

Exploration of Students' Learning Experiences in Developing Creativity through Project-Based Learning

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Article Information

ABSTRACT

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Aim: This study aims to explore students' learning experiences in developing creativity through the implementation of Project-Based Learning (PjBL) in fairy tale learning at the elementary school level. **Method:** A qualitative approach with a phenomenological method was employed, involving a fourth-grade teacher and fourth-grade students as participants. Data were collected through classroom observations, in-depth interviews, and documentation, and were analyzed using data reduction, data display, and conclusion drawing, with source and technique triangulation employed to ensure trustworthiness. **Result and Discussions:** The findings revealed that students' creativity developed progressively throughout the project process, beginning with idea exploration, group discussions, story-planning, revision, and culminating in project presentation. At the beginning of the learning process, students relied heavily on teacher guidance; however, they gradually became capable of independently determining storytelling strategies, modifying storylines, selecting appropriate media, and organizing group roles. The development of creativity was reflected in students' increased ability to generate multiple ideas (fluency), adapt strategies when encountering challenges (flexibility), produce distinctive storytelling performances across groups (originality), and refine their ideas through revision and reflection (elaboration). The study further found that creativity emerged not as an individual process but through the interaction of students' personal experiences, peer collaboration, teacher facilitation, and the use of digital technology as a catalyst for idea generation. **Conclusion:** These findings suggest that PjBL in fairy tale learning not only produces storytelling products but also creates authentic learning experiences that foster students' creativity in meaningful, contextual, and collaborative ways.

Keywords: Project Based Learning, Student Creativity, Elementary School, Fairy Tale Story



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INTRODUCTION

The development of 21st-century society requires students to possess creative, critical, communicative, and collaborative thinking skills. Creativity is considered one of the essential competencies needed to address various life challenges and the rapid advancement of technology. Therefore, learning processes in schools should no longer focus solely on knowledge acquisition but also on the development of students' ability to generate new ideas and solutions. However, in practice, classroom learning is still largely dominated by teacher-centered conventional methods, which limit students' opportunities to develop their creativity. This condition results in students becoming passive and less engaged in the learning process. Therefore, a learning model that provides more meaningful learning experiences and encourages active student engagement is needed.

One learning model that is considered capable of fostering students' creativity is Project-Based Learning (PjBL). This model positions students at the center of the learning

process through project activities that require them to identify problems, design solutions, collaborate, and produce tangible outcomes. Various studies have shown that PjBL positively contributes to the enhancement of students' creativity, innovation, and problem-solving skills. According to (Wayan et al. 2024), Project-Based Learning (PjBL) is a learning model that has distinctive characteristics compared to other instructional approaches. It positions students as active subjects in the learning process, promotes collaborative skills through group work, enhances higher-order thinking skills, and strengthens positive interactions between students and teachers within a constructive learning environment. PjBL enables students to gain direct learning experiences through authentic activities. In this process, students learn to develop ideas, make decisions, conduct exploration, and reflect on their work outcomes. Such learning experiences are believed to be an important factor in the development of students' creativity.

Creativity is an essential competency that contributes to students' ability to construct innovative ideas, maximize

their potential, solve problems effectively, and produce new works or solutions based on theoretical understanding and information obtained through the learning process (Syarwani, Syarwani Ahmad 2026). The development of students' creativity should be carried out in a planned and continuous manner through systematic stages, including preparation, exploration, incubation, illumination (idea emergence), verification, and implementation. Supported by Didukung (Pangestika and Suweleh 2024) exploratory learning models optimize the provision of stimulation as a means of encouraging students to acquire new knowledge and experiences, leading to a transformation from not understanding to understanding a concept. Each of these stages contributes to shaping students' ability to think creatively and produce innovative solutions. In the learning process, teachers play a strategic role as facilitators who create a conducive learning environment to encourage students to explore ideas, solve problems creatively, and produce works with novelty value. Students' creativity can be identified through various indicators, such as high enthusiasm in learning activities, persistence in completing tasks, willingness to try new approaches or experiences, and the ability to generate innovative ideas, solutions, and works in accordance with the learning context.

Based on initial observations and interviews conducted by the researcher at SD Negeri 02 Jomblang, Semarang City, it was found that students' creativity levels in learning activities were still relatively low. This condition is indicated by students' low participation in expressing opinions, limited opportunities to develop creative ideas, and the dominance of teacher-centered conventional instruction. This situation results in less interactive learning processes that are not yet able to create an optimal environment for developing students' creativity. In addition, low student creativity is also influenced by the lack of space and facilities that allow them to freely and constructively express their ideas, thoughts, and potential.

Based on this problem, the present study aims to explore students' learning experiences in developing creativity through the implementation of Project-Based Learning (PjBL) in fairy tale learning among fourth-grade students at SDN Jomblang 2, Semarang City.

