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Enhancing Poetry Writing Skills Through Project-Based Learning With Outdoor Learning Approach: An Action Research Study

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ABSTRACT

This classroom action research investigates the effectiveness of Project-Based Learning (PBL) integrated with an Outdoor Learning approach to enhance poetry writing skills among eighth-grade students at SMP Negeri 1 Lawe Alas. The study addresses persistent challenges in poetry instruction, including low student motivation, limited creative inspiration, and monotonous classroom-based teaching methods. Grounded in Vygotsky's constructivist theory, the intervention employed authentic environmental observation as a catalyst for creative expression. The research utilized a two-cycle action research design following the Kemmis and McTaggart model, involving 30 students (14 males, 16 females) during the 2025-2026 academic year. Data collection instruments included poetry writing assessments, classroom observation protocols, student surveys, interviews, and documentation. Poetry assessment criteria encompassed six dimensions: theme development, diction, figurative language, imagery, rhyme, and typography. Results demonstrated substantial improvement across all cycles: mean scores increased from 65.3 (pre-cycle) to 73.5 (Cycle I) to 89.0 (Cycle II), while mastery rates rose from 40% to 63.3% to 90%, surpassing the minimum competency standard of 75. The most significant improvements occurred in imagery creation (38.7% increase) and figurative language usage (33.3% increase), validating the efficacy of direct environmental engagement. Qualitative findings revealed heightened student enthusiasm (93.3% in outdoor activities), enhanced collaborative learning, and increased confidence in poetic expression. The integration of PBL's systematic project structure with Outdoor Learning's experiential pedagogy effectively transforms abstract poetic concepts into concrete, observable phenomena, thereby facilitating cognitive scaffolding and creative production.

Keywords: Project-Based Learning, Outdoor Learning, Poetry Writing Skills, Classroom Action Research, Constructivist Pedagogy.

I. INTRODUCTION

Writing is a fundamental linguistic competency that enables indirect communication through symbolic representation. In Indonesian secondary education, poetry writing is a critical curricular component that integrates the cognitive, affective, and psychomotor domains through aesthetic language manipulation. Poetry, defined as an artistic literary expression employing concentrated, rhythmic language with carefully selected words to convey imaginative thought and emotion, demands sophisticated linguistic abilities beyond ordinary discourse. The pedagogical importance of poetry instruction extends beyond literary appreciation, encompassing creativity development, emotional sensitivity cultivation, and enhancing aesthetic awareness enhancement (Thananate, 2025).

However, empirical observations at SMP Negeri 1 Lawe Alas have revealed significant deficiencies in students' poetry writing capabilities. Initial assessments indicated a mean performance score of 65.3, substantially below the established minimum competency criterion of 75, with only 40% of the students achieving mastery. Analysis of student compositions identified specific deficits across multiple dimensions: thematic development constraints, limited lexical repertoire, inadequate figurative language deployment, weak imagery construction, and insufficient attention to prosodic elements. These shortcomings manifest not as isolated technical deficiencies but as systemic barriers that impede creative expression and literary engagement (Novosyadla, 2025).

The etiology of these pedagogical challenges traces to conventional instructional methodologies that prioritize didactic transmission over experiential learning. Traditional poetry instruction typically follows a linear sequence: theoretical exposition of poetic elements, exemplar analysis, and in-class composition assignments

disconnected from authentic sensory experience. Such teacher-centered approaches, as documented in educational literature, cultivate passive learner dispositions and constrain creative development. The classroom environment, isolated from natural phenomena and sensory stimuli, fails to provide the inspirational foundation necessary for authentic poetic creation. Students confronted with the imperative to "write a nature poem" lacking direct environmental engagement predictably struggle to generate vivid imagery or employ evocative diction (Castillo Moreno & Caudillo Melgoza, 2025).

This study adopts Vygotsky's constructivist epistemology as its theoretical foundation, positing that knowledge construction occurs through social interaction and direct environmental engagement. Constructivist pedagogy conceptualizes learners as active agents who construct understanding through authentic experiences, rather than as passive recipients of transmitted information. This theoretical stance directly contradicts traditional instructional models and necessitates pedagogical approaches that situate learning within meaningful and contextualized activities.

Project-Based Learning (PBL) operationalizes constructivist principles by utilizing complex, authentic projects as the primary learning medium. PBL engages students in the sustained investigation of essential questions, culminating in the production of tangible artifacts that demonstrate acquired competencies. The model emphasizes student agency in decision-making, collaborative knowledge construction, and the integration of multiple skill domains. PBL's defining characteristics include learner-centered design, authentic problem engagement, collaborative investigation, continuous reflection, and holistic assessment of both process and product. Within the poetry writing context, PBL provides a structured framework for transforming poetic composition from an isolated academic exercise into a meaningful creative project embedded in authentic experience (Fathima, 2025).

