



# Reading Literacy Comics: Innovative Learning Media on the Theme of Energy and its Changes

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## ABSTRAK

Penggunaan media pembelajaran oleh guru dalam proses pembelajaran saat ini kurang membantu siswa dalam kegiatan pembelajaran. Tujuan penelitian ini yaitu mengembangkan Media Pembelajaran Komik Literasi Baca pada tema energi dan perubahannya. Jenis penelitian ini yaitu penelitian pengembangan dengan menggunakan model ADDIE. Subjek penelitian ini yaitu 1 ahli materi pembelajaran, dan 1 ahli media pembelajaran. Subjek uji coba yaitu 2 guru dan siswa kelas III sejumlah 13 orang siswa. Metode pengumpulan data menggunakan observasi, wawancara, studi literatur, dan kuesioner. Kuesioer digunakan untuk memperoleh penilaian dari ahli. Instrumen yang digunakan dalam mengumpulkan data yaitu lembar kuesioner. Teknik yang digunakan untuk analisis data yaitu analisis deskriptif kualitatif dan kuantitatif. Hasil penelitian yaitu penilaian yang diberikan oleh ahli isi yaitu 96,91% (sangat baik). Hasil penilaian yang diberikan oleh ahli media pembelajaran yaitu 88,95% (sangat baik). Hasil uji kepraktisan oleh guru yaitu 93,74% sehingga mendapatkan kualifikasi sangat praktis. Hasil uji dari siswa mendapatkan nilai 95,32% sehingga mendapatkan kualifikasi sangat baik. Berdasarkan hal tersebut, maka dapat disimpulkan bahwa media pembelajaran komik literasi baca sangat baik dan layak digunakan dalam pembelajaran.

## ABSTRACT

Teachers' use of learning media in the learning process currently needs to be helping students in learning activities. This research aims to develop Reading Literacy Comic Learning Media on energy and its changes. This type of research is development research using the ADDIE model. The subjects of this study were one learning material expert and one learning media expert. The test subjects were two teachers and 13 third-grade students. Data collection methods use observation, interviews, literature studies, and questionnaires. The questionnaire is used to obtain an expert's assessment. The instrument used in collecting data is a questionnaire sheet. The techniques used for data analysis are descriptive qualitative and quantitative analysis. The result of the research is the assessment given by the content expert, which is 96.91% (very good). The assessment results given by learning media experts were 88.95% very good). The teacher's practicality test result was 93.74%, so the qualification was very practical. The test results from students get a score of 95.32%, so they get very good qualifications. Based on this, it can be concluded that reading literacy comic learning media is very good and suitable for learning.

## 1. INTRODUCTION

Schools organize every aspect of education formally. However, the system used always changes, including the curriculum (Hanum & Annas, 2019; Rofiq & Arifin, 2021). The Indonesian curriculum continues to change over time and development. The curriculum is one of the most important tools for achieving educational goals (Indarta et al., 2022; Lestari, 2018). The curriculum is placed at the educational unit level significantly, even becoming an important component of the overall educational process, so it is difficult to imagine how education would run without the curriculum (Numertayasa et al., 2022; Sasmita & Darmansyah, 2022). Teachers must understand this curriculum. Teachers must also implement the curriculum optimally and effectively to achieve its goals. The 2013 curriculum is currently used in Indonesian schools. The 2013 curriculum requires professional, caring, understanding, creative, and dedicated teachers to grow students' self-confidence (Dwi Agus Setiawan & Nur Kumala, 2020; Prihandoko et al., 2017). Conditions like this will create a pleasant learning atmosphere and make teachers and students comfortable when learning occurs. It will make it less awkward for students to speak and want to talk about the problems they face. Furthermore, the 2013 curriculum applies 4C

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student skills (communication, collaboration, critical thinking, problem-solving, creativity, and innovation) (Izati et al., 2018; Viani & Kamaludin, 2020). Students are expected to have communication skills, especially Indonesian. Students are expected to become the nation's future generation by mastering Indonesian well and correctly.

