International Journal of Education, Vocational and Social Science
https://e-journal.citakonsulindo.or.id/index.php/IJEVSS
E-ISSN : 2963 4954
IJEVSS

Implementation Of Project Based Learning (Pjbl) Based On Jambi Malay Local Wisdom To Improve Student Creativity In Bahasa Indonesia Subjects

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Abstract

This study aims to analyze the effectiveness of Project Based Learning (PjBL) implementation based on Jambi Malay local wisdom in improving students' creativity in Indonesian Language subjects at Madrasah Ibtidaiyah (Islamic Elementary School). The study was conducted at Madrasah Ibtidaiyah Nailul Ikhsan, Sungai Arang, Muara Bungo, Jambi Province, with a mixed-methods explanatory sequential design . The research subjects consisted of 32 fifth-grade students selected through purposive sampling technique . The learning intervention was designed in four PjBL cycles that integrated Jambi Malay cultural elements, including pantun, folklore, woven motifs, and local wisdom values such as mutual cooperation , respect for elders , and protecting nature . Data collection instruments included a language creativity test (adapted from Torrance), learning activity observation sheets, semi-structured interview guidelines, and project assessment rubrics. Quantitative data were analyzed using paired sample t-test and Normalized Gain (N-Gain) , while qualitative data were analyzed thematically following the Miles, Huberman, and Saldaña model. The results showed a significant increase in students' creativity scores ($t = 8.421$, $p < 0.001$) with an average N-Gain of 0.67 (medium-high category). Qualitative analysis revealed that the integration of local wisdom functions as a cultural scaffold that enriches imagination, facilitates divergent thinking, and strengthens students' cultural identity in the language process. The discussion shows that PjBL based on Jambi Malay local wisdom not only

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improves the dimensions of cognitive creativity (fluency, flexibility, originality, and elaboration), but also fosters affective and socio-cultural creativity. This study provides theoretical contributions to the development of contextual pedagogy in madrasas and practical implications for teachers, curriculum developers, and policymakers in integrating local wisdom into 21st-century learning.

Keywords: Project Based Learning , Jambi Malay Local Wisdom, Student Creativity, Indonesian Language, Elementary Madrasah, Contextual Learning

INTRODUCTION

Islamic religious education and madrasahs in Indonesia are consistently directed towards producing students who are not only academically competent but also have character, creativity, and are rooted in the nation's noble values. In the context of the Independent Curriculum, strengthening the Pancasila student profile emphasizes creativity, global diversity, and critical thinking as key pillars of student competency development. However, the reality on the ground shows that Indonesian language learning at the elementary madrasah level still tends to be teacher-centered, textual, and does not address students' sociocultural contexts. As a result, creative language thinking skills–which include producing original texts, communicative problem-solving, and exploring ideas–have not developed optimally (Prasetyo & Nurhayati, 2022; Widiastuti et al., 2023).

Creativity in Indonesian language learning is not merely the ability to produce beautiful sentences, but rather the cognitive-affective capacity to construct meaning, express ideas divergently, and connect language to cultural identity. Recent research shows that pedagogical approaches that separate students from their cultural roots actually hinder the development of contextual creativity (Sari & Fauzi, 2021; Hidayat & Rahmawati, 2024). On the other hand, the integration of local wisdom into learning has been shown to increase student engagement, enrich cognitive schemas, and facilitate the transfer of knowledge to real-life situations (Yusuf & Mulyana, 2022; Fadillah & Putri, 2023). Jambi Province, particularly the Muara Bungo region, boasts a rich treasure trove of local Malay wisdom, encompassing oral traditions (pantun, gurindam, folklore), handicrafts (songket weaving, weaving), traditional architecture, and social values such as adat bersendi syarak, syarak bersendi kitabullah , which are highly relevant as a basis for contextual learning.

Project-Based Learning (PjBL) has been empirically recognized as an effective approach for developing creativity, collaboration, and higher-order thinking. Unlike conventional methods, PjBL

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positions students as active agents who design, implement, and reflect on meaningful projects based on authentic problems or questions (Thomas, 2021; Hmelo-Silver et al., 2022). However, the majority of PjBL studies in Indonesia still focus on STEM fields or urban contexts, with little attention paid to the integration of local wisdom in Islamic elementary schools (madrasah ibtidaiyah) settings (Kurniawan & Setyawan, 2023; Anwar & Lestari, 2024). Furthermore, few studies have systematically examined how the PjBL framework can be operationalized with Jambi Malay cultural content to enhance students' language creativity, particularly in the madrasah context, which is characterized by distinctive Islamic and Indonesian values.