Outdoor Learning, conceptualized as the pedagogical utilization of external environments as primary learning resources, complements PBL by providing an experiential foundation for creative work. Educational research has demonstrated that outdoor learning environments enhance motivation, stimulate creativity, and facilitate concrete understanding through direct sensory engagement. For poetry instruction, outdoor settings offer abundant observable phenomena trees swaying in the wind, water flowing over stones, birds in flight—that serve as concrete referents for abstract poetic concepts. The integration of environmental observation with poetic expression addresses the fundamental challenge of helping novice writers transform their lived experiences into literary language (Bassaw et al., 2025).

The theoretical rationale for combining PBL with Outdoor Learning rests on their complementary affordances. PBL provides the procedural structure and collaborative framework necessary for sustained creative work, while Outdoor Learning supplies the sensory input and inspirational content that animate poetic expression. This synergy addresses both the "how" of poetry composition (technical skills, revision processes, peer feedback) and the "what" (authentic subjects, sensory details, and emotional resonance). This combination transforms poetry writing from an abstract academic requirement into a meaningful investigation of one's relationship with the natural world (Karim, 2025).

Contemporary research on innovative writing instruction provides substantial empirical support for both PBL and Outdoor Learning approaches. Project-based learning interventions have been effective in enhancing creative writing quality, increasing student engagement, and developing 21st-century competencies, including critical thinking, creativity, collaboration, and communication. Specifically, in poetry contexts, PBL implementation has improved thematic development, lexical variety, figurative language sophistication, and imagery vividness. The model's emphasis on sustained engagement with authentic tasks appears particularly beneficial for creative writing, which requires extended periods of ideation, composition and revision (Syamsuddin et al., 2025).

Outdoor learning research has similarly documented positive outcomes across multiple educational domains. Studies indicate that outdoor instruction increases motivation, reduces classroom behavior problems, enhances environmental sensitivity, and improves academic performance in various subjects. Within literacy education, outdoor learning has proven effective for narrative writing, descriptive composition, and poetry creation. The explanatory mechanism centers on direct sensory experience, providing concrete foundations for abstract language use. Students who observe natural phenomena firsthand develop richer mental representations that facilitate more sophisticated linguistic expressions (Torkos, 2025).

However, research examining the integration of PBL with Outdoor Learning remains limited, particularly at the secondary level and within Indonesian language instruction. Existing studies typically investigate these approaches in isolation rather than exploring their synergistic potentials. This gap in the literature justifies the current investigation's focus on how structured project-based pedagogy might be enhanced through the incorporation of outdoor experiential learning. The research question thus becomes not simply whether each

approach works independently but whether their integration produces outcomes superior to conventional instruction or either approach alone.

SMP Negeri 1 Lawe Alas, located in the Aceh Tenggara district, presents an ideal context for investigating outdoor learning integration due to its rural setting with abundant natural resources, including forests, gardens, streams, and mountain vistas. Despite these environmental affordances, poetry instruction has historically remained confined to conventional classroom spaces. The initial diagnostic assessment revealed multiple interrelated problems: students struggled to identify appropriate poetic themes, employed limited and repetitive vocabulary, rarely incorporated figurative language, created weak or nonexistent imagery, lacked enthusiasm for poetry writing, and frequently submitted incomplete or minimal-effort compositions.

Teacher interviews and classroom observations confirmed that instruction followed predictable patterns: definition of poetry and its elements, teacher-provided examples, brief analysis, and individual composition assignments. Students received minimal guidance during the writing process and limited, specific feedback on their drafts. The learning environment provided no structured opportunities for environmental observation, collaborative discussion, or iterative revision all elements that are critical for developing writing competence.

This problematic situation reflects broader challenges in Indonesian language education, where traditional pedagogies persist despite curriculum reforms that emphasize active, student-centered learning. The persistence of teacher-centered instruction, particularly for creative writing, limits students' opportunities to develop authentic creative capacities and constrains their engagement with literary forms as meaningful modes of expression rather than merely academic obligations.

This study aimed to enhance poetry writing capabilities among eighth-grade students through the systematic implementation of Project-Based Learning integrated with Outdoor Learning approaches. Specific objectives include: (1) documenting the implementation process of PBL with Outdoor Learning for poetry instruction; (2) measuring improvements in students' poetry writing abilities across multiple dimensions; and (3) assessing student responses to the integrated pedagogical approach.

This investigation addresses three primary research questions: (1) How does the implementation of Project-Based Learning with Outdoor Learning unfold in poetry writing instruction for eighth-grade students? (2) To what extent does this integrated approach improve students' poetry-writing abilities, as measured by standardized assessment criteria? (3) How do students respond to poetry instruction using this integrated pedagogical model?

