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Analysis of Project Based Learning Model in SBDP Subject in Making 3-Dimensional Craft from Used Goods

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ABSTRACT
This research is motivated by the low ability of fifth grade students of SDN 2 Bunta in producing artwork, especially in Arts and Crafts learning which has so far been limited to drawing activities. To overcome this problem, researchers implemented a Project Based Learning (PJBL) model by utilizing used goods as a medium for making three-dimensional crafts. This activity aims to hone students' creativity, skills, and self-confidence through active and enjoyable learning experiences. Analysis of students' work was carried out to assess the development of their abilities in creating works. The purpose of this study was to determine the Results of the Analysis of the Project Based Learning Model in Arts and Culture Subjects in Making Three-Dimensional Craft Artworks from Used Goods in Fifth Grade of SDN 2 Bunta. In this study, the method used was a qualitative method with a descriptive approach. Data were obtained through observations, interviews, and documentation conducted with teachers, students, and several related parties at the school. The results of this study indicate that the application of the Project-Based Learning (PjBL) model to the Arts, Culture, and Crafts (SBdP) subject in creating 3-dimensional craft artworks from used materials in fifth-grade students at SDN 2 Bunta demonstrated highly effective results.
Keywords: *Project-Based Learning, Crafts, Arts, Culture, and Crafts, Elementary School Students.*

ABSTRAK

Penelitian ini dilatarbelakangi oleh rendahnya kemampuan siswa kelas V SDN 2 Bunta dalam menghasilkan karya seni, khususnya dalam pembelajaran Seni Budaya dan Prakarya yang selama ini masih terbatas pada aktivitas menggambar. Untuk mengatasi permasalahan tersebut, peneliti menerapkan model Project Based Learning (PJBL) dengan memanfaatkan barang bekas sebagai media pembuatan kriya tiga dimensi. Kegiatan ini bertujuan untuk mengasah kreativitas, keterampilan, dan rasa percaya diri siswa melalui pengalaman belajar yang aktif dan menyenangkan. Analisis terhadap karya siswa dilakukan untuk menilai perkembangan kemampuan mereka dalam berkarya. Tujuan dari penelitian ini adalah untuk mengetahui Hasil Analisis Model Pembelajaran *Project Based Learning* pada Mata Pelajaran SBdP dalam Pembuatan Karya Seni Kriya tiga Dimensi dari Barang Bekas di Kelas V SDN 2 Bunta. Dalam penelitian ini, metode yang digunakan adalah metode kualitatif dengan pendekatan deskriptif. Data diperoleh melalui observasi, wawancara, dan dokumentasi yang dilakukan terhadap guru, siswa, serta beberapa pihak terkait di sekolah tersebut. Hasil penelitian menunjukkan bahwa penerapan model pembelajaran Project-Based Learning (PjBL) pada mata pelajaran Seni Budaya dan Prakarya (SBdP) dalam pembuatan karya seni kriya 3 dimensi dari barang bekas di kelas V SDN 2 Bunta menunjukkan hasil yang sangat efektif.

Kata Kunci: *Project Based Learning*, Seni Kriya, Seni Budaya dan Prakarya, Siswa SD.

INTRODUCTION

Creativity is a vital trait that supports various aspects of daily life, especially in education. Each individual possesses unique creativity, and its development is a key goal of national education, as stated in Law No. 20 of 2003 Article 3, which highlights the importance of nurturing students to become creative, independent, and responsible individuals (Sisdiknas, 2003). A curriculum is a structured plan designed to guide the teaching and learning process within educational institutions like schools (Rahmayati & Prastowo, 2023). The curriculum is essential in shaping the content and direction of the educatiosnal process Usman (2023).

The Independent Curriculum allows students the freedom to develop their potential based on their interests and talents Arhinza et al. (2023). Learning problems often arise due to monotonous methods and a lack of creativity and learning media from educators Apriani (2022). This situation causes students to become isolated, limiting their communication with peers, while repetitive teacher questions hinder creativity and reduce children's independence Primayana (2021).

Arts learning in elementary school allows students to express their knowledge and fosters the development of creative and intellectually competent abilities Sindi et al. (2023). Arts and Crafts Education (SBdP) is a learning process that aims to develop students' attitudes, skills, and work enthusiasm through instructional materials Sari et al. (2024). The aim of arts education is to foster creativity, art appreciation, cultural awareness, motor skills, and multicultural thinking, while also providing opportunities for self-actualization and student productivity Dayanti et al. (2021).