METHOD

This study employed a qualitative approach using a phenomenological method to gain an in-depth understanding of students' learning experiences. The phenomenological method was selected because it seeks to explore the essence of participants' subjective experiences of a particular phenomenon, consistent with the fundamental principles of phenomenology, which emphasize the direct exploration of individuals' lived experiences (*Lebenswelt*) without the influence of prior assumptions or preconceptions (Husserl 1965). The study was conducted at SDN 02 Jomblang, Semarang City, in March 2026. The population consisted of students at SDN 02

Jomblang, from which 20 students were selected using a purposive sampling technique. Data were collected through classroom observations, in-depth interviews, and documentation. The collected data were analyzed using an interactive data analysis model consisting of data reduction, data display, and conclusion drawing and verification. To ensure the trustworthiness of the findings, data credibility was established through source, technique, and time triangulation.

RESULTS AND DISCUSSION

Results

1. Students' Learning Experiences in Project-Based Learning

Interviews with several fourth-grade students revealed that Project-Based Learning (PjBL) was perceived as more engaging than conventional classroom instruction. Through project-based activities, students were actively involved in designing, developing, and presenting project outcomes during Indonesian language learning on the topic of fairy tales. The participants reported having greater freedom to express their ideas and experiment with various approaches to completing the project. This learning environment created both enjoyable and challenging experiences, encouraging students to participate more actively throughout the learning process.

a. Developing Students' Creativity through Project-Based Learning (PjBL)

Creativity refers to an individual's ability to generate new, original, and meaningful ideas, solutions, or products within a particular context. As one of the essential competencies required in twenty-first-century learning, creativity enables students to respond effectively to increasingly complex and dynamic challenges. Classroom observations indicated that students' creativity developed progressively throughout several interconnected stages of the PjBL process, including problem exploration, information gathering, solution planning, product development, and reflection. Throughout these stages, students were encouraged to engage in both divergent and convergent thinking, allowing them to generate multiple alternative ideas before selecting the most appropriate solution. The findings further revealed that students' creativity emerged throughout the project process rather than being reflected solely in the final fairy tale product. During the initial group discussions, most students focused primarily on recalling the content of the fairy tale provided by the teacher. However, when they were instructed to retell the story in a way that would be engaging and easily understood by their audience, each group began developing distinctive storytelling strategies. Some groups enriched the narrative by adding dialogues between characters, reorganizing the sequence of events to create a more compelling storyline, or incorporating simple illustrations to support audience comprehension.

The interview findings also indicated that students perceived the activity as more challenging because they were

required not only to understand the story but also to communicate it creatively and effectively.

"Simply reading the story is easy, but when we had to retell it, we had to think about how to make our classmates understand it."
(Student 8)

These experiences demonstrate that students' creativity developed through a continuous process of designing, experimenting, revising, and presenting their project outcomes, rather than through the production of the final storytelling product alone.



Figure 1. Learning activities.

b. Development of Fluency

Based on the interview with Respondent X, fluency refers to students' ability to generate multiple ideas or alternative solutions to a given problem, particularly in the context of fairy tale storytelling.

One student explained:

"We first came up with many different ideas, and then we chose the one that was easiest for all of us to carry out together." (Student 6)

During the fairy tale storytelling project, students encountered various challenges that required them to generate as many ideas as possible. The brainstorming sessions conducted within each group enabled students to propose multiple possible solutions without fear of making mistakes. Project-Based Learning (PjBL) promoted the development of fluency because students were not merely passive recipients of information from the teacher; instead, they actively searched for, processed, and transformed information into new ideas relevant to the project. Each group was assigned to retell a fairy tale provided by the teacher using their own words while ensuring that the audience could clearly understand the story. To accomplish this task, students collaborated with their group members to develop the most effective storytelling strategy before presenting their projects.

c. Development of Flexibility

Flexibility refers to the ability to view a problem from multiple perspectives and adapt strategies when encountering obstacles. Classroom observations revealed that, throughout the project, students frequently faced challenges such as limited materials, inappropriate design choices, or discrepancies between the initial plan and the actual implementation. These situations required students to modify their approaches in order to complete the project successfully.

The implementation of PjBL encouraged students to become more accustomed to revising and adapting their initial ideas. Rather than relying on a single solution, they considered various alternatives before deciding on the most appropriate

approach. This finding indicates the development of flexible thinking, one of the key dimensions of creativity. Flexibility was further strengthened through group discussions, during which students were exposed to different perspectives from their peers, enriching their ways of thinking and problem-solving.

Students' flexible thinking became particularly evident when groups encountered practical constraints during project preparation. For example, one group initially planned to use hand puppets as storytelling media. However, because the number of puppets available was insufficient, they revised their plan by creating illustrated character cards instead. Another group originally assigned one student as the sole storyteller but later redistributed the storytelling roles after realizing that several members lacked confidence in speaking before the class.