This study contributes to educational theory and practice in multiple dimensions. Theoretically, it extends the understanding of how experiential and project-based pedagogies function synergistically to support complex creative tasks. By documenting the specific mechanisms through which outdoor environmental engagement enhances poetry composition within a project-based framework, this study illuminates the broader principles of effective creative writing instruction. Methodologically, the action research design demonstrates how classroom teachers can systematically investigate and improve their practice through iterative cycles of planning, implementation, observation, and reflection.

Practically, this research provides concrete models and procedures that Indonesian language teachers can adapt to their own contexts. The integration of readily available environmental resources with structured project frameworks represents a cost-effective, sustainable approach to instructional innovation that does not require extensive resources or specialized facilities to implement. For students, the approach offers more engaging and meaningful learning experiences that connect academic tasks with authentic sensory experiences and personal expression. For schools and educational systems, this study demonstrates how curriculum standards can be met through innovative pedagogies that simultaneously address cognitive, affective, and creative learning outcomes.

The broader significance of this study extends to educational policy discussions regarding effective literacy instruction and the role of experiential learning in secondary education. As education systems worldwide emphasize 21st-century skills, including creativity, collaboration, and critical thinking, this research provides empirical evidence for specific pedagogical approaches that develop these capacities within existing curricular structures. The documented success in transforming student engagement and performance in poetry writing suggests potential applications across other creative and expressive domains in language arts education.

II. METHODS

A. *Research Design*

This study employed Classroom Action Research (CAR) following the cyclical model of Kemmis and McTaggart, which comprises four iterative phases: planning, action, observation, and reflection. Action research was selected as the methodological approach because it enables practitioners to systematically

investigate and improve their professional practice through deliberate intervention and structured inquiry. The research design embedded the investigation within authentic classroom contexts, ensuring ecological validity and immediate practical applicability (Sugiyono, 2019).
The study implemented a two-cycle action research design, with each cycle consisting of multiple instructional sessions. The cyclical structure enables progressive refinement based on formative assessments and reflective analyses. The initial diagnostic assessment (pre-cycle) established baseline performance, followed by Cycle I implementation, analysis, and reflection, which informed modifications for Cycle II. This iterative approach aligns with the action research principles of continuous improvement through systematic inquiry and evidence-based pedagogical adaptation (Arikunto, 2017).
The research design operationalizes a deliberate intervention strategy by replacing conventional poetry instruction with an integrated PBL-Outdoor Learning approach and systematically documenting implementation processes and outcome measures to assess effectiveness. By comparing student performance across the pre-cycle, Cycle I, and Cycle II phases, the design enables the attribution of observed changes to the pedagogical intervention while accounting for progressive refinement through iterative cycles.

B. *Research Setting and Participants*
The research was conducted at SMP Negeri 1 Lawe Alas, located in the Lawe Alas sub-district, Aceh Tenggara Regency, Aceh Province, Indonesia. The school's natural environment features lush vegetation, gardens, a small river, and mountain vistas—abundant resources that are ideal for outdoor learning activities. School facilities include 12 classrooms, a library, a science laboratory, a computer laboratory, and administrative offices, serving a total student population of 360 students with 28 teaching faculty.
The participants comprised 30 eighth-grade students (14 males and 16 females) during the 2025-2026 academic year. The class exhibited heterogeneous academic ability: approximately 40% high-achieving students, 40% average performers, and 20% lower-achieving students based on prior academic records and teacher assessments. This heterogeneity reflects the typical composition of Indonesian secondary classroom and enhances the generalizability of the research to similar educational contexts.
The research was conducted over four weeks from November 19 to December 19, 2025, scheduled during regular Indonesian language instruction periods to minimize disruption to normal academic programming. The timing was deliberately selected to avoid examination periods, ensuring student availability and minimizing competing academic requirements. Each instructional cycle consisted of three 80-minute sessions (two 40-minute periods per session), providing sufficient time for the comprehensive implementation of the integrated PBL-Outdoor Learning approach.

C. *Instructional Intervention*
The pedagogical intervention integrated six phases of Project-Based Learning with systematic Outdoor Learning experiences. The PBL phases, adapted from Indonesian Ministry of Education guidelines, included: (1) Essential Question Presentation, (2) Project Planning, (3) Schedule Development, (4) Project Monitoring and Facilitation, (5) Assessment and Evaluation, and (6) Experience Evaluation.
Cycle I Implementation (November 20-22, 2025): Session 1 introduced poetic concepts (definition, structural elements, types, composition processes) and collaborative project planning. Students formed six heterogeneous groups of five members each, with each group selecting a specific natural phenomenon for observation (trees/foliage, flowers/plants, river/water, sky/clouds, animals/insects, and mountains/landscape). In Session 2, outdoor observation activities were conducted, with students visiting school grounds to observe assigned natural subjects. Using structured observation worksheets, the students recorded sensory details, emerging vocabulary, figurative expressions, and emotional responses. Session 3 focused on individual poetry composition based on observation notes, peer sharing, formative feedback and class reflection.
Cycle II Implementation (December 4-8, 2025): Based on Cycle I reflection identifying needs for enhanced instruction in diction and figurative language, Cycle II incorporated modifications to the program. Session 1 provided intensive instruction on word choice strategies and figurative language techniques (personification, metaphor, simile) with extensive examples. Session 2 conducted outdoor observations in different locations (rice fields, vegetable gardens) with extended observation time (75 min vs. 60 min in Cycle I) and more detailed observation protocols. Session 3 emphasized individual composition with intensive teacher conferencing, providing specific constructive feedback to each student before the final submission.