In fact, learning is an effort to develop teacher activities with students Adnyana & Yudaparmita (2023). Creative thinking is the ability to use thoughts and actions to generate useful innovations, either as ideas or tangible products, based on existing elements Natty et al. (2019). Creative thinking is the ability to view problems from different, solution-oriented perspectives Paryanti et al. (2023). Creative attitude is very important for every student Nisa et al. (2019).

Teachers can use learning models to stimulate and enhance students' learning success Fitri et al. (2022). hildren are highly curious, active, enjoy experimenting, and are able to express themselves creatively, imaginatively, and communicatively Asmara (2019). This study highlights the importance of using varied and effective learning models to enhance students'

creative thinking and engagement in learning Muhamad (2023). This research focuses on the use of the Project-Based Learning (PjBL) model, chosen for its alignment with the Independent Curriculum that emphasizes project-based learning Yanti & Novaliyosi (2023). This aims to help students learn in a structured way as a sign that their tasks can be completed one by one Zaharah & Silitong (2023).

Project-based learning involves problem solving, decision making, inquiry, and creative skills Zayyinah et al. (2022). Project-based learning provides students with opportunities to solve real-life problems individually or in groups Veselov et al. (2019). Project-based learning is important for children as it allows them to explore knowledge and satisfy their curiosity in finding solutions to problems they encounter Warmansyah et al. (2023). Project-based learning allows children to communicate, express, and develop their ideas through tangible work Pertiwi et al. (2022). The PjBL model is an arts learning model that utilizes project activities as the center of its activities Mashuri et al. (2021). Students work in groups to find solutions to problems through projects, giving them the opportunity to enhance their skills in creating products based on the teacher's materia Kusnawan (2021).

Creating art from household waste is a fine arts activity suitable for elementary students, aimed at fostering creativity and producing more valuable works from recycled materials Prihartanti (2022). Fine art produces tangible works that express beauty and creativity, serving as a means to foster self-expression, enhance skills, and develop students' creativity Aristi et al. (2023). Without creativity, children only learn at a cognitive level, thus limiting students' ability to develop their creativity Mulyaningsih (2023).

Crafts are handicrafts that possess both aesthetic and functional value. In Arts, Culture, and Crafts (SBdP) lessons, students are encouraged to observe, appreciate, and create works of art from objects around them. However, many students, particularly in the fifth grade at SDN 2 Bunta, still lack optimal artistic creativity because art instruction is limited to drawing.

Therefore, a new approach is needed, utilizing used materials as a learning medium. By creating 3-dimensional crafts, students can become more active, confident, and free to develop their creative ideas. Although there has been extensive research on used materials, their use to develop elementary school students' artistic creativity still requires further study.

METHODS

Type and Design

This study is qualitative research with a descriptive approach, aiming to explore and understand in depth the creativity of Grade V students at SDN 2 Bunta in making 3-dimensional craft art from used materials. The descriptive design provides a systematic, factual, and accurate depiction of student creativity, focusing on the creative process and influencing factors to gain a comprehensive understanding.

Data and Data Sources

In this study, the data collected was in the form of qualitative information regarding the application of the Project Based Learning (PjBL) learning model in the Arts, Culture and Crafts (SBDP) subject, especially in the activity of making 3-dimensional craft artwork from used goods by grade V students of SDN 2 Bunta.

Data Collection Technique

This study uses two types of data collection techniques, namely primary data and secondary data. Primary data were obtained through direct observation of student activities in Project Based Learning and structured interviews with grade V teachers of SDN 2 Bunta regarding the role of teachers in the learning. Meanwhile, secondary data

were obtained through documentation, such as photos of activities, interview results, and student grade lists, which support primary data and provide a comprehensive picture of the learning process and student work results.

Data Analysis

Data obtained through observation, interviews, and documentation are analyzed through three stages, namely: (1) Da ta Reduction. Is the process of summarizing and selecting important data, looking for themes and patterns, and discarding irrelevant data to facilitate further analysis; (2) Data Presentation. The reduced data is arranged in the form of a descriptive narrative, and can be supplemented with charts or relationships between categories to provide a systematic and easy-to-understand picture, and (3) Conclusion Drawing/Verification (implied from the context although not written above). Is the process of finding meaning from the data presented to answer the focus of the research, which is then verified to ensure its validity.

