

Project - Based Learning Tools in Teaching Social Studies: Its Influence to the Creativity of Junior High School Students in Tanauan City Division

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THE PROBLEM AND ITS BACKGROUND

This chapter is an overview of the study which was focused on the analysis of the project-based Strategy in Teaching Social Studies and its influence in the Creativity of Junior High School in Tanauan. This chapter presents a brief discussion of the introduction, statement of the problem, hypothesis, and significance of the study, scope and delimitation, and definition of terms.

Introduction

Project-Based Learning (PBL) tools enable teachers to unlock their creativity, particularly in social studies education, by providing new approaches for engaging students in real-world problem-solving. PBL encourages educators to rethink and enhance their teaching strategies, lesson plans, and classroom management. According to Larmer & Boss, 2015 by adopting project-based methods, teachers can design dynamic, interactive learning experiences that promote critical thinking and collaboration, resulting in more impactful and meaningful classroom environments.

Project-Based Learning Strategy includes the limited focus on how PBL influences teachers' creativity, especially in social studies education, and how it contributes to changes in teaching methods, lesson planning, and classroom management. According to Wurdinger and Qureshi (2015), PBL significantly enhances teachers' creativity by requiring them to adapt their lesson plans and classroom management techniques to foster a more dynamic and engaging learning environment

The study conducted by Ravitz, J., & Hixson, N. (2017) investigated the impact of Problem-Based Learning (PBL) on student engagement and academic performance. The findings show notable enhancements in student motivation and teamwork abilities. PBL increases motivation by connecting learning to real-world problems, making it more engaging and meaningful for students. This relevance ignites intrinsic interest and promotes active participation in the learning process. Additionally, PBL strengthens collaboration skills by requiring students to work together on projects, fostering the development of communication, problem-solving, and conflict resolution abilities as they collaborate and learn from one another.

As stated by Zhao et al. (2020) in their research, "Project-Based Learning: A Review of the Literature," analyze various studies on PBL and emphasize its role in nurturing creativity. The review points out that PBL plays a crucial role in enhancing creativity by involving students in practical, real-world problem-solving tasks.

The role of PBL in fostering creativity, Zhao and Duffy (2020) also highlight that PBL enhances critical thinking, problem-solving skills, and collaborative learning, as students work together on complex, real-world projects that require innovative solutions and active engagement.

The purpose of this study is to analyze how Project-Based Learning (PBL) enhances student motivation and collaboration skills, fosters creativity and critical thinking, and to identify gaps in research regarding its impact on teachers' creativity, teaching methods, and the role of teacher training in effectively implementing PBL.

Additionally, there is a lack of research on how teacher training and professional development support the effective implementation of PBL while enhancing teacher creativity. However, there is still limited research on how PBL affects teachers' creativity in the long run and how cultural and contextual factors influence its implementation. Standardized tools are needed to assess teacher creativity within the PBL framework, along with a deeper understanding of how transitioning from teacher-centered to student-centered instruction in social studies influences teacher innovation.

Project-Based Learning (PBL) has become a prominent pedagogical approach, particularly in the field of social studies education, due to its potential to promote deeper learning, student engagement, and the development of critical 21st-century competencies. Mayer&Li (2022) PBL is characterized by student-driven, real-world projects that demand active inquiry, critical thinking, and collaboration, allowing learners to construct knowledge through hands-on experiences. While the positive impact of PBL on student outcomes—such as motivation, collaboration, creativity, and critical thinking—has been extensively documented, there exists a notable gap in research regarding its influence on teachers, especially in terms of fostering creativity, transforming teaching methods, and enhancing classroom management.

Furthermore, there is a lack of standardized tools to measure teacher creativity within the PBL framework. As PBL shifts the traditional teacher-centered model to a more student-centered approach, it requires educators to adopt new skill sets and a more innovative mindset and According to Barrow LH (2022) Teachers must design open-ended projects that encourage student inquiry, foster collaborative problem-solving, and integrate real-world issues into the learning process. These shifts demand significant pedagogical adjustments, yet the specific impact of PBL on teachers' professional growth and creativity remains insufficiently explored.

Moreover, as educators transition to this more dynamic and student-centered approach, ongoing professional development is crucial in equipping them to address new challenges and refine their teaching practices. The frameworks necessary to enhance teachers' ability to implement PBL effectively and creatively are still unclear, warranting further investigation into how such training should be structured and delivered.

Theoretical Framework

Piaget's theory of Cognitive Development emphasizes that children learn best through active experiences and interactions with their environment, which leads to cognitive development. In the context of this study, Piaget's theory is relevant as it highlights the importance of hands-on learning. Project-Based Learning (PBL) allows students to engage with real-world problems, fostering a deeper understanding of social studies concepts. This approach aligns with Piaget's idea that learners construct their knowledge by actively engaging with their surroundings.

PBL encourages students to apply social studies concepts in real-world contexts, promoting active learning and cognitive development, which is central to Piaget's theory. This method enhances creativity as students build connections between what they learn and their own experiences

Moreover, Vygotsky's Sociocultural Theory emphasizes the importance of social interaction and cultural context in learning. He believed that cognitive development is strongly influenced by social interactions, particularly in collaborative settings, and that language plays a key role in this process.

The collaborative aspect of PBL supports Vygotsky's theory, as students work together on projects, exchange ideas, and learn from each other. This social interaction within the PBL framework fosters creativity and enhances the understanding of social studies concepts. Vygotsky's emphasis on social learning aligns with how PBL encourages communication, collaboration, and collective problem-solving.

In addition, David Kolb's Experiential Learning Theory stresses that learning occurs through direct experience and active engagement. It proposes a cyclical process where learners go through concrete experiences, reflect on them, conceptualize ideas, and then apply what they have learned.

PBL embodies Kolb's experiential learning theory by immersing students in real-world problems where they actively engage, reflect on their experiences, and apply their knowledge. This hands-on approach enhances

creativity, as students actively explore different solutions and perspectives, reinforcing their learning through experience.

Albert Bandura's Social Learning Theory focuses on learning through observation, imitation, and social interaction. He proposed that individuals learn by observing others and modeling behaviors, especially in a social setting.

In PBL, students collaborate with peers, share diverse perspectives, and learn from each other. This aligns with Bandura's theory, as students observe different viewpoints and approaches, fostering creativity through social interaction and teamwork. This collaborative environment supports the development of both understanding and creativity in social studies.

On the other hand, Howard Gardner's Theory of Multiple Intelligences theory posits that individuals have different types of intelligences, such as linguistic, logical-mathematical, musical, bodily-kinesthetic, and interpersonal, among others. He emphasizes the importance of catering to these varied strengths in education.

PBL accommodates Gardner's theory by allowing students to express their understanding in diverse ways, whether through group discussions, creative projects, or research. By addressing different types of intelligences, PBL encourages creativity and allows students to showcase their unique strengths in their learning, thereby promoting self-expression and fostering creativity.

These theories collectively support the idea that Project-Based Learning enhances creativity by providing an environment where students can actively engage with content, collaborate with others, reflect on their experiences, and express their understanding in multiple ways.

This framework emphasizes skills like critical thinking, creativity, collaboration, and communication, which are vital in today's world. PBL inherently fosters these skills by requiring students to work together on projects, think critically about social issues, and present their findings, helping them to become more innovative and adaptable.