D. Data Collection Instruments

Multiple data collection instruments ensured comprehensive assessment of both process and outcome dimensions:

Poetry Writing Assessment Rubric: A six-dimension analytical rubric assessed student poetry across: (1) Theme (20 points): appropriateness, clarity, and development; (2) Diction (20 points): word choice accuracy, lexical sophistication, and aesthetic quality; (3) Figurative Language (15 points): creative use of literary devices; (4) Imagery (15 points): vividness and concreteness of sensory language; (5) Rhyme (15 points): prosodic harmony and musicality; and (6) Typography (15 points): visual form and creative layout (total: 100 points). Each dimension employed a 5-level scoring criteria ranging from excellent (17-20/13-15 points depending on the dimension) to very poor (1-4 points). Scores were converted to a 0-100 scale with categorical classifications: 85-100 (Excellent), 75-84 (Good), 65-74 (Adequate), 55-64 (Poor), 0-54 (Very Poor).

Teacher Activity Observation Protocol: A collaborating teacher observed and rated instructor performance across 10 dimensions: introduction activities, content mastery, PBL implementation, Outdoor Learning facilitation, media utilization, classroom management, student guidance, feedback provision, assessment, and closure activities. Each dimension received scores of 1-4 (Poor, Adequate, Good, Excellent), yielding total scores of 10-40 points with percentage calculation.

Student Activity Observation Protocol: Systematic observation documented student engagement across eight dimensions: classroom participation, outdoor learning enthusiasm, observation skills, group collaboration, poetry writing ability, discipline, questioning behavior, and presentation skills. Each dimension was assessed as the percentage of students demonstrating active engagement, with overall averages calculated.

Student Response Questionnaire: An 8-item Likert-scale survey (Strongly Agree, Agree, Disagree, Strongly Disagree) assessed student perceptions of outdoor learning enjoyment, inspirational value, writing facilitation, PBL attractiveness, conceptual understanding, motivation, collaborative learning benefits, and teacher guidance.

Interview Protocol: Semi-structured interviews with six purposively selected students (two high-, average, and low-achieving) explored experiences, perceived challenges, learning preferences, and suggestions for improvement. Interviews were conducted after each cycle to capture the evolving perceptions.

Documentation: Photographic and video documentation of outdoor observation activities, classroom writing sessions, student presentations, and collaborative discussions. Student poetry artifacts were collected and analysed, for this study . These materials provided visual evidence that supported the quantitative and qualitative findings.

D. *Data Analysis Procedures*

Data analysis employed mixed methods, integrating quantitative and qualitative approaches:

Quantitative Analysis: Student poetry scores were calculated for each assessment dimension and overall performance. Descriptive statistics (means, standard deviations, frequency distributions) were used to characterize performance levels. Mean scores and mastery percentages (students achieving ≥75) were compared across the pre-, Cycle I, and Cycle II phases to document improvement trajectories. The categorical achievement distributions illustrated the progression from lower to higher performance levels. Teacher and student activity observation data were converted into percentages and compared across cycles.

Qualitative Analysis: Following Miles and Huberman's interactive model, qualitative data underwent three processes: (1) Data Reduction systematically summarizing observation notes, interview transcripts, and questionnaire responses while identifying recurring patterns; (2) Data Display organizing reduced data into matrices, narratives, and thematic summaries to facilitate interpretation; (3) Conclusion Drawing/Verification interpreting patterns, comparing findings with theoretical frameworks, and triangulating across data sources to establish credible conclusions.

Triangulation: Data validity was established through three triangulation strategies: (1) Source Triangulation comparing data from students, teacher-researcher, and collaborating observer; (2) Method Triangulation corroborating findings across assessments, observations, surveys, interviews, and documentation; and (3) Time Triangulation comparing data collected at different time points (pre-cycle, post-Cycle I, post-Cycle II) to verify consistency and track changes.