RESULTS AND DISCUSSION

The results of the interviews conducted by the researcher aim to strengthen the research findings related to the application of the Project-Based Learning (PjBL) model in learning three-dimensional craft art from used goods in class V SDN 2 Bunta. This interview involved a class V teacher, namely Mr. Dandy Afrianto, S.Pd., who has experience and is active in implementing the learning model. The researcher has summarized the interview results in detail, and compared them with the results of observations and other data that have been collected.

The researcher asked Mr. Dandy about the effectiveness and challenges in implementing Project-Based Learning, especially in making three-dimensional craft art from used goods. This interview was conducted on April 30, 2025, and the following is a statement given by Mr. Dandy:

"In my opinion, the Project-Based Learning model is very effective to be applied in the classroom. I understand the concept and its application, so I choose to use it in learning. This model not only encourages students' creativity, but also increases their activeness and involvement during the learning process. In addition, Project-Based Learning is not limited to Arts and Crafts (SBdP) subjects, but can be integrated into various other subjects, depending on how the teacher designs the learning activities. In preparation, I always determine the topic and learning objectives first, and ensure that the projects given are relevant to students' daily lives, and the materials used are easy to find in the surrounding environment."

Based on the interview results obtained by the researcher regarding the implementation of learning, the researcher conducted another interview to explore how Mr. Dandy assessed students' interest and involvement during the learning process. The following are statements obtained from the interview.

"To assess students' interest during learning, I usually pay attention to how they are involved in the projects that we work on in stages and in a structured manner. I see whether students learn actively, creatively, and are able to work together in groups. In addition, I also observe their enthusiasm when working on projects, as well as how they respond to the tasks given. The classroom atmosphere is sometimes lively because the children are playing, but I still keep them focused. I do the evaluation by asking students to present the results of their projects, and I give open questions to direct them to think critically. The students' responses are very positive and they seem happy because they can learn while directly practicing the material being taught."

Based on the results of the interview with Mr. Dandy Afrianto, S.Pd., it can be concluded that the application of the Project-Based Learning (PjBL) model in learning three-dimensional craft art from used goods in class V of SDN 2 Bunta has proven effective in increasing creativity, activeness, and student involvement. This model is not only relevant to students' daily lives, but is also able to foster interest in learning and cooperation in groups. The teacher prepares learning in a structured manner and conducts evaluations through presentations of project results and open questions that encourage students to think critically. Overall, the students' responses were very positive, they felt happy and motivated because they could learn directly through practice, so that PjBL can be an alternative innovative and applicable learning model in elementary schools.

The results of the interview are supported by the results of research observations conducted at SDN 2 Bunta, as follows:

Based on the observation results, it shows that the implementation of the Project-Based Learning (PjBL) model in learning three-dimensional craft art from used goods in class V SDN 2 Bunta runs effectively and in accordance with the PjBL steps. The teacher prepares the project in a structured manner, sets learning objectives that are relevant to students' lives, and facilitates the group work process actively. This model increases students' creativity, involvement, and interest in learning. Evaluation is carried out through project presentations and open questions that encourage students to think critically. Student responses are positive, and they feel happy learning through direct practice. Thus, PjBL has proven to be an innovative and applicable learning approach in elementary schools.

In implementing learning, the teacher first sets a clear theme and learning objectives so that the projects worked on by students are relevant and meaningful in the context of everyday life. The teacher also identifies materials and techniques that are easy for students to understand and apply, so that the process of making 3-dimensional craft art from used goods can run smoothly. During the learning process, the teacher directs students to be actively involved in every stage of the project, from planning, implementation, to presentation of the results. The teacher also provides constructive direction and feedback to enrich students' understanding of the material. The observation results showed that students were very enthusiastic, actively participated, and showed joy in working on the craft project. This proves that the Project Based Learning learning model is effective in increasing student involvement and creativity in Arts and Crafts subjects, especially in making 3-dimensional craft works of art from used goods in class V SDN 2 Bunta.

Cultivating moral values is also a major concern for teachers. Teachers state that the best way to teach moral values to students is by setting a good example. For example, if teachers want students to speak honestly, then teachers must first set an honest example for them. In addition, teachers get students used to respecting each other, greeting their teachers and friends every morning, and teaching them to apologize and take responsibility for mistakes they make.

