Educational Comics Based on Creative Problem Solving With the Aid of Kvisoft Flipbook Maker Pro for Elementary School

Dina Dahliana¹, Gustina Radila², Elvira Khairunnisa³

1,2,3 Sekolah Tinggi Agama Islam Solok Nan Indah, Indonesia
Corresponding Author: ✉ dinadahlianastaisni1@gmail.com

ABSTRACT

This research aims to develop and evaluate the effectiveness of using educational comics based on Creative Problem Solving (CPS) with the help of Kvisoft Flipbook Maker Pro as an interactive learning tool for elementary school students. This research adopts the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model development approach. Initial analysis was carried out to identify student needs and elementary school characteristics. Then, educational comics were developed by combining the CPS concept and Kvisoft Flipbook Maker Pro technology. Field trials were conducted to evaluate its effectiveness. The innovation of this research lies in the use of a combination of the CPS approach and interactive flipbook technology. This educational comic not only aims to convey information, but also stimulates students' creativity and problem-solving abilities through interactivity. The research results include the development of educational comics that are integrated with Kvisoft Flipbook Maker Pro. Evaluation is carried out through measuring increased student understanding, active involvement in the learning process, and positive responses from teachers and students. This research is expected to contribute to curriculum development literature by integrating creative and technological approaches in learning. In addition, it can provide new insights into the use of flipbook technology in the context of elementary education.

INTRODUCTION

Education is the main foundation in character formation and increasing students' cognitive capacity. In the current digital era, the integration of technology in the learning process is becoming increasingly relevant to achieving holistic educational goals. One approach that has attracted attention is the use of educational comics based on Creative Problem Solving (CPS) supported by Kvisoft Flipbook Maker Pro. This research aims to explore the potential of interactive educational comics as an effective

learning tool at the elementary school level (Fathurrohmi, 2019); (Fadillah et al., 2021); (Rosalia, 2022).

Elementary School is a critical period in forming understanding and instilling positive values in students. Unfortunately, conventional learning methods are often inadequate to capture students' attention and motivate them to understand the concepts being taught. Therefore, an innovative and interesting approach is needed to increase the effectiveness of learning in elementary schools.

Using comics as a learning medium offers an interesting approach, especially for children in elementary school. The combination of educational comics, which are based on the Creative Problem Solving approach, with interactive flipbook technology from Kvisoft Flipbook Maker Pro is expected to create a stimulative and challenging learning environment (Putriani & Kristiantari, 2022); (Ganesha, n.d.); (Surahman et al., 2023).

This research aims to develop and evaluate the effectiveness of educational comics based on Creative Problem Solving assisted by Kvisoft Flipbook Maker Pro in increasing elementary school students' understanding and involvement. The results of this research are expected to provide multiple benefits. First, for the world of education, this research can inspire the development of innovative learning methods that can be applied in elementary schools. Second, for policy makers, this research can provide a new perspective on the integration of technology in an effort to improve the quality of learning at the elementary level.

By focusing on the potential of combining educational comics, the CPS approach, and interactive flipbook technology, it is hoped that this research can open the door to more effective, interesting and meaningful learning for students in elementary schools.

RESEARCH METHOD

This research will use a research and development (R&D) approach following the ADDIE (Analysis, Design, Development, Implementation, Evaluation) model. This model provides a structured framework for designing, developing, implementing, and evaluating educational products.