One student commented:

"At first, I didn't want to tell the story, but my friends suggested that we take turns so I wouldn't feel too nervous." (Student 11)

These findings demonstrate that students gradually became capable of adapting their strategies and overcoming obstacles independently, rather than relying entirely on teacher guidance.

d. Development of Originality

The classroom observations revealed an interesting phenomenon during the implementation of the learning activities, particularly during group discussions. Each group demonstrated a unique perspective in solving the assigned task during the Indonesian language lesson on fairy tales. Although all groups worked with the same fairy tale material, each developed a distinct approach to presenting the story.

The first group believed that using hand puppets would help the audience better understand the story. In contrast, another group argued that expressive facial expressions, vocal intonation, and body movements were sufficient to engage the audience without relying on additional media. These differing perspectives formed the basis for each group to design its own storytelling strategy according to its creativity and preferences. The classroom teacher noted:

"No two groups presented the story in the same way. Each group had its own distinctive characteristics."

These findings indicate that the freedom to determine the form and presentation of the project encouraged the emergence of original ideas, allowing each group to express its creativity in unique and meaningful ways.

e. Development of Elaboration

The elaboration stage focuses on students' ability to expand an initial idea into a more detailed, complex, and meaningful product. In the fairy tale learning project, students were not only expected to generate ideas but also to develop those ideas into tangible products through a series of planning, implementation, and evaluation activities. The teacher provided students with the flexibility to determine how they would present their fairy tales, either by incorporating instructional media or by relying solely on their storytelling performance. This flexibility served as an important indicator of the extent to which students were able to elaborate and refine their ideas within the context of storytelling.

Classroom observations showed that every group enriched its project presentation in different ways. Some groups employed visual aids, such as illustrated pictures, while others used hand puppets to enhance audience engagement. Several groups adopted collaborative storytelling by taking turns narrating different parts of the story, creating a more dynamic and interactive presentation. These variations reflected students' efforts to expand and improve their original ideas rather than merely reproducing the story provided by the teacher.

The findings demonstrate that students' elaboration skills developed through a continuous process of refining, revising, and enriching their work. The extended duration of the PjBL process provided sufficient opportunities for students to evaluate their ideas, incorporate feedback from peers and the teacher, and improve the quality of their storytelling products before the final presentation.

f. Development of Creative Problem-Solving Skills

The findings indicate that Project-Based Learning (PjBL) also contributed to the development of students' creative problem-solving skills. Throughout the project, students learned to identify authentic problems, analyze their underlying causes, generate alternative solutions, select the most appropriate strategy, and evaluate the outcomes of their decisions. This process encouraged students to think creatively when confronted with unstructured and unfamiliar situations. Such competence is essential because creativity involves not only generating novel ideas but also applying those ideas effectively to solve problems. This development was evident during the elaboration stage, where each group engaged in collaborative discussions to formulate appropriate strategies for presenting their fairy tales. Through these discussions, students negotiated ideas, resolved differences of opinion, and determined the most effective storytelling approach,

demonstrating their ability to apply creative thinking to practical challenges encountered during the project.

g. Developing Creativity through Authentic Learning Experiences

One of the defining characteristics of Project-Based Learning (PjBL) is its emphasis on authentic tasks that are closely connected to students' everyday lives. In this study, students completed contextual projects based on fairy tales that reflected familiar situations and experiences within their surrounding environment. By engaging in these projects, students were encouraged to connect their prior knowledge with real-world practice rather than merely recalling information from textbooks.

Classroom observations revealed that students became more actively engaged when they were allowed to relate the fairy tales to their own experiences and present them in ways that reflected their creativity. Their direct involvement in meaningful learning activities enabled them to experiment with different storytelling strategies, collaborate with peers, and refine their ideas throughout the project. These authentic learning experiences made the learning process more meaningful and fostered solution-oriented creativity. Consequently, students were able to demonstrate creativity not only in the final storytelling performance but also throughout the process of planning, collaboration, problem-solving, and reflection.

II. Supporting Factors for the Development of Students' Creativity through Project-Based Learning (PjBL)

Based on classroom observations, interviews with the fourth-grade teacher, and in-depth interviews with students, the findings indicate that the development of students' creativity in Project-Based Learning (PjBL) during fairy tale instruction did not occur spontaneously. Instead, it was shaped by learning conditions that provided students with opportunities to explore ideas, collaborate with peers, and independently produce creative work. Data analysis identified four major factors that supported the development of students' creativity.

a. Freedom and Learning Autonomy

The findings revealed that the freedom granted to students was the most influential factor in fostering creativity. Rather than determining the storyline, characters, setting, or final project format, the teacher only established a general requirement that each group produce a fairy tale containing a moral value. At the beginning of the learning process, most students asked for examples of the "correct" story. However, after being encouraged to develop their own ideas, noticeable changes in students' learning behaviors emerged. Each group began creating different story themes based on their personal experiences and imagination.

