

Developing Science Comic Learning Media for Grade IV Elementary School Based on Local Wisdom of South Kalimantan

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Article Information

ABSTRACT

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This research aimed to; 1) determine the feasibility of comic-based learning media based on the local wisdom of South Kalimantan for the science subject in grade IV elementary school; 2) determine the responses of teachers and students to comic-based learning media based on the local wisdom of South Kalimantan for the science subject in grade IV elementary school. This research used Research and Development (R&D) with the Four-D (4D) development model; Define, Design, Develop, Disseminate. The trial design took the form of validation sheets and questionnaires with research subjects consisting of a media validator, a material validator, a language validator, teachers, and students of SDN Pengambangan 6 Banjarmasin. Data analysis was conducted after collecting data from the results of expert validation and the responses of teachers and students. The results showed that the feasibility from media experts was 93.3% (very feasible). The feasibility from material experts was 83.3% (very feasible). The feasibility from language experts was 94.3% (very feasible). The average feasibility assessment by the three expert validators for comic-based learning media based on the local wisdom of South Kalimantan was 89.2%, categorized as very feasible. The teacher response assessment result was 86.6% with a criteria of very good, and the student response assessment result was 78.75% with a criteria of good.

Keywords: Comics, Local Wisdom, South Kalimantan.

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INTRODUCTION

Education in the learning process is not limited to the materials provided by the government; it is also necessary to integrate local wisdom around the students to make the learning process more efficient, meaningful, and enjoyable, as well as to shape the character of students who love their environment. Local knowledge can be defined as the embodiment of how society lives in order to effectively interact with both social and natural environments. Local wisdom has evolved over time and has been ingrained in the culture of that society. Many variables influence the establishment of local wisdom in a region, including geographical conditions, religious ideals, and community social conditions (Saidah, 2020:7).

Based on the social and geographical aspects of an area that are relevant to the circumstances of local wisdom, local wisdom can be integrated into the school curriculum and science subjects. Natural Science (IPA) is defined as knowledge based on natural phenomena that begins with a scientific mentality and uses scientific procedures that may be applied to humanity (Kumala, 2016:6). Students can better comprehend and appreciate the local wisdom around them as intelligent beings who will preserve their environment beautiful by understanding science.

Science learning is a process of developing thinking abilities and process skills in order to solve environmental challenges. Students are expected to be active, creative, imaginative, and open-minded when studying science. Teachers must also take an active role in developing learning environments that encourage students to be active and motivated students in the learning process. Creating learning media to clarify, simplify, and shorten the material is one of them.

Teachers must be able to create engaging learning media that effectively explains educational material to students. As a result, initiatives and new ideas are required, namely in the form of generating learning media as a supplement to clarify the topic. Learning media is something that is used in learning to deliver messages to students, and media that is used concurrently can also raise students' interest in the content of the message (Rusydiah, 2020:9-10).

Many types of learning media have been developed, one of which is comic learning media for elementary school through high school. Comics are a type of learning material that can be used in the teaching and learning process, as well as erasing people's negative perceptions of comics as just simple reading. Comic books are a type of learning medium that is used to transmit learning messages. Comics are a unique

media that creatively blends words and pictures. Comics can capture the attention of individuals of all ages since they are simple to grasp. According to Waluyanto (in Ambaryani, 2017:20), teachers can transmit educational material more interestingly and easily by employing comic media.

A science comic medium based on local wisdom, focusing on “Efforts to Balance and Preserve Natural Resources (SDA) in the Environment,” is designed with a special emphasis on South Kalimantan. This comic serves as an effective and self-directed learning tool, allowing students to explore scientific concepts independently, without the need for constant teacher guidance. The science material, centered on “Efforts to Balance and Preserve Natural Resources (SDA) in the Environment,” is part of the theme 3 curriculum for fourth-grade students. The events depicted in the comic take place in the students’ immediate environment. Creating this comic not only imparts scientific knowledge but also offers a glimpse into the richness of local wisdom that surrounds the students, emphasizing the importance of preservation. The comic is crafted with an engaging visual style, personally created by researchers. The content is presented in a language that is accessible and relatable to everyday life, ensuring that the material is both informative and enjoyable for the students.