Listening, speaking, reading, and writing are the four components of the language skills (Alviolita & Huda, 2019; Nuraeni et al., 2019). Language skills are very important in a modern, increasingly complex society, and students must learn them, especially regarding reading skills. First, when students complete their education, reading skills are needed to study every subject that students acquire during school (Gunawan et al., 2022; Rizal et al., 2021). Second, students have social lives outside of school, and reading skills are also necessary (Gunawan et al., 2022; Mohamad Johan, 2018). For example, they read newspapers, magazines, restaurant menus, and movie subtitles. As experienced and qualified teachers, teachers ensure students have everything they need to make learning more enjoyable and meaningful. Teachers must master and be proficient in using learning methods, media, and models to organize the learning process to increase student responses and achieve learning goals effectively (Fitriani et al., 2019; Nuraeni et al., 2019).

However, teachers' use of learning media in the learning process currently does not help students in learning activities, especially in elementary schools (Muskania et al., 2019; Riwanti & Hidayati, 2019). It is caused by the teacher's inability to use technology, which results in a lack of teacher ability to develop computer-based learning media independently (Ahmad & Mustika, 2021; Nur Jannah, 2020). Teachers usually only provide information, become passive in the student learning process, and do not apply a student-centered learning approach. Classroom learning becomes uninteresting because no innovative learning media are available in schools (Ahmadi et al., 2017; Opidianto et al., 2021). It causes students to have low critical, creative, and reading skills.

The results of observations in the third grade at SD Negeri Gugus 3, Selemadeg District, revealed several problems. Students begin the lesson by directly studying the topic that will be used without apperception. This makes it very difficult for students to learn. Teachers deliver material through lectures in core activities, and students only act as recipients. After the explanation, the teacher assigns students to do the exercises. The learning carried out by the teacher made students less interested and paid less attention to learning reading skills. Hence, students' reading skills in the third grade at SD Negeri Gugus 3 Selemadeg District were low, student learning activities tended to be passive, and student learning outcomes decreased. Apart from the observations and interviews, information was obtained that students' reading skills were still low. Students show inaccurate reading skills in pronunciation and intonation, inconsistent punctuation, frequent repetition of words, and spelling. Apart from that, this condition is caused by the limited number of learning media available in schools and the inability of teachers to use technology. The learning media students use only consists of pictures in the student's companion book videos accessed via YouTube.

Efforts are needed to increase students' interest and learning outcomes, especially regarding their reading skills. Learning media can improve weak reading skills (Anggraini & Efendi, 2022; Paramita et al., 2022). One of the tools used in the learning process is learning media, which helps students understand the subject matter (Alviolita & Huda, 2019; Amil et al., 2021). Media can help teachers convey lesson material more concretely, influencing students' desire and interest in learning. Using learning media during the learning process may help teachers convey the material better and connect it to the students' real-world (Haryanto, 2014; Sari et al., 2021). Comics are an alternative learning media. Comics can be an interesting tool for learning activities (Angga et al., 2020; Rosyida, 2019). Comics are a type of media whose appearance is in the form of images with dialogue and colors that attract students' interest in reading and help them understand the lesson (Boangmanalu et al., 2018; Handayani & Koeswati, 2020). Comics containing reading relevant to the material taught can help students improve literacy.

Previous findings reveal that comics are one of the interesting visual media fields (P. Handayani & Koeswati, 2020; Ruiyat et al., 2019). Other findings also reveal that digital comics can increase motivation and enthusiasm for learning (Taufiq et al., 2020; Udayani et al., 2022). It was concluded that students need digital comics to arouse interest and motivation in learning and increase reading literacy. Literacy comics in this development are comics with an electronic display format so that readers can enjoy the story content online via smartphone or other supported electronic devices. This is a means of fostering students' interest in reading using print and electronic media on theme 6 (Energy and Change) for third-grade elementary school. The development of literacy comics has many advantages. One is that learning becomes more interesting for students because they learn from the text and the movement of images packaged in literacy comics. Students no longer think abstractly. Image media makes learning material clearer and easier to accept. As a result, the presentation of the material becomes more concrete. There

has been no study on energy and its changes in Reading Literacy Comic Learning Media. This research aims to develop Reading Literacy Comic Learning Media on energy and its changes.

## 2. METHOD

This type of research is development research using the ADDIE model, which includes analysis, design, development, implementation, and evaluation (Alodwan & Almosa, 2018). At the analysis stage, needs analysis, characteristics, and curriculum analysis are carried out. Reading literacy comic learning media was designed at the design stage, and instruments were developed. Reading Literacy Comic Learning Media was developed in the development stage based on previously developed designs and product validation tests. At the evaluation stage, a product effectiveness test is carried out. The subjects of this research were one learning materials expert and one learning media expert. The test subjects were two teachers and 13 third-grade students. Data collection methods use observation, interviews, literature studies, and questionnaires. Observations and interviews were conducted to determine the field's problems and needs. Literature studies are used as a theoretical basis for the original analysis results. Questionnaires are used to obtain assessments from experts. The instrument used to collect data was a questionnaire sheet. The questionnaire grid is presented below in Table 1, and Table 2.