For example, Group 1 developed a fairy tale entitled *The Mouse Deer: Guardian of the Digital Forest*, which tells the story of a clever mouse deer using digital technology to protect

the forest from illegal logging. This idea emerged after group members connected the fairy tale assignment with their everyday experiences of using smartphones. Meanwhile, Group 3 created *The Sparrow Afraid to Fly*, featuring a young sparrow that struggles with self-confidence. The story was inspired by one group member's personal experience of feeling anxious before participating in a school competition.

The classroom teacher explained that such themes had never emerged during previous lessons, when students were only asked to copy or continue stories provided in the textbook.

Classroom observations further showed that, throughout the story development process, students frequently revised the plot, introduced additional conflicts, and even changed the endings after group discussions. These revisions reflected divergent thinking, as students generated multiple alternative ideas before selecting the most appropriate storyline.

One student commented:

"When we were allowed to create our own story, it became much more enjoyable. At first, our story only had a rabbit as the main character, but then we added a tortoise and a robot to make it more interesting." (Student 7)

The classroom teacher also observed that students became considerably more enthusiastic when they were given the autonomy to determine the content of their stories than when completing conventional writing assignments.

These findings demonstrate that allowing students to independently determine the storyline, characters, conflicts, and resolutions strengthened their sense of ownership over the project. This autonomy encouraged them to explore their imagination more freely and produce more original and creative storytelling products.

b. Collaboration and Social Interaction

The findings indicate that group discussions served as the primary context in which students' creativity emerged and developed. Creative ideas did not originate from a single student; instead, they evolved through collaborative processes in which students complemented one another's ideas, provided constructive feedback, and refined their peers' suggestions. Classroom observations revealed that nearly every group revised its story concept more than once during the project.

For instance, Group 5 initially planned to write a story about the friendship between a deer and a rabbit. However, after one member suggested that the characters should come from two different worlds, the story evolved into a fairy tale about the friendship between forest animals and a dragon guarding the mountain. In another group, the researcher observed a negotiation process when students were deciding how to end their story. One student proposed a tragic ending, whereas the others preferred a happy ending. Following group discussion, they agreed on an open-ended conclusion, allowing readers to interpret the continuation of the story independently.

The classroom teacher explained that collaborative discussions encouraged students who were usually passive to become more confident in expressing their opinions. This was evident when students actively exchanged suggestions regarding character names, dialogues, and story illustrations.

One student stated:

"When my friends share their ideas, the story becomes much richer. Sometimes my ideas are quite ordinary, but when we combine them with my friends' ideas, the story becomes much better." (Student 12)

In addition to increasing the diversity of ideas, collaboration also helped students learn to appreciate differing opinions. Several minor disagreements that emerged during group discussions ultimately contributed to improving the storyline. Classroom observations further showed that groups with active communication produced stories featuring more complex conflicts and more logical resolutions than groups whose work relied primarily on a single member.

c. The Teacher's Role as a Facilitator of Creativity

The findings demonstrate that the teacher played a crucial role in sustaining students' creative processes without excessively intervening in the content of their projects. Throughout the learning activities, the teacher more frequently posed guiding questions than provided direct answers. For example, when one group struggled to determine the central conflict of its story, the teacher asked:

"What is the greatest challenge that the main character might face?"

This question encouraged the students to continue their discussion, eventually leading them to develop a new conflict involving disagreements between characters that had not been included in their original plan.

Classroom observations also revealed that the teacher refrained from immediately judging students' ideas as either right or wrong. For instance, when one group proposed portraying a kind-hearted dragon—a characterization that differs from traditional fairy tales—the teacher did not reject the idea. Instead, the students were encouraged to explain the rationale behind their decision. This approach increased students' confidence in defending and developing their own ideas.

Furthermore, the teacher provided gradual and constructive feedback on story structure, language use, and moral values without altering the students' original concepts. As a result, students remained the primary decision-makers throughout the creative process.

During the interview, the teacher explained:

"I try not to provide complete examples of fairy tales because students usually imitate them. Instead, I simply give them guidance so that they feel confident enough to develop their own ideas."

This facilitative approach resulted in each group producing a fairy tale with distinctive characteristics, and no two stories were found to be identical.

d. Utilization of Digital Technology

The findings indicate that digital technology served as an important factor in expanding students' creative exploration during the development of their fairy tale projects. Students utilized various digital resources to gather references on animal characters, story illustrations, settings, and moral values that could be incorporated into their fairy tales. In addition, several groups employed simple graphic design applications to create book covers and character illustrations for their stories.