Based on the description, there are significant research gaps : (1) the lack of PjBL models explicitly designed based on Jambi Malay local wisdom for Indonesian Language subjects; (2) limited empirical evidence on the impact of local cultural integration on madrasah students' language creativity; and (3) the need for a measurable, replicable, and compliant implementation framework in line with the spirit of the Independent Curriculum. This research aims to fill these gaps by designing, implementing, and evaluating PjBL based on Jambi Malay local wisdom at Madrasah Ibtidaiyah Nailul Ikhsan, Sungai Arang, Muara Bungo.

The objectives of this study are: (1) to describe the implementation of PjBL based on Jambi Malay local wisdom in Indonesian language learning; (2) to analyze the increase in student creativity before and after the intervention; (3) to identify supporting and inhibiting factors in the implementation process; and (4) to formulate pedagogical recommendations for the development of contextual learning in madrasas. The significance of this study lies in its theoretical contribution to the development of culturally responsive pedagogy in Islamic education, as well as its practical contribution in the form of a ready-to-use learning model that can be adopted by Indonesian language teachers in madrasas throughout Jambi Province and other Malay cultural areas.

RESEARCH METHOD

Research Design

This study employed a mixed-methods explanatory sequential design . The quantitative phase was conducted first to measure changes in students' creativity scores through a one-group pretest-posttest design . Next, the qualitative phase was conducted to explore the implementation process, mechanisms for increasing creativity, and student and teacher perceptions of learning. Data integration was conducted through a connecting strategy, where quantitative findings served as the basis for participant selection and the focus of in-depth

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interviews (Creswell & Creswell, 2022).

A. Research Location and Subjects

The research was conducted at Madrasah Ibtidaiyah Nailul Ikhsan, Sungai Arang Village, Muara Bungo District, Jambi Province, in the even semester of the 2024/2025 academic year. The research subjects were 32 fifth-grade students selected through a purposive sampling technique with considerations of: (1) availability of access to local culture-based projects; (2) diversity of socio-economic backgrounds; and (3) written permission from parents/guardians. The sample characteristics included 18 male students and 14 female students, with an age range of 10–11 years.

B. Instruments and Validity

The research instruments consist of:

1. Language Creativity Test : Adapted from the Torrance Tests of Creative Thinking (TTCT) Verbal, modified into 10 items that measure four indicators of creativity: fluency , flexibility , originality , and elaboration . Content validity was tested by three experts (language education lecturer, madrasah practitioner, Jambi Malay cultural expert) with Aiken's V index = 0.87. Reliability was tested using Cronbach's alpha = 0.84.
2. PjBL Observation Sheet : Contains 15 learning process indicators according to PjBL syntax (starter questions, planning, scheduling, monitoring, evaluation, reflection). Scores are scored on a Likert scale of 1–4.
3. Semi-structured Interview Guidelines : Aimed at teachers and 6 students selected based on the highest, medium, and lowest creativity scores.
4. Project Assessment Rubric : Refers to the Independent Curriculum criteria (depth of content, creativity of expression, cultural relevance, collaboration, and presentation)

C. Implementation Procedures for PjBL Based on Jambi Malay Local Wisdom

The intervention was implemented in four cycles over 12 meetings, with the following structure: PjBL Phase Learning Activities Integration of Jambi Malay Local Wisdom

1. Starting Questions The teacher presents the problem: "How to preserve Jambi Malay culture through language that is attractive to the younger generation?" Introduction to Malay pantun, the story of Sang Kancil & Buaya , the traditional value of bersin syarak
2. Project Planning Students form heterogeneous groups, design project themes (folk story podcasts, mini pantun books, digital posters of woven motifs) Selection of themes based on local wisdom, consultation with local cultural figures

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3. Scheduling & Monitoring Students create timelines, collect sources, draft texts, and test presentations. Integration of the values of mutual cooperation and respect for teachers/elders in group work
4. Evaluation & Reflection Project presentation, rubric assessment, learning journal reflection Discussion on the relevance of local culture to modern life and Malay-Muslim identity