**Table 1. Content and Media Expert Validation Instrument Grid**

Aspect	Assessment Indicators	Total
Contents	Conformity of material with Basic Competencies	4
	Material accuracy	3
	Up-to-date material	3
Presentation	Presentation technique	1
	Presentation support	3
	Scientific approach activities	5
Graphics	Cover/cover design	6
	Comic content design	14
Language	Straightforward	4
	Communicative	2

**Table 2. Teacher Response Questionnaire Grid**

Aspect	Assessment Indicators	Total
Contents	Material suitability	2
	Clarity of material	
	Level of understanding and story	1
Presentation	Instructions for using comics	1
	Coherence in comics	1
	Syntax of the scientific approach	1
	Student experimental activities in learning	1
	Image presentation	1
Graphics	Assignment	1
	Components of the initial display of the comic	1
	Font type/font size	1
	Characters in comics	1
Language	Use of language according to characteristics	1
	Language that is clear, effective, and easy to understand	1
	Ease of understanding the storyline	1

The techniques used for data analysis are qualitative and quantitative descriptive analysis. This analysis technique is also used to collect data from expert validation analysis results, respondents' practicality assessments, and readability in the form of input and suggestions as reference material for revision/improvement of comics as a learning medium. This data analysis technique was carried out to obtain analysis in the form of numbers from the questionnaire data in the validation test using a percentage formula. To be able to provide meaning and make decisions, a scale of 5 achievement level conversion is used.

## Discussion

This research uses the ADDIE model to develop reading literacy through comic learning media. First, analyze. The analysis results are that students start the lesson by directly studying the topic that will be used without apperception. It makes it very difficult for students to learn. Teachers deliver material through lectures in core activities, and students only act as recipients. After the explanation, the teacher assigns students to do the exercises. The learning carried out by the teacher made students less interested and paid less attention to learning reading skills. Hence, students' reading skills in the third grade at SD Negeri Gugus 3 Selemadeg District were low, student learning activities tended to be passive, and student learning outcomes decreased. Apart from the observations and interviews, information was obtained that students' reading skills were still low. Students show inaccurate reading skills in pronunciation and intonation, inconsistent punctuation, frequent repetition of words, and spelling. Apart from that, this condition is caused by the limited number of learning media available in schools and the inability of teachers to use technology. The results of the curriculum analysis are presented in Table 3.

**Table 3. Core Competencies, Basic Competencies, and Indicators**

Core Competencies	Basic Competencies
Understand factual knowledge by observing (hearing, seeing, reading) and asking questions based on curiosity about themselves, God's creatures and their activities, and objects they encounter at home and school.	3.2 Explore information about sources and forms of energy presented in verbal, written, visual, and environmental exploration.
	4.3 presents the results of extracting information about sources and forms of energy in written and visual form using standard vocabulary and effective sentences.

Second, planning. At this stage, reading literacy comic learning media is designed. This stage ensures that media design has an orderly and understandable procedure. At this stage, the task is to determine the program or application to be used, namely Photoshop CS6 and Microsoft Word. The display and story script, consisting of flowcharts and storyboards, were also designed. The flowchart for reading literacy comic learning media is presented in Figure 1.

Third, development. Reading literacy comic learning media was developed based on previously created designs. First, collect material for educational comics. It includes images of various energy sources, backgrounds, fonts, cartoon characters, materials, and other supporting images. After the materials are collected, the next step is to create a comic background for each scene, such as a background on the road, on the river bank, and an abstract background. Making comic backgrounds using Photoshop CS6. The finished comic background is then inserted into Ms. Word. All materials that have been collected are arranged in Ms. Word. They start by making a box for writing using shapes and text boxes. The conversation box for each character also uses shapes and is designed using the shape format menu. The development results are presented in Figure 1.