Based on the interview with the fourth-grade teacher at SDN Pengambangan 6 Banjarmasin, she was very pleased with the creation of this comic-based learning media as an addition to the existing instructional materials in the classroom. In the learning process, especially during the science subject “Efforts to Balance and Preserve Natural Resources (SDA) in the Environment” in the first semester of theme 3 for the fourth grade, she often utilized audio-visual learning media from sources like YouTube. However, based on observations, the researcher found that this approach could lead to a lack of enthusiasm among students in the learning process. This was because they only passively watched the displayed videos without actively using or interacting with the media directly, which could play a more active role in the learning process. With the addition of the comic as supplementary media, it was hoped that students would be more directly and actively engaged in the learning process.

The researcher proposes a solution to address this issue by developing an instructional media. The instructional media created aims to boost enthusiasm, facilitate students in understanding the material, enhance their literacy skills, and cultivate an attitude of appreciation for the local wisdom of

South Kalimantan. Considering that the teacher is also a literacy skill advocate at SDN Pengambangan 6 Banjarmasin, it is deemed appropriate to develop instructional media that simultaneously enhances literacy skills and fosters an attitude of environmental appreciation among students, all within the context of the natural local wisdom of South Kalimantan.

The advantages of this comic-based instructional media are that users can read it directly, either in the form of a printed booklet or as a flipbook accessible through Google. It can be reused after completing the material to enhance students’ literacy skills and foster an appreciation for the local wisdom of South Kalimantan. However, a drawback of this comic is that the image quality produced may be less HD in the printed booklet form, while the flipbook format may require some mobile data usage for access.

The difference between this research and relevant previous studies lies in the researcher’s development of this comic-based instructional media using the IbisPaint-X application available on Android, making it more convenient to work on anywhere. Additionally, the inclusion of elements of local wisdom from South Kalimantan sets it apart from earlier studies. However, a challenge encountered in the design process is the use of a smartphone with a relatively small screen size.

Based on the background provided, the researchers are interested in conducting research and development entitled “Development of Science Comic Learning Media Based on Local Wisdom of South Kalimantan in Grade IV at SDN Pengambangan 6 Banjarmasin.” The objective is to facilitate understanding, enhance literacy skills among students, improve comprehension of efforts to preserve natural resources in daily life, and foster a love for the local wisdom of South Kalimantan among students.

METHOD

The Four-D (4D) model was employed in the composition of this research. The Four-D (4D) model is a model for research and development. The Four-D (4D) paradigm, established by S. Thiagarajan, Dorothy S. Semmel, and Melvyn I. Semmel in 1974, was used to develop learning tools. The Four-D (4D) Research Model, as the name implied, consisted of four stages: define (definition), design (designing), develop (development), and disseminate (dissemination). The stages of the Four-D (4D) model could be seen visually in the figure below:

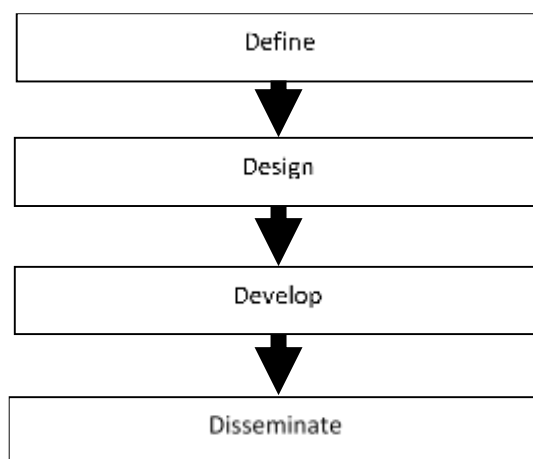


Figure 1. Stages of development of the Four-D model (4D)

The design of this research and development was conducted in two stages of product testing. The first stage involved testing with expert validators, including media experts, content experts, and language experts. After obtaining the product's feasibility results from expert validators, the second stage was initiated, which included product testing for responses from fourth-grade teachers and students at SDN Pengambangan 6 Banjarmasin. Data collection instruments for expert validators, teacher responses, and student responses utilized validation sheets and questionnaires. Once the data was collected, the analysis of expert validation results, teacher responses, and

student responses was carried out using the Likert scale percentage formula by Sugiyono 2015: 37, as follows.

$$Percentage = \frac{Score\ obtained}{Maximum\ score} \times 100\%$$

The assessment of the feasibility criteria of the developed product, both from the validation by expert validators and the assessment of teacher and student responses in this research, was based on the feasibility criteria according to Riduwan (2015:15) with the percentage criteria as seen in Table 1.