E. *Success Criteria*

The research established explicit success criteria across process and product dimensions:

Process Indicators: (1) Teacher performance achieving minimum "Good" category (≥75%); (2) Minimum 80% of students demonstrating active engagement in learning activities; and (3) Minimum 80% of students expressing positive responses to the instructional approach.
Product Indicators: (1) Class mean poetry writing score achieving or exceeding the minimum competency standard of 75; (2) Minimum 80% of students achieving mastery (score ≥75); and (3) observable improvement across all six poetry assessment dimensions from pre-cycle through subsequent c ycles.
These criteria provided objective benchmarks for evaluating intervention effectiveness and determining whether to conclude the study or continue with additional cycles.

F. *Ethical Considerations*
This study adhered to the established ethical principles of educational research. The school administration granted formal permission for this study. Students and parents received information about the research purpose and procedures, with voluntary participation being emphasized. Confidentiality was maintained through pseudonymous reporting of the results. The action research design ensured that all students received enhanced instruction rather than creating control groups deprived of potentially beneficial interventions. The findings were shared with the school administration and teaching staff to inform ongoing instructional improvement efforts.

III. RESULTS AND DISCUSSION

A. *Research Result*
Implementation Process of PBL-Outdoor Learning Integration
The systematic implementation of Project-Based Learning integrated with Outdoor Learning unfolded across two iterative cycles, each demonstrating progressive refinement in pedagogical execution and student engagement.

Pre-Cycle Baseline Assessment
The initial diagnostic assessment revealed substantial deficiencies in poetry writing capabilities under conventional instructional conditions. Students produced poems characterized by vague themes, limited vocabulary, minimal figurative language, weak imagery, and formulaic structures. The pre-cycle mean score of 65.3 fell significantly below the 75.0 competency threshold, with only 12 students (40%) mastering the subject. Dimensional analysis identified imagery (53.3%) and figurative language (56.7%) as areas of greatest weakness, indicating fundamental challenges in creating vivid sensory language and employing literary devices, which are competencies central to poetic expression.
Qualitative observations during pre-cycle instruction documented typical patterns of conventional poetry teaching: teacher exposition of poetic elements, exemplar analysis, followed by individual writing assignments completed entirely within classroom confines. Students exhibited limited enthusiasm, frequently expressed confusion about how to begin, and submitted compositions that reflected minimal creative investment. The absence of concrete experiential foundations left students attempting to generate "nature poems" through pure imagination, disconnected from authentic sensory engagement.

B. *Cycle I Implementation and Outcomes*
Cycle I marked the initial implementation of the integrated PBL-OL approach. Session 1 commenced with the essential question: "How can we express the beauty of nature through poetry?" This framing immediately shifted the instructional focus from technical skill acquisition to a meaningful creative challenge. Collaborative project planning engaged students in determining observation subjects, establishing procedures, and setting timelines, transferring agency from teachers to learners, consistent with PBL principles.
Session 2's outdoor observation activities generated palpable student enthusiasm, with 86.7% demonstrating high engagement levels. Students moved through the school grounds observing assigned natural phenomena trees, flowers, water features, the sky, insects, and the landscape with evident focus and curiosity. Structured observation worksheets guided systematic attention to visual details (colors, shapes, movements), auditory elements (sounds of wind, water, and birds), tactile qualities (textures of bark and leaves), and olfactory sensations (floral scents and earthy smells). Students recorded emergent vocabulary, similes, and emotional responses, creating substantial raw material for subsequent compositions.
Session 3 composition activities revealed observable differences from the pre-cycle performance. Students demonstrated greater confidence and fluency, with reduced instances of writer's block or extended periods of inactivity. Peer sharing sessions exhibited higher-quality work, with several compositions employing vivid imagery and creative figurative language inspired by direct observation. For example, one student's poem,

Kamboja Flowers in the School Courtyard,'' utilized personification and rich visual imagery that reflected authentic engagement with her observational subject.
Quantitative assessment documented significant improvement: mean scores increased to 73.5, with 19 students (63.3%) achieving mastery, representing an 8.2-point mean gain and a 23.3 percentage-point increase in the mastery rate. Dimensional improvements were particularly notable for theme (62.5% to 76.0%) and imagery (53.3% to 73.3%), validating the hypothesis that environmental observation facilitates a thematic focus and sensory language development.
However, the Cycle I outcomes remained below the established success criteria. The mean performance (73.5) fell short of the 75.0 threshold, and the mastery rate (63.3%) substantially trailed the 80% target. Reflective analysis identified specific deficiencies requiring attention: diction remained somewhat limited despite improvement; figurative language use, while more frequent, lacked sophistication; teacher feedback was insufficient during the composition process; observation time constrained thorough environmental engagement for some students; and several students hesitated to seek assistance when encountering difficulties.

