 376–88.
- Firmansyah, Agnes, and Adzimatnur Muslihasari. 2020. "Pengembangan Handout Berbasis Cerita Pendek Tematik Tema 5 Kelas 5 Untuk Melatih Kemampuan Berpikir Kritis Siswa." EDUSCOPE 06(02): 1–11
- Haka, Nukhbatul Bidayati et al. 2023. "Model Pembelajaran RICOSRE Berbantuan Podcast Terhadap Peningkatan Keterampilan Komunikasi Dan Berpikir Analitis Pada Mata Pelajaran Biologi Kelas XI." Journal of Hypermedia & Technology - Enhanced Learning 1(1): 15–22.
- Handayani, Fitria, and Pakhrul Razi. 2022. "Pengembangan Handout Fisika Berbentuk Komik Terintegrasi Nilai-Nilai Pendidikan Karakter Untuk Meningkatkan Keterampilan Proses Sains Siswa SMA Kelas X." Jurnal Penelitian dan Pembelajaran Fisika 8(2): 213–22.
- Mahadiraja, Dirat, and Syamsuarnis. 2020.
 "Pengembangan Modul Pembelajaran Berbasi Daring Pada Mata Pelajaran Instalasi Penerangan Listrik Kelas XI Teknik Instalasi Tenaga Listrik T.P 2019/2020 Di SMK

Negeri 1 Pariaman." JTEV (Jurnal Teknik Elektro dan Vokasional) 06(01): 77–82.

- 15. Manisa, Tesa, Susriyati Mahanal, and Fatchur Rohman. 2020. "Empowering Problem-Solving Skills Through RICOSRE Learning Model." Article Jurnal Pendidikan Sains 8(1): 12–15. http://journal.um.ac.id/index.php/jpsISSN:2 338-9117
- 16. Mariana, Erni, and Ayang Kinasih. 2020.
 "Pengaruh Penggunaan Handout Terhadap Hasil Belajar Fisika Siswa Kelas VIII SMP N 3 Tumijajar." Jurnal Pendidikan Sains (JPS) 8(2): 171–78.
- Novitaningrum, Mieta, and Stephani Diah Pamelasari . 2014. "Pengembangan Handot IPA Terpadu Berbasis Inkuiri Pada Tema Mata Untuk Kelas IX Siswa MTs Al-Islam Sumurejo." Unnes Science Education Journal 3(2): 542–48.
- Qiftiyah, Maratul, and Yuliyanti. 2018.
 "Pengembagan Modul Pembelajaran Tematik Terintegrasi Dengan Ayat-Ayat Al-Qur'an." Jurnal Pendidikan dan Pembelajaran Dasar 5(2): 275–86.
- Sari, U. K., & Yoenanto, N. H. (2019). Gambaran Kreativitas Guru dalam Penerapan Kurikulum 2013 Sekolah Dasar di Surabaya. *Jurnal Psikologi Integratif, Vol.7, No.* 2, 93-103. doi:10.14421/jpsi.v7i2.1809
- 20. Septora, Rio. 2017. "Pengembangan Modul Dengan Menggunakan Pendekatan Saintifik Pada Kelas X Sekolah Menengah Atas." Jurnal Lentera Pendidikan Pusat Penelitian LPPM UM METRO 2(1): 86–98.
- 21. Siti, Dina, Maryam Audina, E Kosasih, and Resa Respati. 2018. "Pengembangan Bahan Ajar (Handout) Ritmis Untuk Siswa Kelas I

Sekolah Dasar." PEDADIDAKTIKA: Jurnal Ilmiah Pendidikan Guru Sekolah Dasar 5(3): 276–86.

http://ejournal.upi.edu/index.php/pedadidakt ika/index. 59 Sugiyono. (2018). Metode Penelitian Kuantitatif Kualitatif dan R&D (2nd ed.). Alfabeta.

- 22. Sumiati, Ika Dewi, Susiyati Mhanal, and SIti Zybaidah. 2018. "Potensi Pembelajaran RICOSRE Pada Peningkatan HAsil Belajar Kognitif Siswa Kelas XI." Jurnal Pendidikan: Teori, Penelitian dan Pengembangan 3(10): 1319–22.
- Susanto, Wahyu Nur, and Supiana Dian Nurtjahyani. 2018. "Development of Discovery LearningBased Biology Handout on Creative Interaction Materials with Its Environment." Biology Education Conference 15(1): 471–77.
- 24. Turrohmah, Lathifah, and Nasrul Hakim. 2022. "Pengembangan Handout Elektronik Menggunakan Flip Pdf Professional Pada Materi Kingdom Plantae Siswa Kelas X SMA/MA." Lathifah Turrohmah & Nasrul Hakim 52 Jurnal Biotek 10.
- 25. Yulandari, Yulandari, and Dea Mustika. 2021. "Pengembangan Handout Tematik Berbasis Model Inkuiri Di Sekolah Dasar." Jurnal Basicedu 5(3): 1418–26.

How to cite this article: Windy Zaurotun Izdayana Salsabila, Ellianawati, Nuni Widiarti. Development of digital handouts on Pancasila education subjects using the Ricosre learning model in elementary schools. *International Journal of Research and Review*. 2024; 11(10): 105-116. DOI: *10.52403/ijrr.20241011*
