

## Implementation of Project Based Learning Model Based on Pop-Up Book Media to Improve Student's Creativity In History Lesson

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### Abstrak

Penelitian ini bertujuan untuk menganalisis penerapan model *Project Based Learning* (PjBL) berbasis media *Pop-Up Book* dalam meningkatkan kreativitas peserta didik pada pembelajaran sejarah di SMA Negeri 1 Gebog Kudus. Penelitian ini dilandasi oleh kebutuhan untuk menciptakan pembelajaran yang mendorong keterlibatan aktif dan pengembangan keterampilan abad ke-21, khususnya kreativitas. Metode yang digunakan adalah kualitatif deskriptif dengan pendekatan studi kasus, dengan subjek penelitian berupa guru sejarah dan peserta didik kelas XI F-8. Data dikumpulkan melalui wawancara, observasi, dan studi dokumen, lalu dianalisis menggunakan teknik triangulasi data. Hasil penelitian menunjukkan bahwa penerapan PjBL dengan media *Pop-Up Book* mampu meningkatkan keempat indikator kreativitas peserta didik, yaitu kelancaran berpikir, fleksibilitas, orisinalitas, dan elaborasi ide. Hal ini menunjukkan bahwa penerapan PjBL berbasis *Pop-Up Book* merupakan alternatif pembelajaran kreatif yang relevan dan dapat diadaptasi di berbagai jenjang dan mata pelajaran.

**Kata kunci:** project based learning, *pop-up book*, kreativitas.

### Abstract

*This study aims to analyze the implementation of the Project-Based Learning (PjBL) model using Pop-Up Book media in enhancing students' creativity in history learning at SMA Negeri 1 Gebog Kudus. The research is motivated by the need to create learning experiences that encourage active student engagement and the development of 21st-century skills, particularly creativity. A descriptive qualitative method with a case study approach was employed, involving a history teacher and students from class XI F-8 as the research subjects. Data were collected through interviews, observations, and document analysis, and were analyzed using data triangulation techniques. The findings indicate that the implementation of PjBL with Pop-Up Book media effectively enhances the four indicators of student creativity: fluency in thinking, flexibility, originality, and idea elaboration. This suggests that the use of Pop-Up Book-based PjBL is a relevant and adaptable creative learning alternative across various educational levels and subjects.*

**Keywords:** project based learning, *pop-up book*, creativity.

### INTRODUCTION

Education in Indonesia today is confronted with the need for learning that not only focuses on mastery of subject matter but also emphasizes 21st-century skills such as creativity, critical thinking, and the ability to adapt to rapid technological developments (Mashudi, 2021). The lecture method is still frequently

encountered in the field as the primary approach used by teachers to deliver and explain material in a structured manner. This method is considered effective by some students because they feel comfortable listening to the teacher's explanation and receiving information directly without needing to actively engage in the learning process. This

condition indicates that the learning approach used is still teacher-centered. Teacher-centered learning has limitations in fostering students' critical thinking and creativity (Rahmadila et al., 2023). When students act merely as passive listeners, they lack opportunities to interact, explore, and develop new and creative ideas. Such conditions may lead to a decline in learning motivation and overall student achievement (Hasriadi, 2022). In the 21st century, education must develop students' potential, including creativity. Creativity not only plays a role in producing new works but also in problem-solving and thinking critically in innovative ways. One way to foster student creativity is through history learning.

History education is one of the subjects that plays a crucial role in shaping students' character and national insight, where students not only acquire knowledge about the past but are also encouraged to understand the processes of social, political, and cultural change that shape today's society. This aligns with the goals of history education, which emphasize the development of historical thinking—students' ability to acquire facts and critically and deeply master historical ideas (Kemdikbudristek, 2022). In history learning, creativity can be manifested in how students interpret historical events and present them in engaging and meaningful ways (Sit et al., 2016). Creativity also includes the ability to

generate original ideas and solve problems in unique ways. It becomes a vital skill in history education, serving as a bridge between understanding historical concepts and students' unique visual expressions. Therefore, innovative learning approaches are needed to shift the focus from teacher-centered instruction to student-centered learning, where students actively participate in the learning process.