Table 1. Eligibility criteria

Percentage	Description
0% - 20%	Totally Not Feasible
21% - 40%	Not Feasible
41% - 60%	Feasible Enough
61% - 80%	Feasible
81% - 100%	Very Feasible

RESULTS AND DISCUSSION

Results

The results of this research aligned with the Four-D (4D) research and development model, which consisted of Define, Design, Develop, and Disseminate stages.

Define Stage (Definition)

This stage aimed to determine the learning media that could be developed based on the initial problem analysis, usage needs, and the selection of materials in accordance with the identified issues.

1. Preliminary analysis

This stage described several existing problems and provides solutions to these issues. In this phase, interviews were conducted with fourth-grade teachers during the first semester, theme 3. The identified problems and their

solutions were as follows: 1) a lack of enthusiasm among students due to passive learning processes, 2) insufficient variety in the learning media used, as it primarily relies on student textbooks and YouTube, without any media that could be directly utilized by students, resulting in a lack of understanding of the presented science material.

2. Student analysis

This stage involved analyzing the characteristics of fourth-grade students to determine their preferred learning processes, considering their age of 8-9 years, where concrete understanding and enjoyable learning processes were essential.

3. Task analysis

In this phase, an analysis of tasks was conducted, aligning them with the identified issues in the initial analysis. The assignments given were based on the main topics in the

fourth-grade curriculum, theme 3, specifically on the science subject, “Efforts to Balance and Preserve Natural Resources (SDA) in the Environment,” presented in multiple-choice or fill-in-the-blank format.

4. Concept analysis

The research at this stage was focused on determining the concept of the developed learning media, the learning process, and other supporting tools. This was crucial for ensuring the effectiveness and efficiency of the learning process using comic-based media grounded in the local wisdom of South Kalimantan.

5. Formulation of learning objectives

After determining the tasks and concepts, this stage involved setting the learning objectives that would be implemented. This included defining the assignment format, learning strategies, teaching methods, and learning media related to the science curriculum in theme 3 for fourth-grade students, specifically covering the topic “Efforts to Balance and Preserve Natural Resources (SDA) in the Environment.”

Design Stage (Designing)

At this stage, the research was conducted during the design process after the define stage had been completed. The selection of the media format became a crucial factor at this stage.

1. Development of test standards

In this stage, the design process was based on the analysis of students and the previously defined learning objectives. The development of test standards for the South Kalimantan-based local wisdom comic design included the design and responses from teachers and students.

2. Media selection

Once the preceding stages were determined, this stage involved media selection. The choice of media was aligned with the initial analysis, student analysis, and dissemination stages. In this research, the selected media was a comic based on the local wisdom of South Kalimantan, focusing

on the topic “Efforts to Balance and Preserve Natural Resources (SDA) in the Environment” in theme 3 for the first semester of fourth grade.

3. Format selection

The research at this stage involves choosing the format of the media used during the learning process. In this format selection, the developed comic media takes the form of two concepts: a printed format in the form of a booklet and a digital format in the form of a flipbook, each with its own characteristics.

4. Initial design

The research at this stage involved creating the developed media in the form of an initial design for the South Kalimantan-based local wisdom comic. This design would be refined in the development stage with input and suggestions from experts.

Develop Stage (Development)

The research process at this stage involved the redevelopment of the comic media. Although the existing learning media could be used, its feasibility was not yet confirmed. The development of comic media continued until it was deemed suitable for use in the final design. The development stage up to the final design involved validation tests by several experts. Input and suggestions from these experts would determine the final design. There were two stages in this development process, as follows.