Research Paradigm

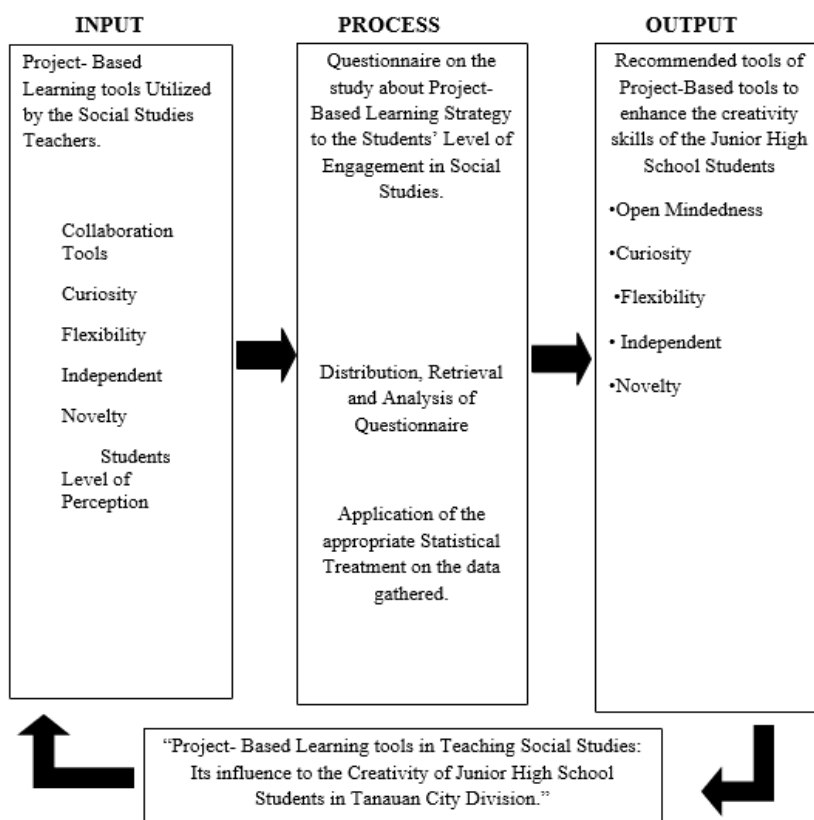


Figure 1. Research Paradigm

The researchers adopted the Input-Process-Output Model (IPO Model). It indicates all the materials and information that is required in the process, the specific process itself, and the guide on determining the Project-Based Learning Strategy. Figure 1 presents the conceptual model, which demonstrates how the Project-Based Learning strategy impacts the creativity of Junior High School teachers.

The first box (Input) consists of the aspects of the respondents profile as well as aspects as related to the researchers independent and dependent variables. Details of which are specified in the researchers statement of the problem.

In the second box (Process), the researchers include the survey questionnaires administered to respondents. These questionnaires serve as a key component of the data collection method implemented by the researchers. In developing the questionnaire, the researchers opted to divide it into three parts to determine the project- based learning strategy in teaching social studies: Its influence the creativity of junior high school teachers.

The third box (Output) illustrates the significant relationship between the Project-Based Learning strategy in social studies and its impact on the creativity of junior high school teachers.

The cycling arrows that connect the boxes (input-process-output) shows the process in the project- based learning strategy in social studies: Its influence the creativity of junior high school teachers.

Statement of the Problem

The main objective of the study was to investigate the Project- Based Learning tools influence in the development of Creativity Skills Among Junior High School Teacher.

Specifically, it sought answers to the following questions:

1. What is the perception of the respondents in the implementation of the Learning tools for managing project-based strategies in terms of:
 - 1.1 collaboration tools;
 - 1.2 presentation software;
 - 1.3 research and research tools; and
 - 1.4 use of rubrics?
2. How may the creativity of social studies students be described in terms of;
 - 2.1 open mindedness;
 - 2.2 curiosity;
 - 2.3 flexibility;
 - 2.4 independent; and
 - 2.5 novelty?
3. Is there a significant relationship between the project-based tools employed by the teachers and the creativity of social studies students?
4. Is there any recommended strategy of Project-based learning to enhance the creativity skills of the Junior High school students?

Hypothesis

There is no significant relationship between the project-based learning tools between the influence of creativity of junior high school teachers.

Scope and Delimitation

This study focused on exploring the use of Project-Based Learning tools in teaching social studies and their influence on enhancing the creativity of junior high school students in the Tanauan City Division.

Scope

This study aims to explore the impact of Project-Based Learning (PBL) on fostering creativity, problem-solving skills, and student engagement in social studies among junior high school students in Tanauan City during the 2024-2025 academic year. By integrating PBL strategies into the social studies curriculum, the research seeks to determine how this approach enhances students' ability to apply social studies concepts to real-world issues. The study employs a mixed-methods approach, including surveys, interviews, classroom observations, and project assessments, to gather both qualitative and quantitative data on student learning outcomes.

Delimitation

This study is limited to the use of Project-Based Learning tools in teaching social studies within the specific context of the Tanauan City Division and does not extend to other subject areas or educational divisions. The research is confined to junior high school students and their experiences in social studies classrooms, thus excluding other grade levels and school subjects. Furthermore, the study only focuses on a sample of teachers who are currently implementing PBL strategies within their teaching practices, rather than a broader pool of educators across different teaching methodologies. The primary instruments used in this research are surveys, interviews, and classroom assessments, and the data collected pertains only to the period during which the study was conducted. Therefore, the findings may not be generalizable beyond the scope of this study's specific parameters. Narrow the scope of the research

The instrument and method

Significance of the Study

The study focused on the Project-Based Learning strategy in teaching social studies and its impact on the creativity of junior high school teachers in Tanauan. Additionally, the findings of this study will be valuable to the following:

Students. As teachers implement PBL, students experience a more engaging and dynamic learning environment. This approach can motivate them to think creatively and enhance their problem-solving abilities, preparing them for future challenges.

Teachers. This study highlights how PBL can foster teachers' creativity. By exploring innovative ways to engage their students, teachers can improve their effectiveness and better address the diverse needs of their students.

School Administration. The findings help school administrators recognize the advantages of Project-Based Learning (PBL) in creating a dynamic teaching environment. This awareness can result in greater support for innovative teaching methods that improve student learning.

Curriculum Developers. The findings from this research can help curriculum developers incorporate Project-Based Learning (PBL) into educational programs. This approach promotes not only deeper understanding but also nurtures creativity and practical skills in students.

Future Researchers. This study establishes a foundation for further investigation into the relationship between teaching methods and creativity. It paves the way for new insights into enhancing educational practices.

Definition of Terms

In order to provide clarity and establish a common understanding for readers, several key terms used throughout this study are defined below. These terms are explained both conceptually and operationally, offering a comprehensive understanding of how they are applied in the context of this research.

Creativity. The ability to generate new and innovative ideas or solutions, shown by students thinking outside the box in their PBL projects

Collaboration Tools. Digital tools that allow individuals to work together and share resources, even when they are in different locations, such as Google Docs, Trello, or Slack.

Curiosity. A strong desire to learn and explore, shown by students asking questions and seeking additional information during their PBL activities.

Flexibility. The ability to adapt to changing circumstances, demonstrated by students adjusting their approaches when facing unexpected challenges in their projects.

Independent. The ability to work and think autonomously, as shown by students managing their tasks and solving problems on their own during the PBL process.

Novelty. The quality of being new or original, demonstrated by students creating unique solutions and ideas in their PBL projects.

Open-mindedness. The willingness to consider new ideas and perspectives, demonstrated by students being receptive to feedback and alternative solutions

Presentation Software. Software used to create visual presentations, like PowerPoint or Google Slides, to share project information with others.

Research and Research Tools. The process of gathering, analyzing, and using information to explore a topic, often aided by tools like Google Scholar and JSTOR.

Project-Based Learning. This is an educational approach where students learn by working on real-world projects that involve solving complex problems, like those in Social Studies.

Use of Rubrics. Guidelines for grading assignments by specifying the criteria and levels of performance, such as those used to assess students' PBL projects.

REVIEW OF RELATED LITERATURE AND STUDIES

This chapter presents a review of related literature and studies that are deemed relevant to the research, providing a foundation for understanding the study's context and significance. The presentation begins with a review of literature from both foreign and local contexts, followed by studies that are relevant to this research.