Classroom observations revealed that the use of digital technology accelerated students' idea-generation process. For example, Group 2 initially planned a story featuring only a single main character turtle. After searching for visual references and discussing ideas with the assistance of artificial intelligence (AI), the group expanded the story by creating five additional characters, each with distinct personalities. This development enriched the storyline and produced a more engaging narrative conflict.

One student explained:

"We asked AI for ideas about character names, but we changed the story ourselves so that it matched what we wanted." (Student 15)

The classroom teacher also reported that technology increased students' enthusiasm because it enabled them to explore a wide range of illustrations and digital storytelling examples. Nevertheless, the teacher continuously monitored students' use of technology to ensure that they did not simply copy information or AI-generated content from the internet. Instead, students were encouraged to adapt, modify, and reconstruct the information according to their own ideas and imagination. Overall, the findings suggest that digital technology did not replace students' creativity; rather, it functioned as a cognitive tool that broadened their exploration of ideas and inspired the creative process. Students' creativity continued to develop through critical thinking, collaborative discussions, the modification of information, and the creation of fairy tales that reflected their own experiences, perspectives, and imagination.

II. Challenges in the Implementation of Project-Based Learning (PjBL)

Classroom observations, interviews with the fourth-grade teacher, and in-depth interviews with students revealed that although Project-Based Learning (PjBL) provided students with extensive opportunities to develop creativity in creating fairy tales, its implementation was accompanied by several challenges. These challenges emerged throughout every stage of the project, including story planning, collaborative work, product development, and project presentation. Data analysis identified five major themes that represent the difficulties experienced by both students and the teacher during the implementation of PjBL.

a. Challenges in Time Management

The findings indicated that most students experienced difficulties managing their time during the project development process. During the first two class meetings, nearly all groups spent the majority of their time deciding on the story theme and characters. Group discussions often lasted considerably

longer than expected because each member attempted to defend his or her own ideas, resulting in group decisions being reached only near the end of the lesson. Classroom observations showed that three out of the five groups had not established a clear timeline for completing their tasks. Some groups devoted excessive time to discussing story ideas, causing the script-writing phase to be postponed until the following meeting. In contrast, other groups began writing immediately without first developing a story outline. Consequently, they repeatedly revised the storyline because the narrative lacked coherence and logical flow. One group had not completed the ending of its fairy tale by the scheduled presentation session, prompting the teacher to provide additional time outside the regular project schedule so that the students could refine their work.

One student explained:

"We spent too much time choosing the story. I wanted a dragon story, while my friend wanted a princess story. It took us a long time before we finally started writing." (Student 9)

The classroom teacher also acknowledged that developing a fairy tale project required considerably more time than conventional classroom instruction because every stage involved discussion, revision, and collaborative decision-making.

"The students were genuinely enthusiastic, but they were not yet accustomed to setting work targets and managing their time. As a result, most groups only realized that time was running out when their stories were still unfinished." (Classroom Teacher)

These findings suggest that although students' creativity developed through an extensive process of exploration, experimentation, and idea refinement, this development was not yet accompanied by effective time-management skills. Consequently, managing project timelines became one of the primary challenges in implementing Project-Based Learning.

b. Differences in Students' Abilities and Characteristics

The findings revealed considerable differences in students' levels of participation throughout the project. In nearly every group, one or two students emerged as the primary contributors who generated the main story ideas, while the remaining members tended to follow the group's decisions. For example, in Group 4, one student demonstrated the ability to organize the storyline coherently and actively proposed ideas for the conflict and resolution. In contrast, two other members mainly recorded the discussion outcomes without contributing new ideas. During the interview, one student admitted feeling less confident because they believed their ideas were not as good as those of their classmates.

"Actually, I had an idea, but I was afraid my friends would think it wasn't good." (Student 5)

Classroom observations also indicated that students with stronger literacy skills were generally more capable of developing dialogues, constructing conflicts, and selecting a wider range of vocabulary. Conversely, students whose reading skills were still developing often struggled to transform

their ideas into written narratives. As a result, they tended to assume supporting roles, such as creating illustrations or decorating the final project.

The classroom teacher explained:

"Students with stronger language skills usually take responsibility for writing the story, while the others prefer drawing or coloring the illustrations."

Nevertheless, with continuous guidance from the teacher, several students who had initially remained passive gradually became more confident in expressing their opinions during the story revision stage. These findings suggest that differences in students' abilities and personal characteristics represented not only a challenge but also an integral part of the process through which creativity developed during the implementation of Project-Based Learning.

c. Challenges in Collaboration and Group Work

Classroom observations revealed that collaboration was not always balanced among group members. Several groups exhibited unequal task distribution, the dominance of particular students, and limited responsibility among some members. For instance, in Group 5, one student assumed responsibility for almost the entire story-writing process because they believed their classmates took too long to generate ideas. Consequently, the remaining members only contributed by creating illustrations and did not fully understand the storyline. During the project presentation, two group members were unable to explain the narrative because they had not been actively involved in its development.