1. Expert assessment

The assessment by experts at this stage played a crucial role in the development of comic-based learning media grounded in the local wisdom of South Kalimantan. Input and suggestions from media experts, content experts, and language experts contributed to the determination of the suitability of the developed comic media for use. This assessment was conducted by several expert validators, including media experts, content experts, and language experts, aiming to ascertain the feasibility of the comic-based learning media grounded in the local wisdom of South Kalimantan, as shown in the table below.

Table II. Expert Validator Assessment Results

No	Expert Criteria	Validation Score	Percentage	Description
1	Media Expert	42/45	93,3%	Very Feasible
2	Material Expert	50/60	83,3%	Very Feasible
3	Linguist	33/35	94,3%	Very Feasible
	Average	125/140	89,2%	Very Feasible

Based on Table 2 above, the average assessment results provided by the validators after revising the product and preparing it for testing against teacher and student

responses yielded a percentage score of 89.2%, categorized as very feasible.

Following the product revision process based on the input and suggestions from expert validators for the comic-based learning media grounded in the local wisdom of South Kalimantan, the next step involved the development testing process with fourth-grade teachers and 32 students from SDN Pengambangan 6 Banjarmasin.

2. Development trial

After the validation test of the comic-based learning media by experts had been conducted, and the final design had been obtained, the next step was to test the media with teacher and student respondents to assess the feasibility of the comic-based learning media grounded in the local wisdom of South Kalimantan. In this case, the teacher respondent was Ms. Rajihah, S.Pd., the fourth-grade class teacher, and the student respondents were 32 fourth-grade students from SDN Pengambangan 6 Banjarmasin.

Table III. Teacher Response Assessment Results

No	Teacher Name	Questionnaire Response Score	Percentage	Description
I	Rajiha, S.Pd.	52/60	86,6%	Very Good

Table IV. The Average Results of Responses from 32 Students

Questionnaire Response Score	Percentage	Description
1512/1920	78,75%	Good

Based on the assessment conducted by the fourth-grade teacher regarding the comic-based learning media grounded in the local wisdom of South Kalimantan, it is concluded that the media was highly suitable for use as a learning tool, especially in the science curriculum for fourth-grade theme 3. The average results of student

responses from 32 respondents showed a positive reception toward the comic-based learning media grounded in the local wisdom of South Kalimantan. The implementation process of the Development stage could be seen in Figure 2 below.

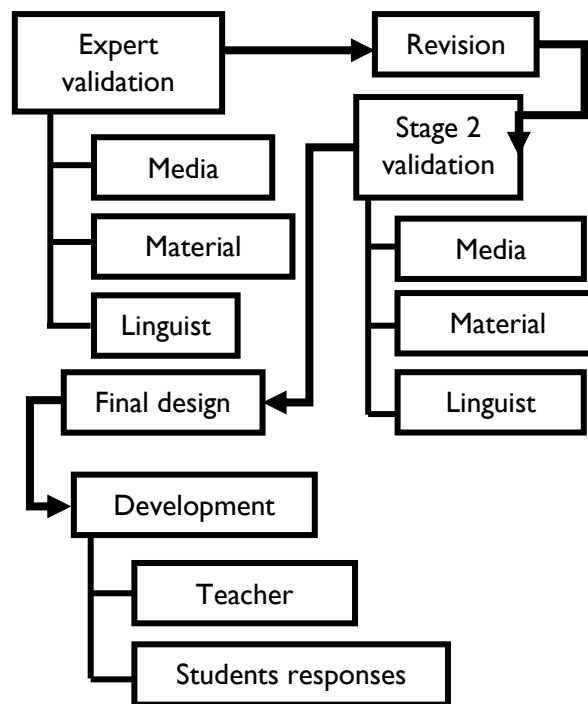


Figure 2. Develop Stage (Development)

Disseminate Stage (Dissemination)

After obtaining consistent and feasible results from the validation and development trial of the comic-based learning

media grounded in the local wisdom of South Kalimantan, the learning media was ready to be disseminated to teachers and students. Before dissemination, there were several final stages,

including packaging, diffusion, and adaptation. The selection of a distributor played a crucial role in the dissemination stage of the comic-based learning media grounded in the local wisdom of South Kalimantan.