Related Literature

A study by Biazus and Mahtari (2020) used project based learning and direct instructional learning models and found that the PBL model had a significant impact on the enhancement of creative thinking skills of secondary school students and the researchers found that students who were taught using the PBL approach showed significant improvements in their creative thinking skills compared to those who were taught using the more traditional direct instruction method. This suggests that the PBL model, which encourages hands-on,

problem-solving activities and student-driven learning, may be more effective in fostering creativity among students.

In addition, Martinez and Sanchez (2020) explored the effects of project - based learning on ninth- grade student writing skills and found that cooperative work in project - based learning potentially promoted students critical thinking, communication, and collaboration skills, significantly improving middle school students English writing skills. As a result of this study found that the cooperative work involved in PBL not only enhanced students' critical thinking, communication, and collaboration skills but also led to a significant improvement in middle school students' English writing abilities.

As stated by Gratchev and Jeng (2018), the combination of traditional teaching methods and project - based learning activities improved students learning experiences, and data collected over 3 years showed that the two groups achievements were very similar, and the findings indicated that students were less motivated to accept new learning methods such as PBL. Sivia et al. (2019) used a mixed triangulation - convergence approach to examine the difference in student engagement between project - based learning units and found that project - based learning did not significantly increase student engagement.

Moreover, the study conducted by Karacalli and Korur (2014) used a quasi - experimental design to teach the experimental group using a project - based learning approach and the result showed no statistically significant effect on students. The researchers implemented PBL with an experimental group, meaning that students in this group were taught using a project-based approach. PBL is a teaching method where students engage in real-world, complex projects and work collaboratively to solve problems or create something tangible. The idea is that this hands-on, inquiry-driven learning method might enhance students' engagement and understanding of the subject matter.

De la Torre-Neches et al. (2020) in their study "Project-based learning: an analysis of cooperation and evaluation as the axes of its dynamic" explore how cooperation and evaluation serve as key components in the dynamic process of Project-Based Learning (PBL). They suggest that when these factors are effectively integrated, PBL can greatly improve student learning, stimulate creativity, and better equip students for real-world challenges.

Santos (2018) conducted an extensive study on the implementation of PBL in Philippine high schools, focusing on its impact on student creativity and engagement. The research revealed that PBL resulted in greater student satisfaction. Participants noted that collaborative projects provided them with opportunities to explore their interests, especially in social studies, where they could creatively analyze local historical events.

As emphasized by Reyes (2021), community - based projects the important in social studies education. The study highlighted that projects engaging local communities not only enhanced students' creativity but also promoted a sense of social responsibility. Students designed projects that addressed local issues, allowing them to apply their learning in real- world contexts, thereby promoting innovative solutions.

Furthermore, according to Cobo & Valdivia (2017) of the University Teaching Institute (PUPC), they allude that project-based learning is a methodology that is developed to work collaboratively, in order to propose proposal solutions to a given problem. It is necessary to indicate that this strategic learning methodology has allowed the Peruvian education system to work cooperatively and collaboratively, both in the planning of teamwork and in the fulfillment of the objectives and goals, making the student improve the quality of social and educational life. Taking as a reference the theme of School Projects and learning for life in the development of the curriculum of Middle Basic General Education, developed at the Simón Bolívar Andean University, education should be focused on project-based learning, as it is a useful tool that allows meaningful knowledge in students, through integral education (Enriquez & Herrera, 2019; Rusmini et al., 2018; Sulaeman et al., 2018)

Project-based learning in Ecuador is a proposal that is oriented to the training of students, in the development of the quality of life for society, although this methodological strategy has been implemented, it is not properly applied, that meets the expectations of knowledge and in the context that students must have to connect to the reality of the educational, social and work environment within the classes taught by teachers. The teaching and learning based on projects, takes advantage of the use of technology in the competences of the

student, through an interdisciplinary competence integrating the levels of the educational component, articulating the training in cognitive contributions, skills, and empirical expertise, for the interaction between the individual, society and the identification of problems with solutions, which articulates the triangulation of the integrated system between student, teacher and research (Bazurto, Muñoz, & Loor, 2017).

Collaboration Tools

The digital collaboration tool enhances collaborative learning in the classroom by offering an interactive platform where students can exchange ideas, resources, and feedback in real-time, promoting engagement, participation, and knowledge sharing, as detailed in the Journal of Educational Technology Systems. (Hurt et al., 2018).

According to Blumenfeld, P. C., et al. (2020) collaboration tools such as shared digital platforms and communication tools play a critical role in project-based learning (PBL). They facilitate real-time communication and collaboration among students, enabling them to share ideas, work together on data collection, and refine their project outcomes. These tools help students stay engaged and connected throughout the learning process, promoting team collaboration and peer interaction, which are essential for successful PBL.

According to Larmer and Mergendoller (2019) discussed how collaboration tools enhance the effectiveness of PBL by enabling students to work together across different locations and time zones. Tools like Google Docs, Trello, and Slack allow students to collaborate seamlessly, track project progress, and manage tasks in an organized manner. These tools help students stay on the same page, allowing for better teamwork and project management throughout the course. According to Zhao and Kuan (2019) These tools also help facilitate the exchange of diverse perspectives, which is critical in global project work, enabling richer learning experiences and deeper insights. Furthermore, according to Dori & Herscovitz (2019) the use of these tools fosters deeper learning as students actively participate in discussions, peer reviews, and collaborative problem-solving.

As stated by Anderson & Smith (2018) these tools help students engage more deeply with the content and their peers, supporting real-time communication and collaborative problem-solving. Such platforms enhance the management of project tasks and contribute to a more organized and cohesive project workflow.

Presentation Software

The book Teaching Project-Based Learning: Supporting Students to Investigate, Collaborate, and Create (ASCD) by Larmer and Mergendoller (2015) discusses the impact of research tools on student inquiry and teamwork in project-based learning, stressing the importance of technology and other resources in supporting the learning process.

According to Vera (2020), digital tools play a crucial role in enhancing project-based learning in social studies classrooms by facilitating student engagement, collaboration, and research. Similarly, Anderson and Smith (2021) highlight the significance of technology integration in social studies education. Their study emphasizes the role of presentation software in project-based learning, demonstrating how digital tools can improve students' ability to organize, present, and analyze information effectively.

As stated by Krajcik and Blumenfeld (2019) in Learning and Instruction highlight that project-based learning, when integrated with technology, offers valuable tools that enhance collaboration and presentation in social studies education. Their research demonstrates how digital resources contribute to increased student engagement and teamwork. In the same way, Gunn and Griffiths (2021) in Educational Technology and Society emphasize that project-based learning strengthens collaboration and presentation skills in social studies. Their study underscores the impact of technology in creating interactive and meaningful learning experiences.

Research Tools

Thomas (2019) emphasizes that these tools enhance students' ability to engage in evidence-based learning by enabling them to collect data, analyze results, and draw conclusions essential for completing their projects.

Moreover, Krajcik and Blumenfeld (2020) explore the role of digital tools, such as research platforms, databases, and data analysis tools, in supporting students within project-based learning. They assert that these resources assist students not only in gathering information but also in organizing and analyzing it to address their project inquiries. Additionally, they stress the significance of tools that facilitate data visualization, allowing students to interpret complex information more effectively.

A recent study by Patterson et al., (2021) stated that research tools allow students to dive into topics, analyze data, and present their findings through well-researched projects. These tools promote collaboration and communication as students often work together to analyze and interpret data.

Furthermore, Zhao and Kuan (2021) emphasize the significance of digital tools in education, stating that these resources not only assist students in gathering information but also enhance their ability to conduct in-depth historical analysis and critically evaluate cultural and historical data. Similarly, Harris and Carr (2020) highlight the advantages of incorporating technology into learning. They explain that by utilizing online databases, data analysis software, and other digital resources, students are better equipped to perform comprehensive analyses and produce high-quality work for their projects.