The Merdeka Curriculum is a form of educational reform aimed at creating a contextual, flexible learning environment focused on developing 21st-century competencies, including creativity (Kemdikbudristek, 2022). One innovative teaching approach aligned with the principles of the Merdeka Curriculum is the implementation of the Project-Based Learning (PjBL) model. According to Barus et al. (2022), PjBL emphasizes active student engagement in solving real, challenging, and meaningful projects. Through these projects, students act as active, collaborative, and innovative creators of knowledge. One form of PjBL that stimulates student creativity is the development of Pop-Up Books in history learning. This model encourages students to conduct research, design, and produce a creative product in the form of an interactive book featuring three-dimensional elements. PjBL promotes active student involvement and provides space for them to construct their own

understanding (Purnomo & Ilyas, 2019). The use of Pop-Up Books as a learning medium can increase student interest and encourage them to think creatively and critically in presenting historical material in a visual and informative way.

The study by Sundari et al. (2023) showed that Pop-Up Book-based learning can significantly enhance students' creativity, particularly in the dimensions of originality and idea elaboration. According to Munandar, as cited in Nursalam (2024), creativity encompasses four key indicators: fluency in thinking, flexibility in thinking, originality of ideas, and idea elaboration. These four indicators are highly relevant in the process of creating a Pop-Up Book, where students are required to design visual concepts of historical events, adjust them to the spatial and temporal context, and convey their ideas in an original and in-depth manner.

The PjBL model is rooted in constructivist theory, which emphasizes that knowledge is constructed by learners through direct experience and personal reflection (Lestari et al., 2023). This model not only encourages students to design projects for presentation but also fosters emotional engagement, teamwork, and critical problem-solving skills. This aligns with the findings of Thomas et al. (2000), which demonstrated that PjBL enhances student engagement in the

learning process and promotes more meaningful learning outcomes.

Field data show that the implementation of the Project-Based Learning (PjBL) model using Pop-Up Book media at SMA Negeri 1 Gebog Kudus has had a positive impact on students' creativity. Based on an interview with the history teacher, Mrs. Indri Siswanti, it was revealed that this learning model made students more enthusiastic during the learning process, actively engaged in collaboration, and showed improvement in producing original works. This aligns with Csikszentmihalyi (1996) view that creativity thrives in environments that support exploration and freedom of expression. A study by Elmanidar et al. (2023) also found that the use of PjBL with Pop-Up Book media is effective in enhancing creativity among elementary school students, although there is still a lack of research specifically on its application in history learning at the high school level. Therefore, this study was conducted to further investigate the implementation of Pop-Up Book-based PjBL in senior high school history education.

Based on the previously described background, this study aims to address the research question: How do the preparation and implementation of the Project-Based Learning (PjBL) model using Pop-Up Book media enhance students' creativity in history learning at SMA Negeri 1 Gebog

Kudus? The objective of this study is to conduct an in-depth analysis of the implementation process of PjBL in the context of history education and its impact on students' creativity—particularly in terms of engagement, creative output, and the development of creative thinking throughout the learning process. This research is expected to provide practical contributions for teachers in designing more innovative history lessons and to support the advancement of project-based learning models. By integrating the PjBL model with Pop-Up Book media, it is anticipated that students will not only understand history textually but also be able to express their understanding through creative works that hold both educational and aesthetic value.

## **METHODS**

This study employs a descriptive qualitative approach using a case study method, aiming to gain an in-depth understanding of the implementation of the Project-Based Learning (PjBL) model using Pop-Up Book media in history education. Qualitative research is a method that involves the collection and analysis of descriptive, contextual, and holistic data to understand the meaning behind a phenomenon or event being observed (Creswell, 2014). The research was conducted at SMA Negeri 1 Gebog Kudus, with the subjects consisting of a

history teacher and students of class XI F-8. The data used in this study include both primary and secondary data. Primary data were obtained through interviews and classroom observations, while secondary data were collected through document studies involving journals, books, and student learning records. Data collection techniques involved direct interviews with the history teacher, Mrs. Indri Siswanti, as well as with selected student representatives from each group, observation of classroom learning activities, and review of documents relevant to the study.

The validity of the data was ensured through source and method triangulation, by comparing results obtained from all three data collection techniques. According to Miles et al. (2013), qualitative data analysis involves four stages: (1) data collection, (2) data reduction, (3) data display, and (4) conclusion drawing. In this study, the data were analyzed systematically through these stages to produce a comprehensive picture of the effectiveness of the PjBL model using Pop-Up Book media in enhancing students' creativity in history learning.