In the development of comic-based learning media grounded in the local wisdom of South Kalimantan, based on the research findings, the researcher discovered that engaging and enjoyable learning activities could boost students' enthusiasm for learning and keep them focused on the presented material. Given these findings, the researcher decided to develop comic-based learning media incorporating the local wisdom of South Kalimantan, specifically in the science subject "Efforts to Balance and Preserve Natural Resources (SDA) in the

Discussion

a. Feasibility of Comic-Based Learning Media Grounded in the Local Wisdom of South Kalimantan

The validation of the feasibility of comic-based learning media grounded in the local wisdom of South Kalimantan in this research involved feasibility testing by media experts, content experts, and language experts. After obtaining the validation data along with comments and suggestions from expert validators, the researcher made revisions according to the comments and suggestions provided by the media, content, and language expert validators, as well as the instrument validators for teacher and student responses. The feasibility assessment obtained from media experts showed a percentage of 93.3% with the criteria of very feasible. The aspects evaluated for the feasibility of this media were as follows.

1. Coloring on each comic page.
2. The use of language and traditional Banjar clothing.
3. Comic format.
4. Naming characters with Banjar nicknames.

The feasibility assessment obtained from content experts showed a percentage of 83.3% with the criteria of very feasible. The aspects evaluated regarding the content of this comic were as follows:

1. Alignment with the curriculum, core competencies, and Basic Competencies (KD) of science in Grade IV, theme 3.
2. Alignment with the developmental stage of children.
3. Alignment of material topics with the local wisdom of South Kalimantan.

Furthermore, the feasibility assessment obtained from language experts showed a percentage of 94.3% with the criteria of very feasible. The aspects evaluated in terms of language in the comic based on the local wisdom of South Kalimantan were as follows:

1. Grammatical correctness.

Environment," which was part of theme 3 for the first semester of fourth grade.

This research and development process utilized the Four-D (4D) development model by Thiagarajan et al. (1974), consisting of four stages: Define, Design, Develop, and Disseminate. The comic-based learning media grounded in the local wisdom of South Kalimantan was designed with an engaging storyline that aligned with the instructional material and had a strong connection to the local wisdom of South Kalimantan. In the research and development stage, testing was necessary to determine the product's feasibility based on established criteria and feedback from teachers and students.

2. Avoidance of ambiguous sentences.
3. Use of easily understandable sentences.

The feasibility assessment result of a product based on Riduwan's criteria (2015:15), stating that the percentage interval between 81% - 100% fell into the category of very feasible. Therefore, with the obtained assessment result, the product was considered suitable for testing. The feasibility result in terms of media, based on the evaluation sheet by media experts for the comic-based on the local wisdom of South Kalimantan, met the criteria for an excellent score for the developed media. The following were the criteria for excellent assessment from the media validation.

1. Media components were presented systematically and sequentially.
2. Media components were easy to understand and use in learning.
3. Text in the media was easy to read.
4. The relationship between each component was appropriate.
5. The usefulness of the media in learning science, specifically the Efforts to Balance and Preserve Natural Resources (SDA) in the Environment.
6. Learning media could support both individual and group learning.

Based on the feasibility results of the comic-based on the local wisdom of South Kalimantan, it could be concluded that this comic media was in line with the principles of media selection and use according to Sanjaya in Marlina (2021:10). Sanjaya explained that the selection and use of learning media should align with the teacher's abilities and the cognitive, affective, and psychomotor abilities of the students. Additionally, this comic-based on local wisdom was also in line with the functions of media according to Sanaky in (Marlina 2021:20) concerning the functions of learning media for teachers and students as discussed in the literature review earlier.

The advantages of this comic based on the local wisdom of South Kalimantan were also in line with the five advantages of comic media according to Azizah (2014:35), which were motivation, visual appeal, permanence, intermediary function, and popularity. Additionally, in terms of integrating local wisdom into this comic, it aligned with the perspective of Martati (2019:15-16) regarding local wisdom as local ideas that were wise, full of wisdom, and of good value, ingrained, and followed by community members. The importance of local wisdom needed to be cultivated among the younger generation, especially elementary school children, through local wisdom-based learning in the surrounding environment. This aimed to foster the character of students who cared about social and environmental issues in their surroundings. According to Shufa (2018:51-52), there were four steps to consider in the process of integrating local wisdom into elementary school learning.