Use of Rubrics

Miller, M. D., & McTighe, J. (2023). "Rubrics and Formative Assessment: A Powerful Combination". *Assessment in Education: Principles, Policy & Practice*, 30(1), 115-131. This article highlights the integration of rubrics into formative assessment strategies and how they help guide students toward achieving learning goals in real-time.

According to Panadero & Alonso-Tapia (2019) rubrics, particularly in PBL contexts, help clarify expectations for both students and instructors. They argue that rubrics foster formative assessment, guiding students to improve their work incrementally. Rubrics also enhance students' ability to self-assess and reflect on their progress.

A study by Purdy (2021) highlights the evolving nature of rubrics to better serve the needs of modern project-based learning, especially in online and hybrid environments. She emphasizes that rubrics play a crucial role in fostering collaboration and ensuring transparency and fairness in assessments.

Moreover, Torrance and Pryor (2020) explore the relationship between rubrics and student learning outcomes in project-based learning contexts. They argue that well-designed rubrics not only clarify the evaluation process for students but also contribute to the development of critical thinking and problem-solving skills.

On the other hand, the study of Dani & Ramin (2020) focused on how rubrics can be integrated into PBL for both formative and summative assessment. The authors highlight how rubrics can help students understand the criteria for success, guide their collaborative efforts, and provide clarity for instructors when evaluating student work.

According to Carter & Silva (2021) rubrics are utilized in PBL to enhance student learning and performance. They suggest that rubrics improve clarity, consistency, and fairness in assessments, which, in turn, boosts student confidence and engagement in complex, project-based tasks.

Open- Mindedness

A recent study by Selby (2023) titled "Fostering Open-Mindedness: exciting and collaborative activities for student development. *Everyday Speech*" emphasized the importance of fostering open-mindedness in students through collaborative activities like group discussions and role-playing, enabling them to develop critical thinking, empathy, and adaptability in diverse learning environments, with guidance and support from teachers.

Coppola & McAlpine (2015) discussed how project-based learning (PBL) encourages open-mindedness by promoting interdisciplinary inquiry and collaboration across different academic disciplines, requiring students to adapt and integrate diverse perspectives.

The study by Thomas & McDowell (2018) explored the role of project-based learning in STEM education, showing how the approach fosters open-mindedness by encouraging students to engage in complex problem-solving tasks and think critically about diverse viewpoints.

Moreover, the study by Seng & Lee (2019) investigated how PBL fosters open-mindedness and collaboration among students, particularly when they are asked to work on diverse teams and address global issues. It highlights the critical role of communication and adaptability in these learning environments.

Furthermore, as stated by Elia & Spada (2020) in their study, open-mindedness as a critical skill developed through project-based learning, particularly in collaborative environments where students are exposed to various perspectives and ideas.

Curiosity

Bradfield (2024) discusses the benefits of project-based learning in fostering student curiosity, highlighting how hands-on, inquiry-driven projects encourage exploration, critical thinking, and a deeper engagement with learning concepts.

Hattie (2015) examines the power of curiosity in learning, emphasizing the role of project-based learning in promoting student-driven inquiry and curiosity. He explains that PBL can ignite curiosity and enhance understanding by enabling students to explore real-world problems.

A study conducted by Schunn & Ruis (2017) explore the intersection of curiosity and project-based learning (PBL) in STEM disciplines, emphasizing how PBL fosters student curiosity by linking classroom learning with real-world challenges. This connection significantly enhances student engagement and promotes inquiry.

Coffey & Muench (2016) argue that PBL offers an ideal environment for curiosity-driven learning. They discuss how open-ended projects encourage students to ask questions, explore possibilities, and engage in self-directed inquiry.

Furthermore, Strobel & Barneveld (2018) suggest that PBL sparks student curiosity by immersing them in real-life scenarios that require independent problem-solving and exploration, thus fostering deeper engagement with the learning process.

Saavedra, A. R., & Opfer, V. D. (2016) highlight the importance of curiosity, creativity, and inquiry-based approaches as key components of 21st-century skills. Their study investigates how PBL enhances these skills by offering a flexible framework that motivates students to ask questions and actively seek new knowledge.

Flexibility

Blumenfeld et al., (2016) explore the flexibility of project-based learning (PBL) in maintaining student motivation and engagement, emphasizing how projects can be adapted to meet diverse learner needs and various learning environments. Similarly, Boaler (2016) discusses the significance of flexible, creative teaching strategies in mathematics, highlighting PBL as a key methodology that fosters student engagement and encourages exploration in the learning process.

Additionally, Harris & Cullen (2018) examine how PBL offers flexibility in STEM education by providing students with opportunities to solve real-world problems across multiple disciplines, promoting an integrated and adaptive learning environment.

Krajcik, J. S., & Blumenfeld, P. C. (2019) provide an in-depth analysis of the flexibility of PBL in different educational contexts, showing how it encourages students to take ownership of their learning through inquiry and collaboration.

Zhao, Y. (2021) highlights the flexibility of educational models like PBL, which help students develop entrepreneurial skills by fostering creativity, critical thinking, and adaptability in response to the challenges of the modern world.

Independent

A study by Wang and Zhang (2021) found that project-based learning (PBL) in higher education enhances student independence by promoting self-regulated learning, where students are encouraged to set goals, monitor their progress, and take responsibility for their learning outcomes.

Moreover, Smit and Reeve (2020) argue that PBL supports the development of student autonomy by offering opportunities for choice and control over the learning process, fostering intrinsic motivation and encouraging self-directed learning.

Zhao and Li (2019) found that PBL in primary education enhances independence by allowing students to manage their own projects, make decisions, and collaborate with others, promoting self-reliance in the process. Similarly, Saavedra and Opfer (2020) highlight that PBL nurtures student independence by encouraging learners to take ownership of their projects, engage in critical thinking, and develop problem-solving skills, which are vital for lifelong learning.

Chung and Tan (2021) argue that PBL empowers secondary school students by granting them autonomy in their learning, fostering self-motivation, and encouraging independent thinking through student-led projects.

Novelty

The Gold Standard for Project-Based Learning. PBLWorks is a major proponent of PBL, and their work details how student engagement in authentic, project-based tasks can result in novel and creative outcomes.

According to Thomas & Sente(2019) the PBL model in the context of modern educational needs, emphasizing how novel, real-world projects are key to student engagement and the development of critical skills for future success.

According to Lee & Faries (2015) novel project-based activities can enhance creativity and intrinsic motivation among high school students. It discusses the impact of real-world problem-solving tasks in fostering innovation and self-directed learning.

According to Erickson, L B & Anderson (2018) article discusses how incorporating novel, creative elements into PBL helps foster higher levels of student engagement and critical thinking. It emphasizes that novelty, such as designing original projects or solving unique problems, enhances creativity and overall learning outcomes.

Zhao and Lei (2016) argue that integrating novel, technology-driven projects within a virtual learning environment can boost student engagement and encourage critical thinking. They emphasize the role of novelty in motivating students to address complex problems in a digital space.

Koh and Abbas (2016) examine how schools in Singapore have adopted project-based learning (PBL) with innovative projects to cultivate a culture of creativity. They explore how the novelty of tasks, coupled with a collaborative learning community, promotes critical thinking and problem-solving skills.

Synthesis

The current study and the related studies all recognize the value of Project-Based Learning (PBL) in fostering student development, but they focus on different aspects of how PBL contributes to learning outcomes.

