



Assessment and Evaluation of Canva-Based Comic Strip Media with KEMP Instructional on Sound Material

Risa Faurenza^{1*}, Rian Vebrianto², Herlinda³, Adisti⁴ 

^{1,2,3} Program Studi Magister Pendidikan Guru Madrasah Ibtidaiyah, UIN Suska Riau, Pekanbaru, Indonesia

⁴ Universitas Terbuka, Tangerang Selatan, Indonesia

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ABSTRAK

Kurangnya penggunaan media pembelajaran oleh guru, dengan mengeksplorasi peran penting media dalam mempromosikan dan membatasi informasi dalam lingkungan Pendidikan. Tujuan penelitian ini menciptakan media komik strip berbasis canva dengan instruksional kemp pada materi bunyi. Penelitian dan pengembangan (R&D) adalah metodologi penelitian yang digunakan dalam penelitian ini. Subjek penelitiannya adalah 15 guru dan 30 siswa. Metode pengumpulan data menggunakan google form dan pertemuan langsung dengan responden yang terlibat. Instrument yang digunakan yaitu kuesioner (angket). Hasil temuan evaluasi dan analisis media, data dianalisis secara deskriptif menggunakan SPSS. Hasil penelitian menunjukkan validasi ahli atau guru tersertifikasi sebesar 4,54, praktikalitas guru sebesar 4,8 dan siswa sebesar 4,57. Hasil penelitian menunjukkan media pembelajaran handal, efektif, dan efisien dalam proses belajar mengajar. Simpulan dari penelitian yaitu media e-comic berbasis canva dengan Instruksional Kemp pada materi bunyi efektif dan efisien bila digunakan dalam pengajaran, khususnya pada materi khusus bunyi. Implikasi penelitian ini yaitu penggunaan media visual dapat menjadi lebih penting serta mempunyai dampak pada pengembangan kurikulum dengan mempertimbangkan integrasi media komik strip berbasis canva dalam pengajaran materi bunyi.

ABSTRACT

Teachers need to make more use of learning media by exploring the important role of media in promoting and limiting information in the educational environment. This study aimed to create Canva-based comic strip media with Kemp's instruction on sound material. Research and development (R&D) is the research methodology used in this study. The research subjects were 15 teachers and 30 students. The data collection method used Google Forms and direct meetings with the respondents involved. The instrument used was a questionnaire. The findings of media evaluation and analysis were analyzed descriptively using SPSS. The results showed expert validation or certified teachers of 4.54, teacher practicality of 4.8, and students of 4.57. The results showed that the learning media was reliable, effective, and efficient in teaching and learning. The research concludes that Canva-based e-comic media with Kemp Instruction on sound material is effective and efficient when teaching, especially on special sound material. This research implies that using visual media can become more important and impact curriculum development by considering the integration of Canva-based comic strip media in teaching sound material.

1. INTRODUCTION

Science lessons are important subjects to be taught because, through science learning, students can adopt a scientific attitude in solving their problems (Londa & Domu, 2020; Pebriani et al., 2021; Rusmalinda & Rahmadani, 2022). Science learning is expected to be a vehicle for students to learn about themselves, the environment, and prospects for further development. Science learning is a process of delivering knowledge, which is carried out by pouring knowledge into students (Anazifa & Djukri, 2017; Suzani, 2022). Real-world scenario applications are an effective strategy for teaching science as a process. In science learning, it is necessary to have more innovative teaching strategies to absorb the subject being studied well (Sumarni & Kadarwati, 2020; Wulandari et al., 2020). Science is one of the basic subjects that must be taught, and other

*Corresponding author

E-mail addresses: risafaurenza0611@gmail.com (Risa Faurenza)

objects that support learning must be included. Teaching about nature is the main emphasis of science teaching, which develops from basic ideas to more sophisticated (abstract) ideas. For students to understand more complex science learning materials offered in elementary school/Islamic elementary school classes and so that the learning process can run smoothly, teachers must be able to explain the contents concisely and clearly (F. D. Lestari & Sari, 2021; Winangsih & Harahap, 2023). The use of teaching materials is one of the elements that affect the effectiveness of the learning process. Educational media can increase students' desire to participate in the learning process and make the learning process more interesting for students. Therefore, media consumption can increase learning motivation.