In contrast, Group 2 experienced a disagreement while deciding on the main character. One student insisted on using a dragon, whereas the other members preferred a rabbit. This disagreement caused the discussion to stall for nearly fifteen minutes before the teacher intervened by suggesting that both ideas be integrated into a single story.

One student remarked:

"Sometimes my friends don't want to listen to other people's ideas. If my idea isn't accepted, I lose interest in joining the discussion." (Student 14)

The classroom teacher also acknowledged that the free-rider phenomenon continued to occur during group work.

"Some students tend to wait for their friends to do the work. When task distribution is unclear, usually only two or three students are genuinely involved in completing the project." (Classroom Teacher)

Despite these challenges, classroom observations demonstrated that conflicts successfully mediated by the teacher often resulted in richer and more creative stories. After students combined their different ideas, the groups were able to produce narratives with more engaging conflicts and more coherent storylines than those originally proposed, indicating that constructive conflict, when appropriately facilitated, contributed positively to the development of students' creativity.

d. Limited Teacher Competence in Managing Project-Based Learning

The interview findings revealed that the teacher experienced several challenges in managing Project-Based Learning (PjBL) because this instructional approach differed considerably from conventional classroom teaching. The teacher explained that the greatest challenge was not delivering the fairy tale content itself, but simultaneously facilitating and monitoring multiple student groups throughout the project. Classroom observations showed that while the teacher was assisting one group in developing the conflict of its story, other groups often had to wait for guidance. As a result, several students lost focus and became engaged in off-task activities.

The teacher also acknowledged the difficulty of assessing individual creativity because the final product represented a collaborative group effort.

"Sometimes I know which students are actively involved during the discussion, but it is difficult to determine the extent of each student's contribution when the final outcome is a single story created collectively." (Classroom Teacher)

Furthermore, the teacher admitted that designing guiding questions capable of stimulating students' imagination was not an easy task. At the beginning of the project, the teacher frequently provided overly detailed instructions, which unintentionally limited students' creative exploration. After reflecting on the initial lessons, the teacher revised this approach by asking more open-ended questions, allowing students to generate a wider variety of story ideas and creative solutions.

These findings suggest that the successful implementation of PjBL depends not only on students' creativity but also on the teacher's ability to facilitate the creative process by providing appropriate guidance without dominating students' thinking or decision-making.

e. Limited Facilities, Infrastructure, and Learning Resources

The findings also indicate that limitations in facilities and learning resources influenced students' creative exploration throughout the project. Not all groups had equal access to digital devices or learning materials. During the stages of searching for story references and illustrations, only a few groups were able to use the teacher's smartphone in turns. Consequently, some groups had to wait for extended periods before accessing additional reference materials.

Classroom observations further revealed that several groups relied primarily on textbooks and their own personal experiences as sources of inspiration. Interestingly, these limitations encouraged some students to engage in deeper discussions and rely more heavily on their imagination rather than depending on examples found on the internet. The classroom teacher explained that the limited availability of digital devices prevented technology from being integrated into the learning process as extensively as intended.

"If every student had access to digital devices at the same time, their illustrations and storytelling presentations would probably be much more varied." (Classroom Teacher)

In addition to technological limitations, the materials needed to produce the final projects were also limited. Several groups had to take turns using coloring equipment and drawing paper, causing delays in completing their work. Nevertheless, classroom observations showed that some groups successfully overcame these constraints by creatively utilizing readily available materials, such as recycled paper, leftover cardboard, and their own stationery. Through this process, students demonstrated creativity by transforming simple materials into engaging illustrated fairy tale books. Overall, the findings indicate that the challenges encountered during the implementation of Project-Based Learning extended beyond technical aspects of instruction. They were closely related to students' readiness, teachers' pedagogical competence, group dynamics, and the availability of learning resources. Despite these obstacles, most students demonstrated substantial growth in creativity, as reflected in their increased confidence in expressing ideas, their ability to modify and enrich storylines, and their production of more original fairy tales than they had created prior to participating in project-based learning. These findings suggest that the challenges encountered during PjBL should not be viewed merely as barriers to learning; rather, they constitute an integral part of the authentic learning experience that shapes and strengthens students' creative development.