D. Data Analysis

Quantitative data were analyzed using SPSS v.26. Normality testing was performed using the Shapiro-Wilk test , followed by a paired sample t-test (for normally distributed data) or the Wilcoxon Signed-Rank Test (for non-normally distributed data). Effect size was measured using Cohen's d and the N-Gain Score (Meltzer, 2021). Qualitative data were analyzed using reflexive thematic analysis (Braun & Clarke, 2022) through the following stages: transcription, familiarization , coding , theme development , review , and reporting . Data triangulation was performed through sources (students, teachers, documents) and methods (observation, interviews, tests).

E. Research Ethics

The research obtained ethical approval from the partner university's Institute for Research and Community Service (LP2M) and an official permit from the Principal of Madrasah Ibtidaiyah Nailul Ikhsan. Participation was voluntary, data was anonymized, and all procedures adhered to the principles of beneficence , non-maleficence , and confidentiality as per the Indonesian Educational Research Ethics Guidelines (Kemendikbudristek, 2023).

RESEARCH FINDINGS AND DISCUSSION

Based on the prerequisite test, the pretest and posttest creativity score data were normally distributed ($p > 0.05$) and homogeneous (*Levene's test* $p = 0.312$). The *paired sample t-test* showed a significant difference between the pretest scores ($M = 58.41$, $SD = 9.27$) and posttest scores ($M = 79.65$, $SD = 7.84$), $t\ (31) = 8.421$, $p < 0.001$. *Cohen's d* effect size = 1.48 indicates a large effect. The average *N-Gain value was 0.67 (medium-high category), with 78.1% of students achieving a gain* ≥ 0.50.

Table 1. Distribution of Student Creativity Scores Based on Indicators

Indicator	Pretest (M ± SD)	Posttest (M ± SD)	Δ Score	*p* -value
Fluency	14.2 ± 2.8	19.8 ± 2.1	+5.6	<0.001
Flexibility	13.5 ± 3.1	18.9 ± 2.4	+5.4	<0.001

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Originality	15.1 ± 3.5	21.4 ± 2.8	+6.3	<0.001
Elaboration	15.6 ± 2.9	19.5 ± 2.5	+3.9	0.002

These results indicate that local wisdom-based PjBL consistently improves all dimensions of creativity, with the highest increases in originality and fluency. This aligns with the findings of Anwar & Lestari (2024) who stated that the local cultural context provides *cognitive novelty* that triggers idea divergence. The lower increase in elaboration indicates the need for more intensive mentoring at the stage of refining language products, in line with Fadillah & Putri's (2023) suggestion regarding the need for structural *scaffolding* in creative projects.

3.2 Qualitative Results: Implementation Process and Learning Dynamics

Thematic analysis revealed three main themes that explain the mechanisms of creativity enhancement:

Theme 1: Local Wisdom as *a Cultural Scaffold* for Divergent Thinking

Students actively relate language material to familiar cultural contexts. In the folklore podcast project, students not only retell stories but also add contemporary dialogue, insert closing rhymes, and adapt the language to a register relevant to their peers. A teacher reported: *"Initially, they were hesitant to use local language, but after being given examples of Jambi rhymes and the Islamic values in the story, their ideas flowed. They became braver in experimenting with language styles."* (Teacher, W1). This is consistent with Vygotsky's (2021) theory that cultural tools mediate higher-level cognitive development. Local wisdom functions as a *zone of proximal* cultural development that facilitates the internalization of linguistic concepts.

Theme 2: Collaboration Based on *Mutual Cooperation Values* Increases Fluency and Flexibility

Observations show that group dynamics are strongly influenced by the internalization of Jambi Malay values. Students spontaneously apply the principle *of deliberation and consensus* in role distribution, reducing individual dominance, and increasing marginal participation. In a journal reflection, a student wrote: *"Previously, in groups, only the smart ones worked. Now, using traditional methods, everyone gets tasks according to their interests. Ideas are abundant, no fear of making mistakes."* (Student, S-12). This finding supports the study of Hidayat & Rahmawati (2024) that local collectivity values increase *psychological safety* , which is a cognitive prerequisite for creativity.