The teacher also shared that in fostering learning motivation, she uses interesting learning methods. One of them is by giving awards or praise for every student's success, both big and small. This praise aims to motivate students to continue learning and trying to do better. In SBdP learning, teachers use the Project Based Learning method, which involves students in practical activities such as preparing tools, materials, and media needed for projects, as well as discussing and working in groups. With this method, students are invited to be more active and involved in learning which makes it easier for them to understand the material being taught.

To improve student work, teachers apply various methods, such as not only relying on

lectures in class, but directly inviting students to practice directly in making 3-dimensional craft works of art from used goods. The use of technology is also applied to make learning more interesting and avoid student boredom. Teachers also provide clear and direct feedback, so that students know where they are in the learning process and what needs to be improved.

The teacher explained that she tried to create a comfortable classroom atmosphere, where students felt free to ask questions and share opinions without fear of being wrong. In addition, the teacher routinely communicated with parents to ensure support for learning at home, so that students had more motivation to study well. In encouraging student creativity in SBdP learning, the teacher gave students the freedom to be creative.

For example, during art lessons, students were given the freedom to choose the materials or methods they liked in making 3-dimensional craft artwork from used goods. The teacher always encouraged them to think creatively and not be afraid of making mistakes. The assignments given were also adjusted to the students' interests, so that they felt more enthusiastic and created more freely.

Based on an interview with a teacher, it can be concluded that the Project-Based Learning (PjBL) learning model is considered very effective and relevant in the teaching and learning process. She stated that she already understood the PjBL model very well and consistently applied it in class. According to her, this model not only encourages student creativity, but also significantly increases their activeness during the learning process.

The implementation of the PjBL model is not limited to one subject. The teacher explained that PjBL can be applied to all subjects, depending on how the teacher designs the learning activities. In preparing learning, the first step taken is to determine the topic and objectives, then ensure that the project to be worked on is relevant to real life and uses easily available materials.

To determine learning activities with PjBL, the teacher ensures to understand the competencies that must be achieved by students. After that, he determines the indicators of success that can be realized through the project. The implementation of PjBL is carried out in stages and is structured to encourage students to learn actively, creatively, and collaboratively.

It is important to emphasize that the results of the project are not limited to artwork or crafts, but depend greatly on the subject and learning objectives to be achieved. In explaining the material, the teacher provides an overview first, then connects it to the project that the students will make.

Students' responses to the implementation of PjBL were very positive. They looked very happy and enthusiastic in working on the project. Although the classroom atmosphere could be a bit noisy because students interacted while working in groups, the teacher stated that she was able to control it well.

Overall, the implementation of learning using the PjBL model went smoothly according to the initial planning. The teacher also has his own way to measure student understanding. He provides open questions that not only test knowledge but also encourage students to think critically. In addition, he ensures that the tasks given are structured and relevant to learning objectives.

To enrich the material, teachers provide feedback that directs students to explore learning topics from various sources. Regarding evaluation, one of the most frequently used methods is to ask students to present their project results in front of the class.

The final reaction of students after PjBL learning was very pleasant. They felt enthusiastic because they could learn while practicing directly, which triggered their curiosity

to be higher. This shows that PjBL has succeeded in creating a dynamic and student-centered learning environment. Based on the results of interviews with students, it can be concluded that they like project-based learning because it is considered not boring. One student specifically mentioned that learning by making works from used goods helped them understand the subject matter better.

When asked about their opinions on the learning designed by the teacher, students stated that the learning was very enjoyable and did not make them sleepy. This shows that the learning method involving direct practice and creation of works has succeeded in creating a more interactive and interesting learning atmosphere for students. Overall, these interviews indicate that students had a positive experience with project-based learning. They not only liked the approach, but also felt that it was effective in helping them understand the subject matter. To motivate students to be interested and enthusiastic in following Arts and Culture lessons, teachers try to connect the lesson material with direct practice, by holding discussions or group work, teachers want to make lessons more interesting and involve students actively. Awards and appreciation for each student's efforts are also given to encourage them to continue to be enthusiastic in learning.