Discussion

The findings indicate that students' creativity in Project-Based Learning (PjBL) on fairy tale instruction developed gradually through a sequence of meaningful learning experiences. Creativity did not emerge at the outset of the learning process; rather, it evolved through successive stages of idea exploration, group discussion, story revision, and product refinement. During the initial lesson, most students still relied heavily on the teacher for guidance. They repeatedly asked which story themes were "acceptable," which characters were considered appropriate, and even requested sample stories to use as references. These behaviors suggest that the students were accustomed to teacher-centered instruction and had not yet developed the confidence to generate ideas independently.

A noticeable shift occurred when the teacher limited guidance to explaining the project objectives and the criteria for a fairy tale without prescribing the story content. Under these conditions, students began constructing stories based on their personal experiences, their surrounding environment, and their imagination. For example, one group created a fairy tale entitled *The Mouse Deer: Guardian of the Digital Forest*, while another developed *The Sparrow Afraid to Fly*, inspired by one group member's personal experience of overcoming fear while participating in a school competition. These findings suggest

that students' creativity flourished when they were provided with opportunities to connect authentic life experiences with imaginative storytelling, enabling them to construct original and meaningful fairy tales. These findings reinforce the constructivist perspective, which posits that knowledge is constructed through meaningful learning experiences rather than acquired through the direct transmission of information. The present findings are also consistent with the study by (Bachri and Susarno 2026) which reported that integrating Project-Based Learning (PjBL) with digital media enhanced students' engagement in generating creative ideas. Both studies similarly demonstrate that students become more actively involved in the learning process when they are given the autonomy to make decisions about their own learning activities. However, the present study reveals a phenomenon that received limited attention in the work of Bachri and Susarno. Specifically, students' creativity did not emerge immediately after learning autonomy was introduced. Instead, it was preceded by a transitional phase characterized by confusion, hesitation, and continued dependence on the teacher. In other words, learning autonomy requires an adaptation process before it can effectively foster creativity.

This difference suggests that the exploration of creativity among elementary school students possesses distinctive characteristics compared with learners at higher educational levels. Elementary students continue to require scaffolding from teachers to utilize learning autonomy productively. Consequently, the teacher's role in this study extended beyond that of a facilitator to include providing psychological and instructional support that enabled students to transition from a highly structured learning environment toward greater independence in the learning process.

Students' creativity developed across four indicators of creative thinking: fluency, flexibility, originality, and elaboration. However, the findings indicate that these four dimensions did not develop simultaneously. Regarding fluency, students demonstrated an increased ability to generate multiple alternative ideas following group discussions. Initially, most groups proposed only a single storyline. After the teacher posed open-ended questions such as, "What if the main character faced a different kind of problem?", students began generating a wider range of possible conflicts, characters, and story resolutions.

These findings support the study by (Syarwani, Syarwani Ahmad 2026), which concluded that Project-Based Learning (PjBL) enhances students' ability to generate multiple ideas through exploratory learning processes. However, the present study identified a finding that extends previous research: students' fluency did not emerge solely as an individual cognitive ability but was constructed through social interaction during collaborative brainstorming sessions. Students refined and expanded their ideas by responding to their peers' suggestions, questioning alternative perspectives, and integrating diverse viewpoints into a shared narrative.

Consequently, fluency in this study is better understood as a product of collaborative group dynamics rather than merely an individual creative capacity.

In terms of flexibility, students demonstrated the ability to change strategies when encountering obstacles in story construction. For instance, a group that initially designed a simple story about the friendship between a deer and a rabbit eventually developed a new conflict by introducing a mountain-guardian dragon character after receiving input from other group members. This finding supports the study of (Nur Latifah, Herry Porda Nugroho Putro 2025) which states that creativity develops through the ability to modify ideas. However, in contrast to that study, which emphasizes flexibility as an individual cognitive ability, this research shows that flexibility emerges through social negotiation processes. Changes in ideas occur because students are willing to accept criticism, consider peers' opinions, and revise their initial ideas. Thus, flexible thinking in the context of Project-Based Learning (PjBL) cannot be separated from the quality of student interactions.

The most prominent finding is found in the aspect of originality. Although all groups were given the same theme, no two stories were found to have identical plots, characters, or moral messages. Each group produced different stories according to their own experiences and imagination. This condition strengthens the study of (Puspita et al. 2025), which states that learning freedom can generate original ideas. However, this study also found that idea originality does not entirely stem from individual imagination. Many creative ideas emerged after students combined personal experiences, familiar folktales, group discussions, and inspiration obtained through digital technology (Padila, Aru, and Muhid 2025). Thus, originality in this study is more appropriately understood as the result of a reconstruction process of various sources of experience rather than the creation of entirely new ideas.

In the aspect of elaboration, students demonstrated the ability to develop simple ideas into more detailed stories through a revision process. Most groups made two to three rounds of improvements to their storylines after receiving feedback from the teacher as well as from other groups. The study by (Dian Sarmita 2026) explains that elaboration develops through reflective activities. This research extends that finding by showing that the most meaningful reflection occurs when students receive criticism from other groups during presentations. Such feedback encourages students to add dialogue, clarify conflicts, and improve story resolutions, thereby significantly enhancing the quality of the final product.