Table 1. Poetry Writing Performance Across Research Phases

Assessment Phase	Mean Score	Students Achieving Mastery (≥75)	Mastery Percentage
Pre-Cycle	65.3	12	40.0%
Cycle I	73.5	19	63.3%
Cycle II	89.0	27	90.0%
Total Gain	+23.7	+15	+50.0%

Cycle II Implementation and Outcomes
Cycle II incorporated targeted refinements to address the deficiencies of Cycle. Session 1 provided intensive instruction on diction selection and the use of figurative language techniques. The teacher presented multiple examples contrasting ordinary versus poetic language: "tall tree" versus "tree piercing the sky" or "tree reaching for clouds" helping students internalize principles of metaphorical thinking and evocative word choice. Extended practice with personification, metaphor, and simile equipped students with specific literary techniques to deploy in their writing.
Session 2 outdoor observation occurred in new locations (rice paddies and vegetable gardens), providing novel stimuli and maintaining engagement through environmental variety. The extended observation time (75 min versus 60 min in Cycle I) allowed for more thorough sensory engagement. Students demonstrated enhanced observational sophistication, recording detailed notes about rice plants swaying like dancers, farmers' weathered hands, and the interplay of sunlight and shadow on water observations reflecting both sensory acuity and emerging metaphorical thinking.
Session 3 composition activities incorporated intensive, individualized feedback. The teacher circulated continuously, briefly conferencing with each student, reading draft lines, offering specific suggestions for improvement, and highlighting effective elements worthy of preservation. This "workshop" approach, characteristic of effective writing instruction, provided differentiated support addressing individual student needs and developmental levels. Immediate, targeted feedback enabled students to revise and strengthen their poems before the final submission, incorporating newly learned techniques with teacher scaffolding.
Cycle II quantitative outcomes demonstrated dramatic improvement: the mean score reached 89.0, with 27 students (90%) achieving mastery, —representing a 15.5-point gain over Cycle I and a 23.7-point total improvement from baseline. All assessment dimensions showed substantial gains, with particularly strong improvement in imagery (73.3% to 92.0%) and figurative language (70.0% to 90.0%), —precisely the areas targeted through enhanced instruction. These results exceeded all established success criteria, indicating that the refined implementation achieved its intended goal.
Qualitative indicators paralleled the quantitative outcomes. Teacher performance ratings reached 100% (excellent category), with perfect scores across all dimensions, including the previously problematic feedback provision. Student activity levels rose to an average of 88.3% across all dimensions, with outdoor learning enthusiasm reaching 93.3%. Survey responses indicated 97.5% positive endorsement, with unanimous or near-unanimous agreement that outdoor learning was enjoyable (100%), helped find inspiration (96.7%), and facilitated poetry writing (96.7%).

The interview data captured the qualitative dimensions of the learning experience. A high-achieving student reported, "Cycle II was even better than Cycle I. I became more creative in choosing words and creating figurative language. My poem about rice dancing received praise from classmates.'' An average student noted: "The teacher's explanation of diction and figurative language in the first session really helped me. Now, I can create personification and metaphors in my poems. Im also not afraid to ask for help anymore". A lower-achieving student reflected, "At first I thought writing poetry was difficult, but after this learning experience, I have come to enjoy writing poetry. Observing rice fields was very enjoyable and provided me with many ideas. My score also increased from 68 in Cycle I to 78 in Cycle II". These testimonials illustrate the intervention's success in reaching students across the spectrum of abilities.

Table 2. Dimensional Performance Progression

Poetry Dimension	Pre-Cycle (%)	Cycle I (%)	Cycle II (%)	Total Gain (%)
Theme	62.5	76.0	89.0	+26.5
Diction	60.0	74.0	86.0	+26.0
Figurative Language	56.7	70.0	90.0	+33.3
Imagery	53.3	73.3	92.0	+38.7
Rhyme	60.0	72.0	88.0	+28.0
Typography	62.0	74.7	90.0	+28.0
Overall Mean	59.3	73.5	89.0	+29.7

C. *Quantitative Analysis of Poetry Writing Improvement*

A comprehensive analysis of the assessment data revealed the magnitude and pattern of improvement across the intervention period.

Overall Performance Trajectory

Mean poetry writing scores increased progressively from 65.3 (pre-cycle) to 73.5 (Cycle I) to 89.0 (Cycle II), representing a total gain of 23.7 points or 36.3% improvement in Cycle II. This trajectory demonstrates not only statistical significance but also educational meaningfulness the difference between below-standard performance and genuinely strong creative writing capability.

Achievement distribution data illustrate qualitative shifts in class composition. The pre-cycle assessment showed zero students in the excellent category (85-100), 12 (40%) in the good category (75-84), ten (33.3%) in the adequate category (65-74), six (20%) in the poor category (55-64), and two (6.7%) in the Very Poor category (0-54). By Cycle II, distribution shifted dramatically: twelve students (40%) achieved Excellent, fifteen (50%) achieved Good, and only three (10%) remained in the Adequate category, with zero students in the Poor or Very Poor ranges. This transformation represents not only improved mean performance but also a fundamental elevation of class-wide capability.