If There is students who not enough interested or difficulty follow learning, the teacher will find out the cause of the difficulty. If students do not understand the material or feel bored, the teacher will provide additional explanations and try different learning methods such as discussions or more exercises. Motivation and encouragement is continuously given so that students do not feel discouraged and continue to try. To increase students' interest in art and culture lessons, teachers use strategies that connect art to everyday life. This is expected to attract students' attention and make them more interested in follow lesson. After test or task finished assessed, the teacher provides feedback to students. Feedback is given both verbally and in writing, and it is expected that students can understand what they have done well and what still needs to be improved. In addition, the teacher invites students to discuss the results so that they can understand the steps that need to be taken for future improvements. Finally, the teacher explained that he gave praise to students who got the best work as a form of appreciation for their efforts. This praise aims to motivate students to continue studying hard. While for students who have not received results Well, teachers focus more on their efforts and provide encouragement and assistance to improve their grades next time.

Project Based Learning model in SBdP learning has a significant impact on the final results and learning achievements of students, especially in making three-dimensional craft artwork from used goods. This learning model not only increases student motivation, but also develops critical thinking skills, creativity, and collaboration skills as a whole. *Project-based learning* model has several important implications, including: (1) For teacher, application of model *Project Based Learning* makes it easy implementation of learning because the teacher acts as a facilitator who guides students in the project-based learning process. Teachers can design structured activities so that learning becomes more systematic and focused; (2) For students, the *Project Based Learning model* encourages active, innovative, and creative involvement in learning. Students do not only receive materials passively, but are also directly involved in designing, making, and presenting three-dimensional craft artworks from used goods. This makes learning more fun and meaningful; and (3) In the learning process in the classroom, the implementation of the *Project Based Learning model* helps create an interactive and collaborative learning environment. Students learn to work together in groups, share ideas, and develop communication and *problem solving skills* . Although sometimes the classroom atmosphere

becomes more dynamic And crowded, teacher still can control learning process so that learning objectives are achieved properly.

Field findings support this, showing that the application of the *Project Based Learning model* in the SBdP subject in making three-dimensional craft artwork from used goods can improve student learning achievement. In addition, this model also builds students' positive attitudes towards art learning, increases self-confidence, and provides learning experiences that are relevant to everyday life. *The Project Based* Learning model is an effective and innovative approach in developing students' art competence and creativity in class V SDN 2 Bunta. Furthermore, For understand essence from Model *Project Based Learning* on Eye Lesson SBdP in Making Work Art Craft 3 Dimensions from ib arang bekas, here are some perspectives. This learning model is a structured process designed to facilitate students in obtaining significant changes in understanding and skills, especially in the context of art and creativity, as a result of their direct experience in interacting with learning materials and environments.

In line with various expert views on learning, it can be said that many education experts have expressed opinions on PjBL. Although there are differences in formulation, the essence still leads to the same principle, namely the occurrence of positive changes in students. Two view expert following give perspective Which relevant: (1) According to Piaget (Moore & Piaget, 1971) , Piaget views learning as a process of transforming student behavior that occurs through dynamic interaction with the learning environment, including art materials and social interaction with fellow students. In context of creating artwork 3D Crafts from used goods, students do not only receive information passively, but actively build knowledge and skills through exploration and hands-on experience. Interaction with used materials and peers allows students to develop conceptual understanding and practical skills simultaneously and (3) Larmer & Mergendoller's (Larmer & Mergendoller, 2015) view on Innovative Learning, Larmer & Mergendoller emphasize that PjBL is a process of continuous behavioral change, driven by direct experience and practice. structured. They highlight importance involvement student in real projects that require problem solving, collaboration, and reflection. In making 3-dimensional craft artwork from used goods, students experience a systematic and iterative learning process, where they learn from direct practice and feedback to improve their work. From various perspective in above, it can be concluded that the *Project Based Learning Model* in the Arts and Culture Subject in Making 3-Dimensional Craft Artworks from Used Goods is a sustainable and transformative approach. This understanding indicates that *project Based learning* is directed to produce real changes in student behavior and skills. This change process begins with the introduction of basic art concepts, exploration of materials (especially used goods), to mastery of 3-dimensional craft art making techniques. dimensions. Ultimately, students' work is evaluated, and this evaluation reflects the achievements and positive changes that have been achieved through the application of this learning model.