The current reality is that the complexity of the educational structure, which includes buildings, learning materials, human resources, and processes, makes it very difficult to achieve educational goals. Printed materials such as books can damage students' learning motivation, especially if they use bad writing on paper and binding. Therefore, creating media that contains comic strips, one type of fiction that students read, is very important. Utilizing educational media is very important because it can be a wise approach to shorten learning sessions. Therefore, using media in the classroom can help solve problems, especially in helping students understand new and foreign ideas. Learning will be more successful if media is used in the classroom. Learning through learning media can create new desires and insights and increase learning motivation (P. I. Lestari & I Nengah Suastika, 2021; Mudiartana et al., 2021). Using media as a teaching tool will make learning activities more productive and successful. When given relevant educational materials, students will be more interested and motivated to learn (Kristin, Firosalia, and Mulia, 2023). In addition, educational media can help students understand the subject matter more quickly. Abstract concepts can create more real information when taught through the right media (Analicia & Yogica, 2021; Rahmawati & Atmojo, 2021). Media is any resource that can be utilized to highlight student observation, reflection, student interest, and feelings in the learning process. It can also enlarge the sender's experience with the recipient.

The solution to these problems is using media in the form of comics. Comics are a type of card where characters are illustrated, and interesting stories are told. This is intended to make readers laugh and be connected through visuals. Comic books are used in the classroom to help students hone their creative writing skills (Artini, 2022; Wicaksana et al., 2020). A comic book is a collection of images created with the artist's intent and philosophy, telling a story through illustrations (Kristin & Mulia, 2023; Nurafrihan et al., 2022). In addition, comic books regularly provide the writing needed according to the reader's needs. One of the comics used is a Canva-based comic strip. Comic strips or images accompanying a story are comic strip media for education. The information learned serves as the basis for written narratives. The material has captivating narratives and visuals to encourage children to learn. Students listen to the lesson material being discussed while reading it aloud. There are many advantages to using Canva to make educational media (Andriani et al., 2022; Lenka et al., 2023). This means that by using Canva, we can create various types of detailed designs with various animal features, templates, and page elements that can foster creativity and time management efficiency for teachers or even students in media design projects, which can be used as presentation materials, such as mind maps, slides, and posters. Furthermore, students can work together in a group environment by working together throughout the creative process. Canva has many benefits, including the many design options that can be used to increase student creativity in creating educational materials by utilizing various features; it can also be used to create educational materials using a laptop or other device and is practical when time is limited.

Previous research findings stated that Canva-based Arabic comic media for seventh-grade students is suitable for learning Arabic (Panjaitan & Rasyid, 2023). Canva-based digital comic media in the Indonesian language subject on energy sources is very suitable as a varied and innovative learning medium (Latifah et al., 2024; Nurafrihan et al., 2022). This comic strip media effectively improves the ability to read simple sentences for children with Autism Spectrum Disorders (Lenka et al., 2023). This research is very necessary to address the gap in the use of learning media in the classroom, especially in the context of sound material, by investigating the effectiveness of Canva-based comic strip media with the KEMP instructional approach. This is crucial because it can provide an innovative solution to improve student understanding and engagement in sound learning while enriching existing learning approaches by utilizing modern technology and graphic design. This comic strip media is intended to increase motivation, focus, conceptual understanding, and student performance based on Canva assisted by the Kemp instructional model on sound material. One of the goals of this comic strip media is to increase students' interest and enthusiasm for learning. It can also help simplify difficult ideas for children and help develop their unique personalities and learning preferences. This study aims to create Canva-based comic strip media with Kemp instructional on sound material. Comic media is expected to help children learn independently by providing them with learning tools to use themselves.