Wang & Zhang, Smit & Reeve, Zhao & Li, Saavedra & Opfer, and Chung & Tan all emphasize the role of PBL in promoting student autonomy. They argue that PBL encourages students to take control of their learning by allowing them to make choices, set goals, and monitor their progress, which supports the development of self-regulated learning. These studies focus on how PBL helps students become more independent thinkers and responsible for their academic outcomes.

Martinez & Sanchez and Gratchev & Jeng, on the other hand, examine PBL's influence on critical thinking and collaboration skills. Martinez & Sanchez focus specifically on the development of writing and communication skills, while Gratchev & Jeng look at how PBL can be integrated with traditional teaching methods to enhance these skills. Both studies emphasize the importance of PBL in fostering a deeper level of student engagement and collaboration.

Lastly, Santos, Reyes, Cobo & Valdivia, and Bazurto et al. explore how PBL functions in local contexts, such as the Philippines and Ecuador, and how it helps students develop creativity, social responsibility, and problem-solving skills. These studies highlight the real-world applications of PBL, showing its impact on students' ability to address local issues and contribute meaningfully to their communities.

The current study may integrate elements from these studies by exploring how cooperation and evaluation in PBL support student autonomy and self-regulation, but it focuses more on the dynamic interactions between cooperation and evaluation as central pillars of PBL, whereas the related studies tend to focus on specific outcomes like autonomy, critical thinking, and social responsibility in diverse educational contexts.

RESEARCH METHODOLOGY

This chapter describes the formulation of a research design and methodology adopted to achieve the specified goals of the study. It includes the research design, respondents and locale of the study, the validity and reliability of the questionnaire, data gathering procedure and the statistical treatment of data.

Research Design

This study utilized a descriptive research design to examine the influence of the Project-Based Learning (PBL) strategy on the creativity of Junior High School students in Tanauan. The research aimed to establish the relationship between the use of PBL in Social Studies classes and the level of creativity demonstrated by the students.

This study sought to explore how a hands-on, project-driven learning environment can stimulate creativity in students, with potential implications for curriculum design and teaching methods in Tanauan Junior High Schools.

Respondents of the Study

The respondents of the study were Junior High School Teachers from various schools in Tanauan, selected through random sampling. The schools included in the study were chosen based on their alignment with the research objectives and their representation of the broader educational context in the region. Specifically, the study involved teachers from Tanauan National High School, Tanauan City Science High School, and other local public and private junior high schools within the area. These schools were selected based on their relevance and suitability for the research, ensuring that they provide an appropriate sample of educators to investigate the dynamics of Project-Based Learning (PBL) in the classroom.

OVER-ALL TOTAL TANAUAN PUBLIC SCHOOLS	M	F	Total No. of teachers
Tanauan School of Fisheries	2	5	7
Balele Integrated High School	0	3	3
Tinurik National High School	2	5	7

Banjo Laurel National High School	0	2	2
Bernardo Lirio National High School	1	9	10
Tanauan City Integrated National High School	4	6	10
Pantay National High School	0	2	2
TOTAL	9	32	41

Locale of the Study

This study will be conducted in Junior High Schools located in Tanauan City.



Sampling Technique

The respondents of the study consisted of Junior High School Social Studies teachers from selected secondary schools. The objective of the study was to assess the effectiveness of the Project-Based Learning strategy in teaching Social Studies and its impact on the creativity of Junior High School students in Tanauan. The research investigated how the Project-Based Learning approach influences students' creative thinking, problem-solving skills, and engagement in Social Studies lessons. In selecting the respondents, a probability sampling was applied, utilizing a systematic random sampling technique based on Cochran's formula. It is used in surveys to identify the right number of participants samples. This method is commonly used in surveys to identify the appropriate number of participants or samples, which was determined by the total population size available. The researchers applied the sampling procedure so that each number of the population has an equal chance of being chosen.

Research Instrument

The survey- questionnaire and checklist were used as the main data gathering instrument. The instrument focused on answering the statement of the problem. The questionnaire contains ninety (90). The questionnaire will be distributed to the respondent.

Part one (1) of the questionnaire includes a checklist about the demographic profile of the respondents, such as age, sex, educational attainment, and years of service. Part two (2) focuses on how Project-Based Learning in Social Studies affects the creativity of Junior High School students. This section uses a 1-4 scale, where (1) represents Strongly Disagree, (2) Disagree, (3) Agree, and (4) Strongly Agree. Part three (3) contains a checklist on the level of creativity among students that the respondents have observed. This scale and structure were designed to help the researchers effectively analyze the data gathered.

Validity of the Questionnaire

The researchers developed an updated draft of the questionnaire, which was then submitted to the adviser for feedback. The draft was reviewed in terms of its objectives, organization, and content. It was expected that some items would be revised to ensure that the final version of the instrument aligned with the study's objectives.

The researchers consulted with experts to validate the questionnaire items. The final revised version of the questionnaire was designed to effectively capture the respondents' insights through the survey. The purpose of the study was to assess the impact of the Project-Based Learning strategy in teaching Social Studies and its influence on the creativity of Junior High School students.

After establishing the validity and reliability of the research instrument and obtaining approval of the thesis proposal from the pre- dissertation participants, the researchers sent letters to school principals requesting their assistance in forwarding the research questionnaires to junior high school Social Studies teachers.

Respondents were given adequate time to complete the questionnaire, which was collected personally by the researchers. The researchers then carefully tallied and organized the responses for accurate data analysis

Reliability Test

The reliability of the research instrument was established to ensure consistency and accuracy in measuring the intended variables. Reliability testing was conducted to assess the internal consistency of the survey questionnaire, which is critical for verifying the dependability of the data collected. This process involved calculating Cronbach's Alpha for each subscale to determine their level of reliability.

Subscales	No. Of Items	Cronbach's Alpha	Internal Consistency
PROJECT-BASED LEARNING STRATEGY			
Collaboration Tools	10	.897	Good

Presentation Software	10	.866	Good
Research Tools	10	.968	Excellent
Open – Mindedness	10	.943	Excellent
CREATIVITY			
Curiosity	10	.925	Excellent
Flexibility	10	.956	Excellent
Use of Rubrics	10	.928	Excellent
Independence	10	.906	Excellent
Novelty	10	.943	Excellent

Table 1. Level of Internal Consistency of the Survey Questionnaire

Statistical Treatment of Data

For meaningful interpretation of data, the following statistical treatments will be applied:

1. Mean: This will be applied to determine the responses of the teachers.
2. Standard Deviation: This will be used to calculate the dispersion of all teacher responses in the indicators provided for each variable from the mean.
3. Percentage: It will be used to describe the respondents educational attainment, years of service, and sex.
4. Pearson's Correlation Coefficient: This will assess the strength and direction of the relationship between the two variables.

PRESENTATION, ANALYSIS, AND INTERPRETATION OF DATA

This chapter presents the findings of the study in graphical and tabular forms with their respective interpretation.

Part I. Perception on implementation of the following tools for managing project - based Strategies

Table 1. Collaboration Tools

Indicators	Mean	SD	Interpretation
As a teacher...			
1. I find that Canva helps simplify the project management process.	3.66	0.48	Strongly Agree
2. I use Canva to enhance my ability to improve the quality of my projects.	3.56	0.55	Strongly Agree
3. I use Canva to streamline my tasks and improve efficiency.	3.68	0.52	Strongly Agree
4. I use WPS for the documents I create.	3.24	0.89	Strongly Agree
5. I use WPS to make corrections in the projects I've created.	3.37	0.92	Strongly Agree
6. I found that WPS makes it easy to attach photos for documents or projects I've to create.	3.29	0.90	Strongly Agree
7. I use Google drive for submitting documents or projects for the task or assignments that students will complete.	3.63	0.62	Strongly Agree
8. I use Google meet application for online classes	3.63	0.62	Strongly Agree
9. I found that the use of google classroom helps me to monitors students' task and projects.	3.51	0.68	Strongly Agree

10. Using Google drive makes it easier to store documents when the work is unfinished.	3.73	0.45	Strongly Agree
Total	3.53	0.66	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level); 3.26-4.00-(Strongly Agree/Very High Level)

Table 11 reveals an overall mean of 3.53, interpreted as "Strongly Agree," indicating that the respondents generally had a positive perception of the collaboration tools. Indicator 10, which states that "using Google Drive makes it easier to store documents when the work is unfinished," received the highest mean of 3.73, with a verbal interpretation of "Very High Level." In contrast, Indicator 4, which states "I used WPS for the documents I create," received the lowest mean of 3.24, with a verbal interpretation of "High Level."