Based on the assessment of material feasibility conducted by the material expert for the comic media based on the local wisdom of South Kalimantan, the material had received positive feedback, as follows:

1. The material in the comic was in accordance with the curriculum.
2. The presented material aligned with the developmental stage of the students.
3. The instructional media material supported the language skills aspect of the students.
4. The sequence of activities was clearly depicted in the comic media.

This aligned with the functions and objectives of science subject in elementary schools (SD/MI) according to Dewi (2021:6-8). The function of science subject was to cultivate critical thinking patterns in students regarding the conditions of nature and their surroundings and to develop individuals capable of competing with the progress of time. Meanwhile, the objective of science subject was to instill a scientific attitude in students and positive behavior towards all creations and to preserve and protect the environment from damage. Additionally, the science subject material in this comic corresponded to the developmental stage of humans according to Piaget in Dewi (2021:18), stating that fourth-grade elementary school students were at the concrete operational stage, still in need of media to realize their imagination.

Furthermore, the language aspect of the comic based on the local wisdom of South Kalimantan, as evaluated by the language expert, received excellent qualifications in terms of language. Here were the criteria for language suitability assessed by the linguist:

1. Correctness of grammar in the comic.
2. Simplicity of sentence structure in the comic.

3. Use of communicative and light language.
4. Use of language that is easy to understand.
5. Clarity of information provided in the comic based on the local wisdom of South Kalimantan.

This was in line with the research conducted by Sani (2018) entitled "Development of Science Comics on the Topic of Force and Motion for Fourth Grade Elementary School Students." The results showed that the development of comic media had very valid criteria or was suitable for use in learning. Furthermore, the study by Alfiyani (2015) with the title "Development of Learning Media in the Form of Comics in the Subject of Social Studies Subtopic Moments of the Proclamation of Independence of the Republic of Indonesia for Fifth Grade Elementary School." The results indicated that the expert validator assessment of the media had very suitable criteria.

There was also a study conducted by Datu Linggi Agustinus (2016) entitled "Development of Comics as Observational Text Learning Media for Grade VII students at SMP Pangudi Luhur I Yogyakarta." The results showed that the development of comics from expert validation had very suitable assessment criteria. The results also indicated that teachers gave excellent ratings and deemed it suitable for use in learning. Another study by Zulbaiti (2018) entitled "Development of KIJARA Media (Javanese Comics and Javanese Characters) in Javanese Language Learning for Fourth Grade Elementary School." The media validation results showed that the comic media was suitable for use in learning.

Based on the four previous studies, there was support indicating that the comic-based learning media developed in this research was suitable and appropriate for the learning process. The comic media based on the local wisdom of South Kalimantan for the subject of science in Grade IV, theme 3, semester I at SDN Pengambangan 6 Banjarmasin was considered highly feasible by expert validators, with comments and suggestions for improvement provided by these expert validators.

b. Teacher and student responses

The analysis of evaluations from the responses of Grade IV teachers and students concluded that the comic-based learning media grounded in the local wisdom of South Kalimantan had its own uniqueness and advantages. Apart from containing science subject material for Grade IV, theme 3, about Efforts to Balance and Preserve Natural Resources in the Environment, this media also incorporated the local wisdom of South Kalimantan. Packaged with language that was easy to understand and attractive visual elements, it left a distinctive impression. In the analysis of the questionnaire responses from Grade IV teachers, which consisted of 12 statements about the developed comic media, it obtained a percentage score of

86.6%, classified as excellent, with very constructive comments regarding the comic-based learning media grounded in the local wisdom of South Kalimantan. Based on the assessment scores provided by the teacher, it could be concluded that the comic-based learning media grounded in the local wisdom of South Kalimantan had received positive evaluations.