Theme 3: Muslim-Malay Identity as a Source of Intrinsic Motivation

The integration of traditional values *based on Islamic law and Islamic teachings* in the

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language project strengthens the meaning of learning. Students see language not only as a test tool but also as a medium for cultural da'wah. The digital poster project featuring woven motifs featuring Islamic poetry demonstrated high elaboration skills. Teachers noted increased discipline and responsibility, which correlated with the affective dimension of creativity. As stated by Yusuf & Mulyana (2022), learning that touches on spiritual-cultural identity produces sustainable intrinsic motivation, in contrast to value-based extrinsic motivation that quickly fades.

Discussion: Mechanisms, Theoretical Contributions, and Implementation Challenges

The results of this study provide empirical evidence that PjBL integrated with Jambi Malay local wisdom significantly increases students' creativity in learning Indonesian. The main mechanisms lie in three factors: (1) **contextualization of materials** that reduces foreign cognitive load and accelerates information processing; (2) **activation of cultural schemas** that enrich *the mental lexicon* and facilitate the association of ideas across domains; and (3) **strengthening of identity** that fosters a sense of ownership *of* the learning process, thereby increasing persistence in completing complex projects.

From a theoretical perspective, this study extends *the Culturally Responsive Project-Based Learning* (CR-PjBL) model, originally developed for Western multicultural contexts (Gay, 2021), to an Indonesian madrasah setting. The integration of Islamic values and Jambi Malay local wisdom demonstrates that CR-PjBL is not simply a content adaptation but an epistemological transformation that positions local knowledge as a source of validity, not merely illustration. This aligns with the contemporary Islamic education paradigm that emphasizes *tauhidic knowledge integration* (Al-Attas, 2022; Rahman & Hakim, 2023).

However, implementation is not without challenges. Qualitative findings revealed key obstacles: (1) teachers' limited digital literacy in designing culture-based multimedia projects; (2) gaps in access to documented local wisdom learning resources; and (3) curriculum administration pressures that sometimes hindered project timeline flexibility. Teachers responded by forming mini-communities of practice, collaborating with local cultural studios, and using a *blended scaffolding approach* (online-offline). This strategy aligns with Kurniawan & Setyawan's (2023) recommendation regarding the need for *ecosystem-based professional development* for madrasah teachers.

Comparatively, the results of this study surpass those of similar studies in urban public schools (Prasetyo & Nurhayati, 2022; Widiastuti et al., 2023), which reported limited creativity improvements in technical aspects. The strength of this model lies in the socio-cultural and

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spiritual dimensions measured through project rubrics and journal reflections. This indicates that creativity in the madrasah context cannot be separated from the values framework, thus requiring a holistic, not reductionist, pedagogical approach.

The practical implications of this research include: (1) the development of a PjBL module based on Jambi Malay local wisdom for grades IV–VI of Islamic elementary schools; (2) the integration of language creativity assessment into the Independent Curriculum report card system; (3) training madrasah teachers in *cultural mapping* and authentic project design. For policy, this research supports the acceleration of the implementation of *Compulsory Local Content* which is not merely informative, but transformative in shaping creative competencies and character.

CONCLUSION

The implementation of *Project Based Learning* based on Jambi Malay local wisdom at Madrasah Ibtidaiyah Nailul Ikhsan, Sungai Arang, Muara Bungo, significantly increased students' creativity in Indonesian language subjects. Quantitative analysis showed an increase in creativity scores with a large effect size (d = 1.48) and a medium-high *N-Gain (0.67), especially in the originality and fluency indicators. Qualitative analysis revealed that the integration of local wisdom functions as a cultural scaffold* that facilitates divergent thinking, strengthens collaboration based on *mutual cooperation values* , and fosters intrinsic motivation through strengthening Muslim-Malay identity. The main implementation challenges lie in teachers' digital capacity and the availability of documented learning resources, which can be addressed through the development of a community of practitioners and cross-sector collaboration.

This study recommends: (1) the development of a Jambi local wisdom-based PjBL project bank integrated with a madrasah digital platform; (2) ongoing teacher training in authentic creativity assessment design; (3) further research with a randomized block experimental design and multi-madrasah samples to test the generalizability of the model. Thus, PjBL based on local wisdom is not only a pedagogical strategy, but also an instrument for cultural preservation and character building that aligns with the vision of Islamic education in Indonesia.

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