Both theories complement each other in explaining the effectiveness of the *Project Based Learning model* in the SBdP subject in making 3-dimensional craft artwork from used goods. Piaget emphasized the importance of social interaction and active exploration as the basis for the formation of knowledge, while Larmer & Mergendoller (Larmer & Mergendoller, 2015) emphasized the continuous learning process through direct experience and structured exercises. Thus, the application of PjBL in class V SDN 2 Bunta can be seen as process dynamic Which involving construction knowledge actively And development skills through practice real Which systematic. *Project Based Learning* learning model on subjects SBdP in making artworks 3D Crafts from used goods in Class V SDN 2 Bunta showed a significant increase in

student learning outcomes. The *project-based learning model* is able to improve creativity, skills, And motivation student learning because they actively involved in real project-based learning process that is relevant to everyday life.

This is in line with the results of research conducted by Petty et al. (2023) which showed that the application of the PjBL model had a significant influence on student activities and learning outcomes in the material on making handicrafts from leaf bones in SBdP learning. The study proved an increase in the experimental class gain index of 0.701 (high) compared to the control class of 0.399 (moderate).

In addition, research by Wati et al. (2024) at SD Negeri Payaman 2 Magelang also confirmed that learning with the PjBL model had a positive effect on students' arts and culture learning outcomes and skills. The t-test results showed a significant value of 0.011 <0.05, which means that there was a significant difference between the experimental class and the control class after the implementation of the PjBL model.

With Thus, the application of the model learning *Project Based Learning* in the subject of Arts and Culture in making 3-dimensional craft works of art from used goods is effective in improving student learning outcomes, especially in the aspect of creativity. skills, And understanding material art. Overall , various studies support that the *Project Based Learning model* is effective in improving student learning outcomes in Arts and Culture subjects, especially in making 3D craft works of art from used goods. (1) Low involvement: Students appear less focused and not serious during the initial and final learning activities, such as praying and listening to apperception; (2) Lack of enthusiasm: In the core activities, students appear less enthusiastic and do not show enthusiasm in working on craft projects; (3) Low responsibility: Tasks are not completed properly, and the results show a lack of creativity and accuracy; (4) Passive group work: Group discussions are not active, students tend to be quiet and do not contribute much; (5) Lack of confidence: When asked to answer or present results, students hesitate and lack confidence; and (6) Observation scores: Category "Less" to "Very Less", indicating the need for motivation and a more personal approach from the teacher.

(1) Rushed introduction: Greetings and prayers are carried out without a warm atmosphere. There is no thorough attendance check and the apperception is irrelevant; (2) Learning objectives are not conveyed clearly, making students confused about the direction of learning; (3) The PjBL stages were not carried out optimally: There were no essential questions, the project work rules were unclear, the project activity schedule was not made, and the teacher was passive in guiding students; and (4) The evaluation was not in-depth: The assessment was only general without constructive feedback and no reflection on the learning process.

Learning has not been effective. Teachers have not been able to implement PjBL comprehensively, and students showed very low motivation and involvement. (1) Positive attitude: Students prayed solemnly, paid attention to the teacher during apperception, and showed high enthusiasm in participating in learning activities; (2) Active and responsible: They were enthusiastic in completing the project, the results of their work were better and showed developing creativity; (3) The discussion went smoothly: Students actively worked together in groups and helped each other complete tasks; (4) Confident: When asked to answer and present, students appeared confident and happy; and (5) Increased enthusiasm: The learning atmosphere becomes lively, students enjoy the practical activities of making works from used goods.

(1) Friendly and systematic opening: The teacher greets warmly, leads a prayer, checks attendance, provides interesting and relevant apperception; (2) Clear delivery of learning

objectives, so that students understand the direction and targets of learning; (3) Efective implementation of PjBL: The teacher asks essential questions, explains the rules and project schedule clearly, and actively monitors each group; (4) Intensive mentoring: The teacher walks around the class, gives directions, and supports students in completing the project; and (5) Reflective and constructive evaluation: The teacher assesses the project results fairly, provides feedback that encourages improvement, and involves students in learning reflection.

The teacher has succeeded in implementing the PjBL model comprehensively and effectively. Student involvement has increased significantly, both in terms of responsibility, creativity, and participation. The learning process becomes active, fun, and meaningful. There was a significant increase from meeting I to meeting II. Initially, learning was not effective because teachers and students had not carried out their respective roles optimally. However, in the second meeting, the teacher implemented the PjBL stages completely and systematically, which had a positive impact on increasing student enthusiasm, creativity, and learning outcomes. The Project Based Learning model has been proven to create an active, collaborative, and relevant learning atmosphere for students' real lives.