## **RESULTS AND DISCUSSION**

### **Preparation for Project-Based Learning Using Pop-Up Book Media**

Before the learning process began, the history teacher had developed a

systematic instructional plan. Data collected through interviews indicated that the preparation stage was carefully arranged, covering the development of teaching modules, the construction of evaluation instruments, and the organization of student groups. Mrs. Indri Siswanti, the history teacher, stated that students tended to prefer lecture-based instruction, in which the teacher explains material using PowerPoint while students listen and take notes. This method often resulted in passive learning and low student engagement. Recognizing this, the teacher sought a more engaging learning model that would actively involve students. The selected alternative was Project-Based Learning (PjBL) using Pop-Up Book media. The choice of both the model and the media project was partly inspired by one of the competitions held by the school during its anniversary celebration. The aim was to actively involve students in the learning process while enhancing their creativity through project creation. Students were given the freedom to explore their ideas and design Pop-Up Books based on the assigned historical topics, promoting not only engagement but also the expression of original and meaningful ideas.

#### Teacher Preparation in the Implementation of PjBL with Pop-Up Book Media

During the preparation stage, the teacher undertook several actions prior to

the implementation of learning. This included developing a teaching module aligned with the Merdeka Curriculum, preparing contextual historical materials, and structuring the phases of instruction—ranging from posing essential questions, project planning, scheduling, monitoring, to final evaluation. These preparations were designed to align with the principles of the Merdeka Curriculum, which emphasizes freedom of thought, creativity, and the optimal development of students' potential (Kemdikbudristek, 2022). The historical topic selected for this Pop-Up Book-based PjBL model was Indonesian Resistance Against Colonialism, covering five key resistance movements: against the Portuguese, Japanese, Dutch East India Company (VOC), the Dutch, and the British. The project was conducted over a three-week period or three instructional sessions, involving task and group assignments, the creation of the Pop-Up Book, and final presentations. Students were given the freedom to choose the specific theme of their Pop-Up Book within a set timeframe. The teacher acted as a facilitator, rather than the sole source of knowledge, supporting students in a learning process that was constructive and exploratory. As Barus et al. (2022) emphasized, the teacher's role in the PjBL model is to encourage active student participation through challenging and meaningful activities.

### **Implementation of PjBL Using Pop-Up Book Media**

The implementation of Project-Based Learning (PjBL) was carried out in three main phases: planning, project execution, and presentation of results. During the first meeting, which focused on planning, the lesson began with an essential question designed to prompt students to explore historical events more deeply. Students were then divided into five groups using an online spinning tool, and they collaboratively planned their respective projects. Each group was responsible for organizing a project timeline, distributing individual tasks, gathering historical materials relevant to their assigned theme, designing the Pop-Up Book layout, and eventually presenting the completed project in front of the class. Interview data with students revealed that in the first session, group members assigned roles, selected the Pop-Up Book theme, searched for content, and determined the materials required for construction. This planning phase encouraged students to think critically and creatively in generating unique ideas. The process supported the development of active learners, in line with Thomas et al. (2000), who argued that engaging students in authentic, real-world projects enables them to build deeper and more meaningful understanding.

In the second week, students continued developing their Pop-Up Books,

most of which had already been started outside regular school hours. During this phase, the teacher actively monitored each group's progress and provided constructive feedback throughout the process. Students showed enthusiasm and active participation in all aspects of the project—engaging in group discussions, gathering information from books and social media, sketching designs, and constructing their Pop-Up Books. Throughout this stage, students demonstrated a divergent flow of ideas (fluency) and showed flexibility in adapting to problems when challenges arose. Several groups revised their designs after conducting test trials, particularly in response to issues with the construction of 3D elements. Students displayed originality through their distinctive and varied Pop-Up Book designs, with each group producing unique creative outputs. This demonstrates how the PjBL model integrates learning with critical and collaborative thinking. As noted by Purnomo & Ilyas (2019), Project-Based Learning enhances problem-solving skills and creativity by providing students with the space to independently develop and refine their own solutions.

During the third week, observation results showed that students successfully presented their completed Pop-Up Book projects. The presentation sessions were marked by active interaction and question-and-answer exchanges between

the presenting groups and their peers. Students demonstrated the ability to elaborate visual details alongside narrative content, evident in the quality of the final products. The historical events were presented in an engaging three-dimensional visual format, combining narrative text, illustrative images, and Pop-Up Book elements in a harmonious and meaningful way. Each group's presentation reflected a high level of creativity in visualizing historical material into an informative and aesthetically appealing educational medium. Additionally, the presentation process allowed students to practice and develop public speaking skills in front of their classmates and the teacher. Many students expressed that they found it easier to understand historical content through the creation of the Pop-Up Book, as the medium was more interactive and meaningful. Each part of the material was visualized using distinct elements, which helped them recall historical facts more effectively. Following each group's presentation, the teacher provided content reinforcement, clarified or supplemented incomplete points, and offered constructive evaluation of the student products.