Generally, the teachers' respondents can understand, connect and work collaboratively with their teachers and fellow learners. The learners demonstrate the ability to utilize collaboration tools effectively, engage in constructive communication, and adapt to diverse learning environments. They are capable of showing empathy and concerns for others, fostering positive relationships through digital platforms. Having these competencies in using collaboration tools is considered an essential part of their digital literacy, teamwork, and interpersonal skills. Hurt, L., & Carter, L. (2018).

Table 2. Presentation Software

Indicators	Mean	SD	Interpretation
As a teacher...			
1. I use Microsoft PowerPoint in creating various presentations for my class.	3.80	0.46	Strongly Agree
2. I find it easier to use Microsoft PowerPoint for changing templates or designs.	3.78	0.47	Strongly Agree
3. I can customize the designs I want to create for my presentations.	3.83	0.38	Strongly Agree
4. I use Google Slides to present and share my slideshows.	3.76	0.54	Strongly Agree
5. I use Google Slides, with similar features to Microsoft PowerPoint to easily create presentations.	3.63	0.58	Strongly Agree
6. I prefer Google Slides to be more effective, because it's simplifies editing and allows me to organize my presentations better.	3.56	0.59	Strongly Agree
7. I use Canva to edit the videos I present in my class.	3.68	0.65	Strongly Agree
8. I use Canva to arrange designs that are relevant to my presentation topics.	3.54	0.71	Strongly Agree
9. I use Canva to create presentations and add any elements I need for them.	3.61	0.67	Strongly Agree
10. I discovered how to use Canva's premium features to improve my presentations.	3.17	1.05	Agree
Overall	3.64	0.61	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level) 2.51-3.25-(Agree/High Level); 3.26-4.00-(Strongly Agree/Very High Level)

Table 11 reveals an overall mean of 3.64, interpreted as "Strongly Agree," indicating that the respondents generally had a positive perception of the presentation software. Indicator 3 received the highest mean of 3.83, with the statement "I can customize the designs I want to create for my presentations," which was interpreted as

"Strongly Agree." On the other hand, Indicator 10, which states "I discovered how to use Canva's premium features to improve my presentations," received the lowest mean of 3.17, with a verbal interpretation of "Agree."

Generally, the teacher respondents demonstrate a high level of competence in using presentation software, which contributes significantly to their teaching effectiveness. Teachers are capable of creating engaging, well-organized, and visually appealing presentations that help students understand and retain complex information. They are proficient in using various tools and features of the software, such as customizing slides, integrating multimedia elements, and applying transitions and animations to enhance the learning experience (Miller & McTighe 2023).

Table 3. Research Tools

Indicators	Mean	SD	Interpretation
As a teacher...			
1. My students use research tools like Google Scholar or online databases to find reliable academic sources	3.41	0.87	Strongly Agree
2. My students use tools like Google Forms to collect and organize data for research projects.	3.34	0.91	Strongly Agree
3. My students use digital tools, such as Google Docs and Google Drive, to collaborate and share their research findings	3.34	0.82	Strongly Agree
4. My students use visual tools like Canva or Google Slides to present their research data and findings.	3.32	0.91	Strongly Agree
5. My students use online resources and tools to help them evaluate the credibility of the information they gather	3.32	0.82	Strongly Agree
6. My students use research tools to visually organize their notes, data, and sources effectively.	3.34	0.82	Strongly Agree
7. My students are taught to use citation tools to properly cite their research sources.	3.37	0.92	Strongly Agree
8. My students use research tools to analyze data and identify patterns or trends in their findings.	3.29	0.81	Strongly Agree
9. My students are encouraged to use digital tools to enhance the visual appeal of their research presentations.	3.32	0.76	Strongly Agree
10. My students benefit from using research tools to explore a wide range of topics and sources beyond the classroom materials.	2.85	0.94	Agree
Overall	3.29	0.86	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level); 3.26-4.00-(Strongly Agree/Very High Level)

The total mean of 3.29, evaluated as "Strongly Agree," reflects that the respondents generally had a positive perception of research tools. Indicator 1 received the highest mean of 3.41, with the statement "My students use research tools like Google Scholar or online databases to find reliable academic sources," which was interpreted as "Strongly Agree." In contrast, Indicator 10, which states "My students benefit from using research tools to explore a wide range of topics and sources beyond the classroom materials," received the lowest mean of 2.85, with a verbal interpretation of "Agree."

Generally, the teacher respondents exhibit a high level of proficiency in using research tools, which significantly enhances their ability to support student learning and academic development. Teachers are adept at utilizing a range of online databases, academic search engines, and other research tools to locate reliable, credible sources that are relevant to their teaching. Johnson, K., & Smith, T. (2019)

Table 4. Use of Rubrics

Indicators	Mean	SD	Interpretation
As a teacher...			
1. Using a rubric helps students assess their work before submission.	3.71	0.56	Strongly Agree
2. The feedback provided in the rubric is useful for guiding student improvements.	3.80	0.40	Strongly Agree
3. The rubric clarifies expectations for my students.	3.78	0.42	Strongly Agree
4. My students set personal goals based on the rubric criteria.	3.63	0.54	Strongly Agree
5. Students feel more confident in their work when they follow the rubric.	3.68	0.47	Strongly Agree
6. The rubric breaks down complex tasks into manageable parts for students.	3.66	0.53	Strongly Agree
7. I discuss the rubric with colleagues to gather different perspectives.	3.51	0.60	Strongly Agree
8. I clearly communicate the criteria outlined in the rubric to my students.	3.78	0.42	Strongly Agree
9. I encourage students to refer to the rubric while completing their projects.	3.71	0.46	Strongly Agree
10. The rubric helps students identify areas for improvement.	3.63	0.58	Strongly Agree
Overall	3.69	0.50	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level);3.26-4.00-(Strongly Agree/Very High Level)

The total mean of 3.69, evaluated as "Strongly Agree," indicates that the respondents generally had a positive perception of the use of rubrics. Indicator 2 received the highest mean of 3.80, with the statement "The feedback provided in the rubric is useful for guiding student improvements," which was interpreted as "Strongly Agree." On the other hand, Indicator 7, which states "I discuss the rubric with colleagues to gather different perspectives," received the lowest mean of 3.51, with a verbal interpretation of "Strongly Agree."

Generally, the teacher respondents exhibit a high level of proficiency in using research tools, which significantly enhances their ability to support student learning and academic development. Teachers are adept at utilizing a range of online databases, academic search engines, and other research tools to locate reliable, credible sources that are relevant to their teaching.