2. METHOD

This research and development research focuses on producing learning media and assessing and evaluating Canva-Based Comic Strip Media with Kemp Instructional on Sound Material. R&D research was chosen as a design for producing an effective and efficient learning product. R&D research is considered a tactic to create successful and productive teaching materials. Research and development is a method to produce or improve new products. Books, modules, packages, learning programs, and educational tools are examples of products that are developed, both software and hardware. Studies of the process, learning products, program development and evaluation, and validity must meet the requirements of practicality, efficacy, and practicality. The learning design methodology created by Kemp was used in this study. Jerrold E. Kemp created a model known as the Kemp Education Model (1985). The circle or cycle is the basis of Jerrold E. Kemp's teaching model. Teachers can apply this model to create a systematic, effective, and efficient learning environment in the classroom. Jerrold E. Kemp's learning model is a paradigm centered on the curriculum. The time required to complete the learning process and the student's perspective are priorities in this conventional approach paradigm.

The first step of the research design with the KEMP (Kemp's Model) instructional approach is needs analysis. Conduct a needs analysis first to deeply understand the challenges and needs of students in learning sound material. This will help design comic strip media based on student learning characteristics. Second, instructional planning. Use the KEMP approach to plan instruction systematically. Determine clear and specific learning objectives to guide the comic strip media development process. Make sure these objectives cover cognitive, affective, and psychomotor aspects. Third, comic strip media development. Next, Canva or other graphic design tools can be used to develop comic strip media.

Adjust the design to the KEMP instructional principles, including integrating task-oriented learning activities, modeling, and feedback. Fourth, testing and revision: Before implementing comic strip media into learning, test it with a few students first. Evaluate student responses and the effectiveness of the media in achieving learning objectives. Revise the media if necessary based on the feedback received. Fifth, implementation and evaluation. After the comic strip media is ready, implement it in sound learning. Use KEMP instructional to deliver material by utilizing the media effectively. Conduct regular evaluations to measure student progress and understanding. Sixth, analysis and interpretation. After implementation is complete, analyze the collected data using appropriate methods. Interpret the findings based on the KEMP instructional principles, highlighting the media's success in achieving learning objectives and areas where improvement is still needed. Seventh, instructional renewal. Finally, the findings from the study will be updated and improved for future instruction. This process should be an ongoing cycle that involves continuous reflection and adjustment according to student needs and developments in educational technology. Following these steps can strengthen the research design and increase the effectiveness of using Canva-based comic strip media with the KEMP instructional approach in learning sound.

The subjects of the study were teachers and students. It was handed over to 6 certified teachers to assess or validate the media. Furthermore, students and KKG (class teachers) as media evaluations. A minimum of 15 KKG teachers and 30 students are required. However, there are two stages in this learning process: the first is validation by certified teachers, and the second involves teachers and students evaluating the practical ability to use the media (using a product). This study uses a questionnaire to evaluate the media and collect data. The first instrument is a validation instrument from certified teachers. Then the second instrument is a media practicality instrument for teachers and students. The data collection method is carried out in two ways. The first is directly from the source by conducting an observation study of the media collected, and the second is by using a tool that has been integrated with the Google Form application. The data that has been previously determined is then collected and processed according to the research objectives so that it allows for a more in-depth and comprehensive data analysis. The evaluated data were analyzed using SPSS version 25, which was presented descriptively to display the level of decision of the participants who took part in the Assessment and Evaluation of Canva-Based Comic Strip Media with Kemp Instructions on Sound Material. This analysis uses a Likert scale (1-5) with criteria taken from Very Good (SB), Good (B), Less Good (KB), Not Good (TB), and Very Bad (STB). The assessment interval index and instrument grid are presented in [Table 1](#) and [Table 2](#) (Sugiyono, 2013).

Table 1. Interval Index

Index	Score	Description
4.20-5.00	5	Very Good
3.40-4.19	4	Good
2.60-3.39	3	Poor
1.80-2.59	2	Not Good
1.00-1.79	1	Very Bad

Table 2. Instrument Grid

No.	Aspect	Indicator
1	Display	Clarity of images Clarity of writing Clarity of color
2	Presentation	Attractiveness of comic appearance Presentation of material or content Grammar and sentence structure are easy to understand Suitability of content or material to the lesson Language Graphics