Working on the project in groups fostered students' collaboration and communication skills. Each member played a role in the planning, production, and presentation stages. These activities

encouraged students to actively listen to one another, engage in discussions, and resolve creative conflicts. Such collaborative efforts nurtured values of empathy and social responsibility among students. This aligns with the view of Goodman & Stivers (2010), who argue that collaboration within project-based learning environments trains students in interpersonal skills, which are essential for navigating the challenges of the professional world.

#### **Enhancing Students' Creativity Through Four Creativity Indicators**

Based on observation results, supported by interview data and product analysis, it can be concluded that there was a significant improvement in students' creativity, as reflected in the four creativity indicators proposed by Munandar as cited in : fluency, flexibility, originality, and elaboration. These indicators served as evaluative tools to observe and measure the extent to which students developed their creative potential throughout the Pop-Up Book project-based learning process.

First, fluency was demonstrated by the abundance of ideas generated by students during the planning phase. Each group produced a variety of historical narratives and visualizations, reflecting their ability to think freely and express ideas fluidly. This skill is essential in 21st-century education, where students are expected

to respond to challenges with quick, diverse, and original thinking (Safi'i, 2019).

Second, flexibility was evident in students' ability to modify their designs or visual approaches when encountering technical difficulties, such as shape inaccuracies or material shortages. They were able to adapt to the situation and make creative decisions accordingly. This finding supports the perspective of Lestari et al. (2023), who argue that cognitive flexibility in educational projects reflects students' capacity for innovation and their ability to adjust ideas to real-world constraints and available resources.

Third, originality was clearly reflected in the uniqueness of each group's Pop-Up Book product. No two designs were alike—each differed in cutting techniques, color schemes, and narrative approaches. This aligns with Csikszentmihalyi (1996) concept that creativity thrives in environments that allow freedom of expression and the courage to deviate from conventional norms.

Fourth, elaboration was reflected in the level of detail in the content and design of the books produced by students. They did not merely present historical information in narrative text, but enriched it with illustrations, visual ornaments, and three-dimensional structures that complemented each other. This level of elaboration indicates a deep understanding of the subject matter and

an ability to communicate ideas through complex visual composition. As explained by Sundari et al. (2023), the combination of text and visual form in a Pop-Up Book stimulates students' thinking and enhances their creative perception. These four indicators collectively demonstrate that the learning approach was effective in significantly enhancing students' creativity across multiple dimensions.

In addition to increased creativity, students expressed that creating the Pop-Up Book made it easier for them to understand historical events. They were able to perceive connections between events through the narrative visualizations they created themselves. This process positioned them not just as recipients of information, but as constructors of knowledge representation. These findings align with Sit et al. (2016), who argue that visual-based history learning enhances memory retention and comprehension of historical causality, as students are actively engaged in the transformation of information.

### **Student Creativity Development**

The project implementation process also encountered several challenges experienced by both the teacher and the students. Students reported that one of the primary obstacles during the Pop-Up Book project was time constraints, as much of the work had to be completed outside of school hours. Coordinating

group work schedules was difficult due to each member's individual commitments. In addition, students faced technical difficulties in creating the three-dimensional (Pop-Up) elements, financial limitations, and restricted access to tools and materials. However, these obstacles were addressed through collaborative work strategies, independent time management, and consistent support from the teacher. These findings demonstrate that well-designed projects can serve as adaptive learning platforms, allowing students to navigate real-world constraints while still engaging creatively. As Runco & Jaeger (2012) note, the creative process becomes more mature when individuals or groups are able to modify ideas in response to practical limitations.

## CONCLUSION

The implementation of the Project-Based Learning (PjBL) model using Pop-Up Book media in history education at SMA Negeri 1 Gebog Kudus has proven effective in enhancing students' creativity. Students became more active, creative, and engaged throughout the learning process. This was evidenced by the clear manifestation of the four creativity indicators—fluency, flexibility, originality, and elaboration—from the planning stage to the final presentations. The use of Pop-Up Book media provided a joyful and meaningful learning experience, helping

students better understand historical material. Moreover, the model fostered students' collaboration and communication skills, making the learning process more interactive and student-centered. Challenges such as limited time and materials were successfully managed through thoughtful planning and effective group cooperation. It is hoped that the application of the Pop-Up Book-based PjBL model can serve as a creative learning alternative that may be implemented in other subjects and across different educational levels.

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