Part II How may the creativity of social studies students be describe

Table 5. Open-Mindedness

Indicators	Mean	SD	Interpretation
As a teacher...			
1. My students explore the different perspectives in social studies discussions.	3.63	0.49	Strongly Agree
2. My students show interest in viewpoints different from their own.	3.63	0.49	Strongly Agree
3. My students are willing to reconsider their opinions based on new information.	3.66	0.48	Strongly Agree
4. My students asking questions that challenge conventional thinking.	3.71	0.51	Strongly Agree

5. My students collaborating effectively with peers from different backgrounds.	3.63	0.49	Strongly Agree
6. My students demonstrate flexibility in their thinking during projects.	3.63	0.49	Strongly Agree
7. My students express creativity in their approach to problem-solving.	3.51	0.55	Strongly Agree
8. My students participating actively in debates with an open mind.	3.68	0.47	Strongly Agree
9. My students appreciate the complexity of social issues and are willing to explore them.	3.56	0.55	Strongly Agree
10. My students are willing to try new ways of learning.	3.71	0.46	Strongly Agree
Overall	3.64	0.50	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level); 3.26-4.00-(Strongly Agree/Very High Level)

The total mean of 3.64, evaluated as "Strongly Agree," indicates that the respondents perceived open-mindedness positively. Indicators 4 and 10 received the highest mean of 3.71, with the statements "My students ask questions that challenge conventional thinking" and "My students are willing to try new ways of learning," both interpreted as "Strongly Agree." In contrast, Indicator 7, which states "My students express creativity in their approach to problem-solving," received the lowest mean of 3.51, with a verbal interpretation of "Strongly Agree."

Generally it reflects a very positive trend in promoting open-mindedness, with all indicators showing a strong consensus that students are open, curious, and willing to engage in diverse, complex, and creative learning processes.

Table 6. Curiosity

Indicators	Mean	SD	Interpretation
As a teacher...			
1. My student's curiosity often leads to creative ideas in social studies projects.	3.80	0.40	Strongly Agree
2. My creative assignments inspire students to dig deeper into their curiosities about historical figures or events.	3.63	0.54	Strongly Agree
3. My students take the initiative to propose unique projects in social studies.	3.68	0.47	Strongly Agree
4. My students connect their personal interests with social studies topics to foster creativity.	3.66	0.48	Strongly Agree
5. My students fostering a curious mindset enhances students' ability to think creatively about historical events.	3.59	0.55	Strongly Agree
6. My student curiosity has a significant impact on their learning.	3.46	0.50	Strongly Agree
7. I support my students in used technology creatively to explore social studies themes.	3.63	0.49	Strongly Agree
8. I see failure can be an important part of the learning process for curious students.	3.61	0.54	Strongly Agree
9. I value student questions, even if they are not part of the lesson plan.	3.63	0.49	Strongly Agree
10. usually collaborate with students to design learning activities.	3.59	0.59	Strongly Agree
Overall	3.63	0.50	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level); 3.26-4.00-(Strongly Agree/Very High Level)

The overall mean of 3.63 is interpreted as "strongly agree" in this table, reflecting the respondents' perception of curiosity. Indicator 1 received the highest mean of 3.80, indicating strong agreement with the statement, "My student's curiosity often leads to creative ideas in social studies projects." In contrast, Indicator 6 had the lowest mean of 3.46, with a verbal interpretation of "strongly agree," stating that "My student's curiosity has a significant impact on their learning."

Overall, the data shows that curiosity plays a crucial role in fostering creativity and deeper engagement in social studies, with students actively seeking to connect personal interests, explore unique projects, and embrace failure as part of their learning process.

Table 7. Flexibility

Indicators	Mean	SD	Interpretation
As a teacher...			
1. I observe that students changing their ideas when they learn new information.	3.78	0.52	Strongly Agree
2. The students are able to explore various viewpoints on topics.	3.73	0.55	Strongly Agree
3. My students listen to feedback and adjust their opinions.	3.63	0.58	Strongly Agree
4. I notice that students are able to use various sources in their projects.	3.66	0.56	Strongly Agree
5. I see students suggest different solutions to problems in history or society.	3.61	0.59	Strongly Agree
6. I notice students mix ideas from different subjects in their work.	3.51	0.60	Strongly Agree
7. I am convinced that students try different ways to share their ideas, like presentations or debates.	3.66	0.53	Strongly Agree
8. I notice students improving their work after discussions.	3.49	0.75	Strongly Agree
9. I have observed that students collaborate effectively and share ideas in group settings.	3.83	0.44	Strongly Agree
10. I see that students enjoy exploring unfamiliar topics in their projects.	3.59	0.59	Strongly Agree
Overall	3.65	0.57	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level); 3.26-4.00-(Strongly Agree/Very High Level)

The overall mean of 3.65 is evaluated as strongly agree in this table, and the respondents described flexibility. Indicator 9 got the highest mean of 3.83 stating I have observed that students collaborate effectively and share ideas in group settings, with a verbal interpretation of strongly agree while indicator 8 stated I notice students improving their work after discussions got the lowest mean of 3.49 and a verbal interpretation of strongly agree.

The result shows that students display a high level of flexibility, whether by changing their ideas when presented with new information, collaborating with peers, or exploring different approaches to problem-solving. However, there may be room for further improvement in helping students consistently refine and improve their work after discussions.

Table 8. Independence

Indicators	Mean	SD	Interpretation
As a teacher, I observed that...			

1. Students benefit from working on assignments without constant teacher guidance.	3.59	0.63	Strongly Agree
2. Students' learning improves when they work independently.	3.56	0.55	Strongly Agree
3. Students are more motivated to finish projects when they have control over their approach.	3.63	0.54	Strongly Agree
4. Feedback from students about peer assessments is valued over solely relying on my evaluations.	3.46	0.60	Strongly Agree
5. Students take on challenges to figure things out by themselves.	3.59	0.50	Strongly Agree
6. Independent work enhances students' problem-solving skills.	3.51	0.51	Strongly Agree
7. Students learn more when they manage their own project processes.	3.51	0.55	Strongly Agree
8. I encourage students to make decisions about their projects independently.	3.54	0.55	Strongly Agree
9. My student' initiative in exploring related topics on their own.	3.51	0.55	Strongly Agree
10. I support students in setting their own deadlines for project tasks.	3.54	0.60	Strongly Agree
Overall	3.54	0.57	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level); 3.26-4.00-(Strongly Agree/Very High Level)

The total mean of 3.54 is evaluated as strongly agree in this table, and the respondents described independence. Indicator 3 got the highest mean of 3.63 stating students are more motivated to finish projects when they have control over their approach with a verbal interpretation of strongly agree while indicator 4 and 5 stated feedback from students about peer assessments is valued over solely relying on my evaluations and Students take on challenges to figure things out by themselves got the lowest mean of 3.46 a verbal interpretation of strongly agree.

The results highlight a positive trend in fostering independence, with students showing strong motivation and initiative in managing their learning process, working without constant guidance, and making decisions on their own. However, there may be a slight opportunity to further emphasize feedback from classmates and self-directed problem-solving in the learning process.

Table 9. Novelty

Indicators	Mean	SD	Interpretation
As a teacher, I observed that...			
1. My students enjoy engaging in new and original activities in the classroom.	3.63	0.49	Strongly Agree
2. My students demonstrate creativity when working on unique or novel assignments	3.59	0.59	Strongly Agree
3. My students are more motivated when given opportunities to explore original ideas or approaches.	3.76	0.43	Strongly Agree
4. My students appreciate when lessons or projects involve new concepts or methods.	3.76	0.49	Strongly Agree
5. My students feel confident in presenting original or unique ideas during class discussions.	3.71	0.46	Strongly Agree
6. My students prefer assignments that encourage them to think creatively and come up with original solutions.	3.54	0.60	Strongly Agree

7. My students are open to trying new tools, resources or technologies to enhance their learning.	3.54	0.55	Strongly Agree
8. My students find value in exploring topics that are not typically covered in the standard curriculum.	3.61	0.54	Strongly Agree
9. My students are more engaged when classroom activities relate to real-life situations or new ideas	3.73	0.50	Strongly Agree
10. My students are interested in participating in projects that involve new technologies or modern tools.	3.71	0.46	Strongly Agree
Overall	3.66	0.51	Strongly Agree

Legend: 1.0-1.75-(Strongly Disagree/Poor Level); 1.76-2.50-(Disagree/Low Level); 2.51-3.25-(Agree/High Level);3.26-4.00-(Strongly Agree/Very High Level)

The total mean of 3.66 is evaluated as strongly agree in this table, and the respondents described novelty. Indicator 4 and 5 got the highest mean of 3.76 stating my students are more motivated when given opportunities to explore original ideas or approaches and my students appreciate when lessons or projects involve new concepts or methods with a verbal interpretation of strongly agree while indicator 6 and 7 stated my students prefer assignments that encourage them to think creatively and come up with original solutions and my students are open to trying new tools, resources or technologies to enhance their learning got the lowest mean of 3.54 and a verbal interpretation of strongly agree.