Discussion

Based on the research results obtained by data collection techniques. With the problems set by the researcher, namely:

The role of teachers in student work in the subject of Arts and Crafts class V SDN 2 Bunta The role of teachers in student work in the subject of Arts and Crafts (SBdP) using the Pjbl model in class V SDN 2 Bunta is very large and important. Teachers are not only teachers, but also motivators and facilitators in creating a fun and beneficial learning experience for students. This can be proven from interviews with teachers. Efforts made by teachers to improve student learning outcomes are by providing guidance and directing students, as well as providing various learning methods. Based on the results of observations made during the SBdP learning process with the Project Based Learning model, it can be analyzed as follows: (1) Implementation of PjBL Stages: All stages of the PjBL model have been implemented by the teacher, namely starting from, Formulating essential questions, Designing projects with students, Preparing project schedules and implementation, Monitoring student development, Presenting project results, Conducting project evaluations. This shows that teachers have the understanding and skills to implement PjBL according to its basic principles; (2) Student Participation and Enthusiasm: Students showed high enthusiasm when asked to make artwork from used goods. There was active interaction in groups, students learned to communicate, work together, and solve problems independently. The projects created reflected students' creativity and the functional use of used goods; (3) Theme 3: The Role of the Teacher as a Facilitator: The teacher not only delivers material, but plays a role in guiding, directing, and motivating students during the project work process, The teacher gives students the freedom to be creative, but still provides structured limitations and evaluations; (4) Learning Relevance: Making activities. The activity of making three-dimensional crafts from used goods is very contextual to everyday life. This project-based learning not only improves artistic competence, but also fosters environmental awareness and character values such as responsibility and cooperation; and (5) Observation Conclusion Based on the results of observations and data analysis, it can be concluded that: The Project Based Learning learning model is very effective in applying SBdP learning in grade V, especially in making three-dimensional craft artwork from used goods. Students become more active, creative, and collaborative in the learning process. They not only understand the concept of art, but are also able to apply it in real life.

Research by Isnaini (2022) and Abdillah et al. (2023) shows that learning using loose-part materials can increase students' creativity. When students freely explore their environment, it enriches their creative ideas, develops their imagination, and fosters their curiosity.

The teacher successfully implemented all stages of PjBL well, acting as a facilitator who encourages students to learn independently and productively. The implementation of projects based on used goods fosters environmental awareness and instills positive character values in students. These results are supported by key factors, especially the alignment between the PjBL model's syntax and the aspects of creative thinking skills: fluency, flexibility, originality, and elaboration Almuharomah et al. (2019).

With the various roles carried out, teachers in class V of SDN 2 Bunta have succeeded in creating conditions that support students to achieve better learning outcomes, especially in the subject of Arts and Culture. A humanistic approach, varied learning methods, and appreciation for student efforts all contribute greatly to students' academic and non-academic development. This statement is in accordance with the research results of Loretha et al. (2023) which explains that basic questions or open questions from teachers can stimulate students' thinking and deepen students' understanding.

Teachers have a strategic role in instilling moral, ethical, and disciplined values, serving not only as knowledge transmitters but also as role models who shape students' character and personality through ongoing interaction inside and outside the classroom Sisdiknas (2003).

Furthermore, the role of teachers in modern learning is as facilitators and mentors who actively accompany students during the learning process. In Project-Based Learning, teachers play a crucial role in providing intensive guidance, constructive feedback, and motivation to help students complete projects independently and creativel Moss (2022). Project-Based Learning (PjBL) emphasizes active student involvement in real-life, relevant projects, allowing deep learning through hands-on experience and continuous teacher guidance, resulting in more meaningful and long-lasting outcomes and skills Kabu (2021).

The teacher's role in providing intensive guidance significantly influences students' success in creating 3-dimensional crafts from used materials through the Project-Based Learning (PjBL) model. Students find PjBL more effective than other models due to the structured, enjoyable, and meaningful learning process supported by active teacher involvement. This model enhances both technical skills and the development of positive character and attitudes. The Project-Based Learning (PjBL) model effectively enhances all aspects of students' creative thinking by engaging them in designing, problem-solving, decision-making, and conducting observations, while also encouraging both independent and group work Tarigan & Wibowo (2022).