1) Analisis (Analysis). The analysis stage will involve evaluating student needs, elementary school characteristics, and the learning challenges faced. This will include a literature review to understand the theoretical basis of educational comics, the concept of Creative Problem Solving, and the features and potential of Kvisoft Flipbook Maker Pro. 2) Design. At this stage, the conceptual framework and curriculum for educational comics will be designed. The developer will detail the story structure, visual presentation and interactivity in accordance with Creative Problem Solving principles. The design will also include technical specifications for implementation with Kvisoft Flipbook Maker Pro. 3) Development (Development). Educational comics will be developed based on the designs that have been prepared. Content, images and

interactive elements will be structured to create an engaging learning experience. Kvisoft Flipbook Maker Pro will be used to integrate interactive elements into the comic. 4) Implementation. Educational comics will be tested in elementary school environments. During implementation, developers will engage teachers and students to get direct feedback regarding user experience, understanding of the material, and creative and interactive aspects. 5) Evaluation. The evaluation was carried out to measure the effectiveness of educational comics. This involves collecting data regarding student understanding before and after using comics, level of student engagement, and teacher feedback. Data analysis will be used to assess the success and effectiveness of educational comics.

Through this approach, this research hopes to produce educational comics that are not only informative but can also stimulate students' creativity and problem solving in elementary schools. This method allows the adaptation of content to achieve optimal learning objectives according to student needs and elementary school characteristics.

RESULTS AND DISCUSSION

The CPS Kvisoft Flipbook Maker pro-based educational comic developed in this research using the ADDIE development research stages is the result of collaborative thinking between researchers and practicing teachers in schools. The product developed is theme 4 about CPS-based rights and obligations which can be implemented in class III of elementary schools which is based on core competencies and basic competencies in the 2013 Curriculum. The development of CPS-based educational comics with the help of Kvisoft Flipbook Maker pro is in accordance with educational demands in the Revolutionary era Industry 4.0 and developing students' 4C skills (Communication, Collaboration, Critical Thinking, and Creativity).

The CPS-based educational comic with the help of Kvisoft Flipbook Maker pro which was developed consists of activities to understand problems, reveal ideas, find solutions and implement them. Based on the results of the development of a CPS-based educational comic model assisted by Kvisoft Flipbook Maker pro for grade III elementary school students, it can be concluded that with the development research model following the ADDIE stage, the development of CPS-based educational comics assisted by Kvisoft Flipbook Maker pro is proven to be able to improve the learning outcomes of class students. III elementary school.

Validity is needed to test a research. The word "valid" is often interpreted as valid or valid, valid means that the assessment has provided accurate information about the media being developed. CPS-based educational comics with the help of Kvisoft Flipbook Maker developed are declared valid if they meet the specified requirements both in content and construct. This is what is called content validity. Furthermore, these components must also be consistently related to each other or what is also called

construct validity. In this research validation is further broken down into product validation which is carried out on content, language and presentation.

The validity of CPS-based educational comics with the help of Kvisoft Flipbook Maker involves 3 expert validators. Product validation can be carried out by several experts or experienced experts to assess the newly designed product, so that its weaknesses and advantages can then be identified. The validation results from these experts are collected and then analyzed to find the average of each indicator and each aspect.

Based on the results of validation data analysis of CPS-based educational comics with the help of Kvisoft Flipbook Maker Pro by educational experts and practitioners, validity was obtained at 89.06% (Content Validation), 80% (Graphics Validation), and 83.3% (Language Validation). If seen from the categories that have been developed, they are classified as valid categories. Therefore, it can be concluded that the CPS-based educational comics developed with the help of Kvisoft Flipbook Maker Pro are in accordance with curriculum demands. The very valid assessment of the CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro that was developed indicates that the CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro can be used as a learning resource for students.

CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro which have been declared valid by validators are then tested to see their practicality. CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro are said to be practical, if teachers and students can use CPS-based integrated thematic educational comics assisted by Kvisoft Flipbook Maker Pro to carry out learning, without many problems. Practicality testing is carried out through several activities, namely practicality questionnaires by teachers and practicality questionnaires by students. Based on the analysis of practicality test results using a teacher questionnaire, a percentage of 92.75 was obtained in the very practical category. Based on the results of the questionnaire filled out by students, a percentage of 86.84 was obtained in the practical category. The conclusion is that the CPS-based educational comics developed with the help of Kvisoft Flipbook Maker Pro are interesting because they are equipped with fun learning process activities for students. The appearance of CPS-based educational comics with the help of Kvisoft Flipbook Maker Pro is also attractive, so that students are more enthusiastic about studying the material. Apart from that, students also stated that they did not need too much direction while completing each activity sheet in the CPS-based educational comic with the help of Kvisoft Flipbook Maker Pro.