In addition to the development of creativity indicators, the study by (Putri Indah Wahyuningsih & Rahayu Pristiwati 2026) found that fairy tales serve as a medium for students to express their life experiences. Most students incorporated personal experiences, values they believe in, and phenomena they encounter in daily life into the stories they created. This finding has not been widely addressed in previous studies,

which generally position fairy tales merely as a medium for language learning or character education. In this study, fairy tales function as a space for creative expression, meaning that the resulting products are not merely fictional stories but representations of students' subjective experiences. This is one of the novel contributions of this research to the study of Project-Based Learning (PjBL) in Indonesian language learning at the elementary school level. This study also found that the use of digital technology contributes to the exploration of students' creativity. When using the internet or AI to seek inspiration for characters, illustrations, or story settings, students did not copy the information obtained; instead, they modified it according to group discussions. This finding supports the study by (Saragih and Putra 2026) which states that digital technology enriches the creative learning process. However, the results of this study also differ from several studies that express concern that AI may reduce students' originality. Based on observations, AI was only used as a trigger for ideas, while the storyline, conflicts, dialogue, and moral messages were still constructed through group discussion. Thus, AI functions more as a creative catalyst rather than a replacement for students' creativity.

On the other hand, this study shows that the implementation of Project-Based Learning (PjBL) in fairy tale materials still faces various challenges. The main obstacle does not stem from the complexity of the material, but from students' readiness to manage the project. Most groups spent too much time deciding on ideas, resulting in the writing stage being carried out hastily. This finding is in line with the study by (Ilmi Tri Ayuni & Andi S.W Ningsih, Nuri Nur Azizah, Hasnawati, Shofiah, Herlina 2025), which states that time management is a major constraint in PjBL. However, this study identifies a more specific cause, namely the lengthy negotiation process among students in determining the direction of the story. In other words, the extended time usage does not entirely indicate a weakness in learning, but rather a consequence of a creative process that inherently requires discussion, revision, and consideration of various alternative ideas. This study also found an imbalance in group participation. Students with higher literacy skills tended to dominate the story writing, while other students played more of an illustrator role. This finding supports the research of (Alwanda 2025) regarding participation gaps in collaborative learning. Nevertheless, this study shows that such dominance is not always negative. In some groups, more capable students acted as peer mentors who helped other members develop their ideas. Thus, dominance becomes an obstacle only when it is not accompanied by a process of knowledge sharing within the group. Overall, this study reveals that PjBL in fairy tale materials does not only produce a story as a final product, but also shapes a creative learning experience involving the process of idea generation, dialogue, dealing with differences of opinion, revising work, and reflecting on the learning experience. In contrast to most previous studies that measure

the effectiveness of PjBL through increases in creativity scores or learning outcomes, this study shows that the essence of creativity lies in the experiential process students undergo while completing the project, rather than solely in the quality of the final product. This finding serves as a conceptual contribution of the study, as it emphasizes that creativity in project-based learning on fairy tale materials is a process of experience construction that occurs through the interaction of personal experience, social collaboration, teacher guidance, and the utilization of digital technology. This approach expands the understanding of PjBL implementation in elementary schools, particularly in Indonesian language learning oriented toward developing students' creativity.

CONCLUSION

This study shows that students' creativity in Project-Based Learning (PjBL) on fairy tale materials develops through a gradual learning experience. Students not only produce original stories but also demonstrate improved abilities in generating ideas (fluency), thinking flexibly (flexibility), developing ideas in detail (elaboration), and creating unique works (originality) through processes of discussion, revision, and reflection. This creativity is supported by opportunities for exploration, student collaboration, the teacher's role as a facilitator, and the use of digital technology. Although the implementation of PjBL faces challenges such as time management, differences in student characteristics, group work dynamics, and limited resources, these challenges become part of the learning process that encourages students to adapt and refine their ideas. Thus, PjBL in fairy tale materials does not only produce a story as a final product, but also shapes a meaningful learning experience that genuinely develops students' creativity through the interaction of personal experience, collaboration, teacher guidance, and technology.

This study has limitations because it was conducted in only one classroom with a limited number of participants and focused on fairy tale material; therefore, the findings cannot be generalized to different learning contexts or educational levels. In addition, this study used a phenomenological approach that emphasizes students' subjective experiences without quantitatively measuring the increase in creativity. Therefore, future research is recommended to involve more diverse participants, implement PjBL in other Indonesian language materials, and combine qualitative and quantitative approaches to obtain a more comprehensive understanding of students' creativity development.

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