Factors that influence the work of grade V students at SDN 2 Bunta. Dyah et al. (2021) in the Proceedings of the National Elementary Education Seminar on page 54 stated that the work achieved by students is the result of interactions between various influencing factors, both internal and external factors. In detail, the description of internal and external factors is as follows: (1) Internal Factors. Internal factors are factors that originate from within students, which influence their learning abilities. Internal factors include: intelligence, interest and attention, learning motivation, perseverance, attitude, learning skills, and physical condition and health; and (2) External Factors. Factors originating from outside the student that influence learning outcomes are family, school, and community. Family circumstances influence student learning outcomes. Families whose economic situation is in disarray, husband and wife quarrels, lack of parental attention to their children, and poor daily habits of parents in daily

life influence student learning outcomes.

Based on data obtained through interviews conducted by researchers with class V teachers of SDN 2 Bunta, there are several factors that influence student work. Based on the data obtained, student work is influenced by two things, the students themselves and their environment. First, students: in terms of thinking ability or intellectual behavior, motivation, interest, and student readiness, both physically and spiritually. Second, the environment: namely facilities and infrastructure, teacher competence, teacher creativity, learning resources, models and environmental support, family, and the environment.

Teachers' efforts to improve student work by using the Pjbl learning model in the SBdP subject in class V SDN 2 Bunta include several important steps. Teachers create a positive learning environment by setting clear rules and providing an approach that suits students' personalities, so that students feel valued and motivated to learn.

In light of these findings, a revised theoretical framework may be proposed. This framework posits that the implementation of media-based RME tailored to children's contexts (for instance, rocket minisets) not only fosters the development of mathematical knowledge but also establishes an engaging and collaborative learning environment. The integration of concrete media, such as rockets, into the learning process fosters imagination and profound affection, particularly in the context of mathematics education Supratman, et. al (2025).

In conclusion, the integration of PBL and CRT in this study fostered a classroom atmosphere that was not only intellectually challenging but also culturally and emotionally responsive. This blended approach successfully bridged the gap between abstract civic education concepts and students' lived cultural experiences, thereby optimizing both cognitive and affective learning outcomes Purnamasari, et. al (2025).

CONCLUSION

The application of the Project-Based Learning (PjBL) model in the Arts and Crafts (SBdP) subject for making 3-dimensional crafts from used materials in Grade 5 at SDN 2 Bunta proved highly effective**.** (1) Effectiveness and Impact of PjBL. The PjBL model significantly enhances student creativity, activeness, and involvement throughout the learning process, from planning to presenting their work; (2) Practice-Based Learning: Students feel happy and motivated through hands-on practice, making learning more meaningful and engaging; (3) Increasing Motivation and Cooperation: Group projects enhance students' interest in learning and teamwork, while praise and appreciation from teachers effectively boost their motivation; (4) Holistic Skill Development: Besides technical skills, PjBL also enhances students' critical thinking, collaboration, and problem-solving abilities; (5) The Role of the Teacher as a Facilitator and Motivator; (6) Central Role: The teacher, Mr. Dandy, plays a key role as a facilitator, guide, and motivator by providing intensive support and constructive feedback beyond just delivering the material; (7) Structured Preparation: The teacher prepares lessons in a structured way by selecting relevant topics and objectives, along with easily accessible materials connected to students' daily lives; and (8) Creating a Positive Environment: The teacher creates a supportive, interactive, and collaborative classroom environment where students feel safe to be creative and ask questions, while also promoting moral values like honesty and responsibility by example.

Factors Affecting Student Work Results The research results identified two main

factors that affect student work results, namely: (1) Internal factors (from within the student): Thinking ability, motivation, interest, and physical and spiritual readiness of students; and (2) External factors (from outside the student): Environmental support, such as the availability of facilities and infrastructure, teacher competence, teacher creativity, and support from family and the surrounding environment.

The findings of this study are in line with the theories of experts, such as Piaget who emphasized the importance of active interaction between students and their environment to build knowledge Larmer & Mergendoller (2015) who highlighted continuous learning through real experiences. In addition, the results of this study are also supported by relevant research from Petty et al. (2023) and Wati et al. (2024)which both show that PjBL is effective in increasing student activity and learning outcomes in Arts and Culture subjects.

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