Mastery rates (percentage achieving ≥75) increased from 40% (pre-cycle) to 63.3% (Cycle I) to 90% (Cycle II)—a 50 percentage-point gain over the intervention period. The Cycle II mastery rate of 90% exceeded the established 80% success criterion, indicating that the intervention successfully enabled most students to achieve competency standards. The persistence of three non-mastery students (all in the 65-74 range) reflects realistic heterogeneity rather than intervention failure; even effective instruction cannot eliminate all performance variation given diverse baseline capabilities and learning rates.

Table 3. Teacher and Student Activity Levels

Metric	Cycle I	Cycle II	Improvement
Teacher Performance (%)	75.0	100.0	+25.0
Student Activity Average (%)	73.3	88.3	+15.0
Outdoor Learning Enthusiasm (%)	86.7	93.3	+6.6

Metric	Cycle I	Cycle II	Improvement
Poetry Writing Ability (%)	66.7	86.7	+20.0

Dimensional Analysis

Examination of individual assessment dimensions reveals differential improvement patterns, providing insights into the intervention's mechanisms.

Theme Development improved from 62.5% to 76.0% to 89.0% (26.5-point total gain). This progression indicates that direct environmental observation successfully addresses the fundamental challenge of identifying appropriate poetic subjects. Students moved from vague, abstract themes to concrete, well-developed topics grounded in specific, observed phenomena. Outdoor Learning provided clear thematic anchors—not merely "nature" but "the ancient mango tree in the school courtyard" or "rice fields at harvest time"—enabling focused thematic development.

Diction advanced from 60.0% to 74.0% to 86.0% (26.0-point gain). The Cycle II instructional emphasis on word choice, including a comparative analysis of alternative phrasings and conscious vocabulary expansion, directly contributed to this improvement. Students developed metalinguistic awareness of lexical selection, moving beyond first-thought vocabulary to deliberately crafting more precise, evocative, and aesthetically pleasing word choices.

Figurative Language showed dramatic growth from 56.7% to 70.0% to 90.0% (33.3-point gain). This represents one of the largest dimensional improvements, validating the Cycle II intensive instruction on metaphor, simile, and personification. Students progressed from literal description to sophisticated literary device deployment. The outdoor observation context facilitated figurative thinking watching leaves dance in wind naturally suggested personification; observing rice bowing under grain weight invited metaphorical interpretation as humility or gratitude.

Imagery demonstrated the largest improvement: 53.3% to 73.3% to 92.0% (38.7-point gain). This finding provides perhaps the strongest validation of Outdoor Learning's contribution. Creating vivid sensory imagery constitutes a central poetic skill that is often challenging to teach through classroom-based instruction. Direct environmental engagement provided concrete sensory experiences visual, auditory, tactile, and olfactory that students could translate into poetic language. The progression from abstract, generic imagery (pre-cycle) to specific, sensory-rich language (Cycle II) reflects the authentic experiential foundations of figurative expression.

Rhyme/rhythm improved from 60.0% to 72.0% to 88.0% (28.0-point gain). Although prosodic competence was not the primary instructional focus, students' increased engagement with poetic forms led to more sophisticated rhythmic structures and sound patterns. The outdoor observation environment, rich in natural sounds (bird calls, water flow, wind through trees), may have heightened students' auditory sensitivity, indirectly supporting prosodic development.

Typography advanced from 62.0% to 74.7% to 90.0% (28.0-point gain). Students demonstrated increasing sophistication in visual poem layouts, experimenting with line breaks, stanza configuration, spatial arrangement, and visual-verbal integration. This progression suggests that the enhanced creative engagement fostered by the intervention extended beyond verbal content to include the visual-formal dimensions of poetic expression.

Table 4. Student Response to Integrated Approach (Cycle II, N=30)

Survey Item	Positive Response (%)
Outdoor learning was enjoyable	100.0
Helped find inspiration for poetry	96.7
Made poetry writing easier	96.7
PBL made learning more interesting	96.7
Better understanding of poetic elements	96.7
Increased motivation to write quality poetry	96.7
Group collaboration facilitated learning	96.7

Survey Item	Positive Response (%)
Teacher guidance was helpful	100.0
Overall Average	97.5

Process Quality Indicators

The assessment of implementation quality through observation protocols documents the procedural integrity and evolving refinement of the intervention.

Teacher Performance Evolution

Teacher activity ratings increased from 75% (Good) in Cycle I to 100% (Excellent) in Cycle II. This 25-percentage-point gain reflects deliberate refinement based on the Cycle I reflection. The dimension showing the greatest improvement was feedback provision, which increased from "Adequate" (score 2) in Cycle I to "Excellent" (score 4) in Cycle II. This improvement directly addressed the identified deficiencies and contributed to enhanced student outcomes through more effective instructional scaffolding during the composition processes.