The instrument validation process using the instrument grid involves several steps. First, a description of the instrument grid. A clear description of the instrument grid is prepared for each aspect to be assessed. This includes clarity of writing, clarity of color, the attractiveness of the comic display, grammar and sentence structure, and suitability of the content to the subject matter, language, and graphics. Second, evaluation by experts. Experts or specialists in graphic design, education, and language evaluate the instrument grid. They are asked to assess each aspect of the instrument grid and provide input and suggestions for improvement if necessary. Third, instrument development. An assessment or evaluation instrument is then developed based on the instrument grid and expert input. This instrument includes questions or statements designed to assess each aspect listed in the grid. Fourth, initial trial. The instrument developed is tested on a small number of respondents or participants representing the target population. The goal is to collect initial data on the instrument's clarity, usefulness, and reliability. Fifth, analysis and revision. Data from the initial trial are analyzed to evaluate the instrument's suitability to the established grid. The instrument is revised according to the results of the analysis if deficiencies or improvements are found. Sixth, further trials. The revised instrument is retested on a larger sample or in a more representative situation. The goal is to ensure the instrument meets the required validity and reliability standards. Seventh, instrument finalization. After reviewing the revision process and further trials, the instrument is considered final and ready for research. This instrument is considered valid and reliable for assessing the aspects set in the instrument grid.

3. RESULT AND DISCUSSION

Result

This research and development study focuses on producing learning media and assessing and evaluating Canva-Based Comic Strip Media with Kemp Instructions on Sound Material. The product to be examined and assessed is a comic strip with sound material. Figure 1 presents a brief view of the product.



Figure 1. Comic Strip Media Cover

Based on the validation results and the practicality of the media, the output of the SPSS version 25 application was carried out on the respondents who participated. The results of experts' validation of learning media are presented in Table 2.

Table 2. Validity Score of Learning Media by Experts

No.	Aspect	N	Mean	Std. Deviation	Description
1	Content Suitability	6	4.66	0.47	Very Good
2	Presentation Suitability	6	4.33	0.47	Very Good
3	Language	6	4.5	0.5	Very Good
4	Graphics	6	4.66	0.47	Very Good
Average		6	4.54	0.47	Very Good

Table 2 shows that comic strip media is used, according to certified teacher experts, at a very good stage regarding the appearance of content feasibility (4.66), presentation feasibility (4.33), language (4.5), and graphics (4.66). Experts, also referred to as experts, provide very good insight into the application of comic strips. Experts or experts have an average of 4.54, which is a very good category. The teacher's practicality validation value is presented in Table 3.

Table 3. Practical Validity Score by Teachers

No.	Aspect	N	Mean	Std. Deviation	Description
1	Media content assessment	15	4.86	0.33	Very Good
2	Media appearance assessment	15	4.73	0.44	Very Good
Average		15	4.8	0.39	Very Good

Table 3 shows that comic strip media is used according to teachers, at a very good stage, such as teacher practicality regarding the assessment of media content (4.86) and media appearance (4.73). The teachers provide excellent insight into the application of comic strips. Teachers have an average of 4.8, which is a very good category. The validation value of practicality by students is presented in Table 4.

Table 4. Practicality Validation Scores by Students

No.	Aspect	N	Mean	Std. Deviation	Description
1	The attractiveness of the comic strip display	30	4.96	0.17	Very Good
2	The clarity of the writing	30	4.96	0.17	Very Good
3	The grammar and sentence structure are easy to understand	30	4.93	0.24	Very Good
4	The suitability of the content or material to the lesson	30	4.76	0.42	Very Good
Average		30	4.57	0.26	Very Good

Table 4 shows that comic strip media is used according to students, at a very good stage, such as students' practicality regarding the attractiveness of the comic strip display (4.96), clarity of writing (4.96), grammar and sentence structure are easy to understand (4.93) and the suitability of the content or material with the lesson (4.57). The students provided very good insight into the application of comic strips. Students have an average of 4.57, which is a very good category. Overall, it shows that the assessment and evaluation results of Canva-based e-comic media with Kemp Instructional on sound material are effective and efficient when used in teaching, especially on special sound material.