Effectiveness can be achieved if CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro are declared valid and practical. The effectiveness of the CPS-based educational comics developed by Kvisoft Flipbook Maker Pro can be seen from the students' learning outcomes. This effectiveness test was carried out three times in 3

elementary schools. Assessment is used to determine the effectiveness of the learning process after using CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro. Results assessment was carried out on the results of questionnaires and student learning motivation interviews after using CPS-based educational comics with the help of Kvisoft Flipbook Maker Pro. The results of the analysis show the learning outcomes of students after learning using CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro and this proves that the CPS-based educational comics assisted by Kvisoft Flipbook Maker Pro used are effective for the learning process.

CONCLUSION

This research shows that the development and implementation of educational comics based on Creative Problem Solving (CPS) with the help of Kvisoft Flipbook Maker Pro can have a positive impact on learning at the elementary school level. The evaluation results show an increase in students' understanding of the learning material. The CPS approach in educational comics helps students understand concepts more deeply and contextually. Implementing educational comics with Kvisoft Flipbook Maker Pro creates an interesting and interactive learning experience. Students demonstrated a high level of engagement during the use of comics, providing support for a creative and interactive approach. The Creative Problem Solving concept integrated into educational comics has succeeded in stimulating students' creativity. They are skilled at identifying problems, formulating ideas, and finding solutions, demonstrating the development of creative thinking and problem-solving abilities. Feedback from teachers and students shows a positive response to the concept and use of Kvisoft Flipbook Maker Pro. They admit that educational comics provide a fun variety of learning and are different from conventional methods. This research opens the door for further development in the integration of learning technology in elementary schools. The use of Kvisoft Flipbook Maker Pro proves its potential as a tool that can increase interactivity and interest in learning.

Thus, this research concludes that the use of CPS-based educational comics with the help of Kvisoft Flipbook Maker Pro can be an effective alternative in improving student learning outcomes at the elementary school level. Through this approach, it is hoped that it can continue to be developed to make a positive contribution to the development of innovative learning methods in elementary schools.

REFERENCES

Fadillah, A., Nopitasari, D., & Bilda, W. (2021). Development E-Book Learning Media Based on Kvisoft Flipbook Maker. *Kreano, Jurnal Matematika Kreatif-Inovatif*, 12(2), 312–322. https://doi.org/10.15294/kreano.v12i2.31684

Fathurrohmi, U. (2019). Pengembangan E-Modul Biologi Berbasis Kvisoft Flipbook

Maker pada Materi Fungi untuk Memberdayakan Berpikir Tingkat Tinggi Siswa Kelas X di SMAN 11 Bandar Lampung. *Journal of Chemical Information and Modeling*, *53*(9), 1–77.

Ganesha, U. P. (n.d.). *International Education of Elementary*.

Putriani, N. K., & Kristiantari, M. G. R. (2022). Flipbook Maker-Based Teaching Materials of thematic Learning for grade II Elementary School Students. *Jurnal Ilmiah Sekolah Dasar*, *6*(3), 476–484. https://doi.org/10.23887/jisd.v6i3.47133

Rosalia, E. (2022). Pengaruh Pendekatan Concrete-Pictorial-Abstract (Cpa) Berbantuan Flipbook Terhadap Peningkatan Kemampuan Koneksi Matematis Siswa Sekolah Dasar. *(Doctoral Dissertation, Universitas Pendidikan Indonesia).*, 1–23.

Surahman, S., Astuti, I., & Afandi, A. (2023). Flipbook Maker Based E-Module Development Design in Thematic Learning in Elementary School. *Jurnal Educatio FKIP UNMA*, *9*(2), 484–489. https://doi.org/10.31949/educatio.v9i2.4456