The analysis of the students' responses to the comic-based learning media rooted in the local wisdom of South Kalimantan, consisting of 12 statements and involving 32 fourth-grade students, resulted in a percentage score of 78.75% with the "good" criteria. It could be concluded that the students' responses to the comic-based learning media in terms of media, content, and language were positive. This was evident from the teacher's assessment of the components of the comic-based learning media in South Kalimantan's local wisdom, including:

1. The content in the media aligns with the curriculum.
2. The comic media supports the achievement of learning objectives.
3. The attractiveness of the comic media.
4. The comic media introduces students to the diversity of flora, fauna, and regions in South Kalimantan.
5. The sentences used are not ambiguous.

Based on the results of the teacher and student responses to the developed comic media, it aligned with the previously mentioned theory about the functions of instructional media for teachers and students by Sanaky (in Marlina, 2021:20). The function of instructional media allowed an object or information that could not be brought into the classroom to be manifested through the use of specific media. It also enhanced the creativity of a teacher to create enjoyable learning experiences. For students, it functioned to improve the quality of learning and focus more on the presented material without feeling pressured during learning.

In line with the research conducted by Sani (2018) entitled "Development of Science Comics on the Topic of Motion and Movement for Fourth Grade Elementary School Students," the results of student responses from two schools involved received an assessment of very good. Furthermore, research by Alfiyani (2015) entitled "Development of Learning Media in the Form of Comics on the Subject of the Moments of Proclamation of Independence of the Republic of Indonesia for Fifth Grade Elementary School." The results of student responses to the media were rated as very good. In the subsequent study by Agustin (2016) entitled "Development of Comics as Observational Text Learning Media for Seventh Grade Students at SMP Pangudi Luhur I Yogyakarta." The results obtained from the Indonesian language teacher's response to the comic media were rated as good, and similarly, the

student responses were rated as very good. Furthermore, the research by Zulbaiti (2018) entitled "Development of KIJARA Media (Javanese Comics and Javanese Script) in Javanese Language Learning for Fourth Grade Elementary School." The results of student responses to the comic media were rated as very good in small group trials and large group trials. Based on the four previous studies regarding teacher and student responses, it could be concluded that the media was very good or practical in use for attracting motivation and interest in learning, as well as improving the literacy skills of students in the subject matter of science for fourth-grade theme 3, semester 1.

CONCLUSION

Based on the data obtained from the development and testing of responses from teachers and students, it could be concluded that the comic-based learning media grounded in the local wisdom of South Kalimantan for the fourth-grade science subjects at SDN Pengambangan 6 Banjarmasin had been tested with the participation of 32 students.

The development of comic-based learning media grounded in the local wisdom of South Kalimantan for the science subject was considered suitable for further development according to expert validators. Based on the assessment of the developed media by three expert validators, it received a percentage score of 89.2%, categorized as "very feasible." The media evaluation by the media expert yielded a percentage of 93.3%, categorized as "very feasible." The subject matter expert's evaluation scored 83.3%, also categorized as "very feasible," while the language expert's evaluation resulted in a percentage of 94.3%, categorized as "very feasible." The validation results indicated that the comic-based learning media grounded in the local wisdom of South Kalimantan for the science subject fell into the "very feasible" category.

Based on the feedback from teachers and fourth-grade students at SDN Pengambangan 6 Banjarmasin regarding the comic-based learning media grounded in the local wisdom of South Kalimantan, the results indicated an 86.6% satisfaction rate from teachers, categorized as "very good." Additionally, the student responses, with 32 respondents, achieved a percentage of 78.75%, categorized as "good." Therefore, the comic-based learning media grounded in the local wisdom of South Kalimantan was highly suitable for use in the science learning process for theme 4 of the first semester in the fourth grade.

With this research, it was hoped that it could provide benefits for readers or for researchers themselves to further develop other comic-based media, especially for elementary school children. The researcher would like to provide the following suggestions.

1. It was hoped for readers or future researchers that this research could serve as a reference for the development of

comic-based media on other themes in elementary school settings.

2. For teachers, the comic-based learning media grounded in the local wisdom of South Kalimantan could be used as an engaging teaching tool by incorporating role-playing

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