**Figure 1. Reading Literacy Comic Learning Media**

Fourth implementation. At the implementation stage, the product that has been developed is used in a real context, namely in the classroom. Content and learning media experts carry out trials to find out whether the media that has been developed can be used for learning activities. The assessment results given by the content expert were 96.91%, resulting in a very good qualification. The assessment results given by learning media experts were 88.95%, resulting in very good qualifications. After obtaining all the percentage results, the total expert test subjects were calculated to get a score of 92.93%, thus getting very good qualifications. The results of the practicality test by the teacher were 93.74%, so you get a very



practical qualification. The students' test results obtained a score of 95.32%, resulting in very good qualifications. Based on this, it can be concluded that the learning media for reading literacy comics is very good and suitable for learning.

### Discussion

The analysis results show that reading literacy comic learning media is suitable for learning for the following reasons. First, reading literacy comic learning media makes learning easier for students. After going through various stages of product testing, the development of this literacy comic media has been adjusted according to the recommendations and opinions of experts. Comics can be used in learning activities and help students achieve learning goals (Aeni & Yusupa, 2018; Sukmanasa et al., 2017). Comics make it easier for students to understand learning concepts, especially about energy and its changes. Comic media can also be used at any time according to students' learning needs (Andriani, 2019; Hidayah et al., 2017; Sukmanasa et al., 2017). This literacy comic media focuses on energy material and its changes in the 6th grade III elementary school theme. As a literacy medium, comics are expected to help students learn and motivate them to actively carry out reading activities during learning (Aeni & Yusupa, 2018; Riwanto & Wulandari, 2018). Apart from that, this media can help teachers increase students' reading literacy so that students' understanding and insight also increase.

Second, reading literacy comic learning media motivates student learning. Literacy comics help students understand lesson material, increase learning motivation, and help teachers in learning activities (T. Handayani, 2021; Megantari et al., 2021). It makes it easier for teachers to deliver material, and learning becomes more varied (Astutik et al., 2021; Sukmanasa et al., 2017). The developed literacy comic media has the advantage of an attractive appearance with various colors and harmonious images. In literacy comic media, characters have direct dialogue regarding learning material. Students can also use literacy comic media via laptop or smartphone as a learning medium. This comic media can motivate students to learn (Astutik et al., 2021; Wahyudin et al., 2020). The language used in the linguistic aspect is by the characteristics of the students so that it is easy to understand. The literacy comic learning media that has been developed is very useful because apart from being accessible in printed form, this comic can be accessed via a QR code and can be read anywhere. Students can use literacy comics presented in print and digital because they are interactive. Using technology in developing learning media can help students utilize existing technology and be able to use technology well.

Third, reading literacy comic learning media creates fun learning. The content aspect includes the completeness of the material according to the theme, the completeness of the material according to the theme, the breadth of the comic material according to the Basic Competencies, the depth of the comic material according to the Basic Competencies, the story presented in the comic is accurate, the images with the material in the comic are accurate, the definitions presented in the comic That is right, the material is by developments in science, and the examples and cases in comics are by everyday life. The literacy comic media that has been developed is declared valid because it is presented clearly by the material presented, the colors and characters are attractive, and the instructions for use are clear to make it easier for students to use comics in learning activities (Azizul et al., 2020; Kanti et al., 2018). In line with this, the basic competencies, indicators, learning objectives, and material presented are easy to understand (Dwiasih & Agung, 2021; Ntobuo et al., 2018). Using simple language in learning media functions to convey messages can also make learning activities more enjoyable (Hobri et al., 2019; Taufiq et al., 2020).

Previous findings also reveal that comic media can improve student learning outcomes (Rahmata et al., 2020; Udayani et al., 2022). Other findings also reveal that comic media can be used in learning activities because it can convey information easily and concretely (Aeni & Yusupa, 2018; Dwiasih & Agung, 2021). Because the sentences are not too long and use simple language, the literacy comic media that has been developed can help students learn at school or home. Everyone must use technology properly, including the education (Potkonjak et al., 2016; Sudarsana et al., 2019). With the development of technology, the learning media used is also increasingly developing by utilizing technology, one of which is literacy comic media. This research implies that digital comic media will make learning easier for students and help develop their reading literacy. Apart from that, this research can help teachers train their skills in creating media in learning activities so that students can achieve the learning objectives set and take advantage of the facilities and infrastructure already available at school.

### 3. CONCLUSION

The analysis results show that the reading literacy comic learning media received very good qualifications from experts, teachers, and students. It was concluded that reading literacy comic learning

media is suitable for learning. Reading literacy comic learning media makes learning easier for students and increases learning motivation, so it is suitable for elementary school students.

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