Discussion

This research is a Research and Development research that focuses on producing learning media and assessing and evaluating Canva-based comic strip media with Kemp's instructional on sound material. R&D research was chosen as a design for producing an effective and efficient learning product. R&D research is considered a tactic to create successful and productive teaching materials. At the same time, the learning design created by Kemp is used in this study. Jerrold E. Kemp created a model known as the Kemp Education Model (1985). The study results showed that Canva-based e-comic media with Kemp's Instructional on sound material is effective and efficient when teaching, especially on special sound material. Comic strip educational media presents difficult ideas in a more interesting and visually appealing way (Kristin, Firosalia dan Mulia, 2023; Kristin & Mulia, 2023; Widari & Putra, 2022). Narration and visuals in comic strips help students understand the subject matter of Sound more completely. Canva is the application used to produce this media (Jannah, 2020; Rahmawati & Atmojo, 2021; Smith et al., 2018).

Comic strip media is intended to help students become more proficient learners by improving their understanding of subjects and learning habits. The purpose of the cover of a sound-themed comic strip is to arouse the interest of readers or viewers and arouse their emotions. This cover is an illustration of the content and message to be conveyed in this comic strip. Therefore, the content must be chosen carefully to increase the attention span of readers and allow the content to be displayed effectively.

The desired outcome of a particular teaching or training procedure is known as the learning objective. The understanding, application, and evaluation of certain knowledge, skills, or subjects by students are the goals of this objective. The learning objectives usually include cognitive, emotional, and psychomotor aspects. The material offered by comic strip media is related to Sound in everyday experience. The characteristics of Sound, its properties and sources, its transmission, measurement, its hearing in humans, its application in everyday life, and, in particular, the consequences of hearing storage and safety when loud sounds are consumed are all explained in this material (Inawan et al., 2022; Satria Dewi Pendit et al., 2022). This final stage of comic strip media is to improve students' conceptual understanding and performance. The advantages of the research conducted on the assessment and evaluation of Canva-based comic strip media with KEMP instructional on sound material are that the KEMP instructional approach has been proven effective in designing learning that focuses on achieving learning objectives and optimal student learning experiences. By adopting this approach, the study has the advantage of designing learning media to optimize the sound learning process. Using Canva as a platform for creating comic strips, this study utilizes modern technology that allows easy creation of attractive multimedia content (Nurafrilian et al., 2022; Smith et al., 2018). This broadens the scope and quality of learning media that can be produced, thereby increasing the appeal and effectiveness of learning.

Another advantage of this study is that the results of this study use a comic strip approach based on Canva with Kemp instructional, which can be considered an innovation in presenting sound material. Visual design using Canva may provide advantages in attracting users' attention and increasing their interest in sound material (Azizah & Masub Bakhtiar, 2022; Panjaitan & Rasyid, 2023). Then the contribution of research results shows the contribution in increasing the effectiveness of learning media by combining Kemp instructional in the Canva comic strip format on sound material and providing a special evaluation model for Canva comic strip media with Kemp instructional, which can be used as a reference for research and development of similar media (Analicia & Yogica, 2021; Windawati & Koeswanti, 2021). This finding is reinforced by previous research stating that Canva-based Arabic comic media for seventh-grade students is suitable for learning Arabic language (Panjaitan & Rasyid, 2023). Canva-based digital comic media in the Indonesian language subject on energy sources is very suitable for use as a varied and innovative learning media in learning (Latifah et al., 2024; Nurafrilian et al., 2022). This comic strip media effectively improves the ability to read simple sentences for children with Autism Spectrum Disorders (Lenka et al., 2023). Limitations in generalizing the results of this study to a wider population level, depending on the scope and representativeness of the sample, and limitations in access or user technology skills can affect the effectiveness of Canva and Kemp instructional. Visual media can be more important and impact curriculum development by integrating Canva-based comic strip media in teaching sound material.

4. CONCLUSION

From the assessment and evaluation of Canva-based e-comic media with Kemp Instructional on sound material, the media used in this writing is effective and efficient when used in teaching, especially on special sound material. This is proven by using Google Forms to complete the questionnaire, followed by a direct meeting with the respondents who participated. The assessment results are processed through SPSS version 25. Therefore, using media in this study effectively promotes science learning on Sound. The significance value shows a good category and validity. Therefore, the media used in this study is effective in science learning on sound material. Further research is recommended to explore the potential of other learning media that can be applied in similar contexts and propose further research to measure the effectiveness of Kemp instruction in comic strip-based teaching.

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