It shows that novelty plays a significant role in enhancing student motivation and engagement. Students are not only interested in original ideas and methods but are also enthusiastic about applying creativity and exploring new tools and technologies to enrich their learning experience.

Table 10.

Test Of Correlation Between The Project-Based Strategy Employed By The Teachers And The Creativity Of Social Studies Students.

Creativity of the Students					
Project-Based Strategy	Open-Mindedness	Curiosity	Flexibility	Independent	Novelty
Collaboration Tools	0.623** <0.001	0.675** <0.001	0.721** <0.001	0.759** <0.001	0.561** <0.001
Presentation Software	0.363* 0.020	0.221 0.164	0.367* 0.018	0.286 0.070	0.280 0.076
Research Tools	0.484** 0.001	0.592** <0.001	0.532** <0.001	0.515** <0.001	0.413** 0.007

*Legend: ** Correlation is significant at 0.05 level (two-tailed)*

There is a highly significant relationship between the project-based strategy (collaboration tools and research tools) with the creativity of the students.

There is a high significant relationship between presentation software and open-mindedness and flexibility of the students.

There is no significant relationship between presentation software and the curiosity, independent and novelty of the students.

The table presents the results of a test to assess the correlation between the project-based strategies used by teachers (such as collaboration tools, presentation software, and research tools) and various creativity traits of social studies students, including open-mindedness, curiosity, flexibility, independence, and novelty.

Open-Mindedness: 0.623 ($p < 0.001$), indicating a strong and highly significant positive correlation. As collaboration tools are employed more in teaching, students tend to become more open-minded.

Curiosity: 0.675 ($p < 0.001$), a similarly strong and significant positive correlation. The use of collaboration tools seems to foster curiosity in students.

According to Flexibility: 0.721 ($p < 0.001$), a very strong and highly significant positive correlation. The more collaboration tools are used, the more flexible students become.

Independence: 0.759 ($p < 0.001$), showing an even stronger positive correlation. The use of collaboration tools is linked to greater independence in students.

Novelty: 0.561 ($p < 0.001$), a strong positive correlation, indicating that the use of collaboration tools promotes novelty in students' thinking.

Presentation Software

Open-Mindedness: 0.363 ($p = 0.020$), showing a moderate positive correlation that is statistically significant at the 0.05 level. Presentation software usage seems to positively affect students' open-mindedness, but not as strongly as collaboration tools.

Curiosity: 0.221 ($p = 0.164$), showing a very weak and non-significant correlation ($p > 0.05$). This suggests that presentation software does not significantly influence students' curiosity.

Flexibility: 0.367 ($p = 0.018$), a moderate positive correlation that is statistically significant at the 0.05 level. Presentation software seems to positively affect students' flexibility, although the effect is not as large as that of collaboration tools.

Independence: 0.286 ($p = 0.070$), showing a weak positive correlation that is not statistically significant at the 0.05 level. This suggests that presentation software does not have a strong impact on students' independence.

Novelty: 0.280 ($p = 0.076$), showing a weak positive correlation, but this is not statistically significant ($p > 0.05$). Hence, presentation software does not seem to significantly enhance novelty in students' thinking.

Research Tools

Open-Mindedness: 0.484 ($p = 0.001$), showing a strong positive correlation that is statistically significant. The use of research tools positively influences students' open-mindedness. Curiosity: 0.592 ($p < 0.001$), a strong positive correlation. Research tools have a significant positive effect on students' curiosity. Flexibility: 0.532 ($p < 0.001$), showing a strong positive correlation. The use of research tools fosters flexibility in students. Independence: 0.515 ($p < 0.001$), another strong positive correlation, indicating that research tools contribute to students' independence. Novelty: 0.413 ($p = 0.007$), showing a moderate positive correlation that is statistically significant. Research tools have a moderate positive effect on novelty.

SUMMARY OF FINDINGS, CONCLUSION, AND RECOMMENDATIONS

This chapter presents the summary of findings, conclusion, and corresponding recommendations based on the result of the study.

Summary

This study focused on the project - based learning strategies and creativity of junior high school teacher. It involved the participation of 41 teachers in selected school in Tanauan.

The study used a descriptive correlational design, with the project based learning implementation scale and the teacher creativity scale as the primary instruments for data collection. The mean and person product moment correlation coefficient were employed in the statistical for the data.

Summary of Findings

The salient findings of the study are summarized as follows:

1. Out of 41 respondents, the majority are female at 24 - 32 of age, 6-10 years of services, with masteral degree and tools of inquiry based learning.
2. The data gathered as teacher respondents as perceived of the implementation of the following tools for managing project -based strategies related to collaboration tools, presentation software, research tools, and use of rubrics.
3. The students perceived the creativity of social studies students be described as open- mindedness, curiosity, flexibility, independent, novelty.
4. There is a highly significant relationship between the project-based strategy (collaboration tools and research tools) with the creativity of the students. There is a high significant relationship between presentation software and open-mindedness and flexibility of the students. There is no significant relationship between presentation software and the curiosity, independent and novelty of the students.

Conclusion

The findings of the study, it can be concluded that the implementation of project-based learning (PBL) as a strategy in teaching Social Studies has a significant influence on the creativity of Junior High School teachers. The study demonstrates that the use of PBL encourages teachers to explore innovative teaching methods, engage students actively, and enhance their problem-solving abilities. As a result, teachers' creative approaches to lesson planning and classroom management are notably improved, leading to a more dynamic and engaging learning environment. Therefore, the hypothesis positing a positive impact of PBL on teachers' creativity is supported, and the null hypothesis is rejected.

Recommendations

In light of the findings and conclusion of the study, the following recommendations are offered.

1. Students engaged in Project-Based Learning (PBL) may directly share their experiences, challenges, and insights related to the learning process. They can express how the PBL approach affects their personal growth, creativity, and academic progress. PBL encourages students to take ownership of their learning fostering deeper engagement and a sense of connection to both the content and their teachers. By working on real-world problems, students also develop critical thinking and problem-solving skills, which enhance their overall well-being and academic success.
2. Teachers, as facilitators of PBL, may observe how this strategy influences students creativity, critical thinking, and teamwork skills. They can reflect on how their teaching methods evolve through the integration of PBL and how this shift impacts their relationship with students. Teachers may also gain insights into the best practices for incorporating project-based activities to better engage students and enhance their learning outcomes.

3. School administration may recognize the importance of supporting and promoting Project-Based Learning as a strategy that aligns with the institution's goals of improving student outcomes, fostering creativity, and preparing students for future careers. They can evaluate how PBL influences both the academic environment and the overall school culture, and may advocate for resources and professional development to further integrate PBL across subjects.
4. Curriculum developers can use the insights from the implementation of PBL to refine and enhance the curriculum. They may learn how to design more interdisciplinary, engaging, and student-centered learning experiences. By aligning curriculum content with real-world applications, they can create more meaningful learning opportunities for students.
5. Future researchers can build on the findings of this study to explore the long-term impacts of Project-Based Learning on both students and teachers. Research may expand into other areas, such as the role of technology in PBL its impact on various subjects or how PBL impact on various subjects, or how PBL affects students social and emotional development.

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