The achievement of perfect teacher performance ratings in Cycle II (all dimensions scored 4 excellent) indicates high implementation fidelity. All core PBL phases were executed effectively: essential questions engaged student interest, project planning was collaborative and thorough, scheduling was realistic and adhered to, monitoring involved active facilitation rather than passive supervision, assessment addressed both process and product, and experience evaluation promoted meaningful reflection. Similarly, Outdoor Learning facilitation achieved excellence through appropriate site selection, clear procedural guidelines, effective supervision ensuring safety while promoting autonomy, and successful integration with indoor instructional components.

Student Engagement Patterns

Student activity observation documented progressive increases in all dimensions. The average engagement rose from 73.3% (good) in Cycle I to 88.3% (excellent) in Cycle II. The specific dimensional changes included:

Classroom participation: 70% to 90% (20-point gain), indicating increased willingness to contribute ideas, ask questions, and engage in discussions

Outdoor learning enthusiasm: 86.7% to 93.3% (6.6-point gain) maintaining exceptionally high engagement despite potential novelty effects from initial outdoor experience.

Observation skills: 73.3% to 86.7% (13.4-point gain), reflecting enhanced systematic attention and recording of environmental details

Group collaboration: 76.7% to 90% (13.3-point gain), indicating improved cooperative learning dynamics

Poetry writing ability: 66.7% to 86.7% (20-point gain) the largest gain, directly reflecting improved compositional competence

Discipline: 80% to 90% (10-point gain) suggesting that engaging instruction reduces behavioral issues.

Questioning behavior: 63.3% to 83.3% (20-point gain), indicating increased intellectual confidence and reduced reluctance to seek assistance

Presentation skills: 70% to 86.7% (16.7-point gain), reflecting growing confidence in sharing creative work publicly

The exceptionally high and sustained outdoor learning enthusiasm (Cycle I : :86.7%; Cycle II: 93.3%) merits particular attention. This finding contradicts the potential concern that outdoor activities might degenerate into unproductive recreation. Instead, students maintained high task engagement precisely because the outdoor context provided meaningful purpose observing for creative ends rather than undirected "free time." The slight increase from Cycle I to Cycle II (despite potential novelty effect dissipation) suggests that the enhanced instructional framing and different locations maintained freshness and relevance.

Student Perceptions and Attitudes

The questionnaire data revealed overwhelmingly positive student responses (97.5% overall positive endorsement). Specific items showed:

There was 100% agreement that outdoor learning was enjoyable.

96.7% agreement that it helped find inspiration for poetry.

A total of 96.7% of the students agreed that they wrote poetry more easily after the observation.

96.7% of the students agreed that PBL made learning more interesting.

Of the respondents, 96.7% agreed that they better understood poetic elements.

Of the respodents, 96.7% agreed that they felt motivated to write better poetry.

96.7% agreed that group work facilitated learning.

100% agreement that teacher guidance was helpful.
These data indicate that the intervention succeeded not only in improving technical writing skills but also in transforming students' relationship with poetry as a mode of expression. The near-universal perception that outdoor learning facilitates inspiration and writing ease directly supports the theoretical rationale for environmental engagement as a foundation for creative work. The high ratings for PBL's interest value and collaborative learning benefits validate the project-based framework's role in structuring and sustaining creative effort.

D. *Theoretical Interpretation and Discussion*
The documented improvements and process observations warrant interpretation through the study's theoretical frameworks and educational research literature.
Constructivist Learning Principles
The intervention's success fundamentally validates Vygotsky's constructivist epistemology, emphasizing knowledge construction through authentic experience and social interaction. Students did not passively receive information about poetic elements but actively constructed poetic understanding through direct environmental engagement, collaborative discussions, peer feedback, and iterative composition-revision cycles. Outdoor observation activities provided concrete experiences that students transformed into symbolic representations (poetry) the progression from concrete to abstract understanding that constructivist theory posits as the optimal learning trajectory.
The integration of social and individual learning dimensions deserves emphasis. Group observation activities promoted collaborative knowledge construction as students shared observations, compared interpretations, and collectively noticed features that individuals might have overlooked. However, poetry composition remains an individual work, allowing for personal creative expression. This balance collaborative exploration providing a shared experiential foundation, followed by individual creative production exemplifies the effective integration of social constructivist principles with the recognition of the inherently personal dimensions (Islami et al., 2024).

E. *Project-Based Learning Mechanisms*
The PBL framework contributed to multiple affordances that support poetry development. The essential question ("How can we express nature's beauty through poetry?") provided an authentic purpose transcending mere academic exercise. Unlike conventional assignments framed as teacher compliance ("Write a poem because I assigned it"), the essential question positioned students as creative agents addressing meaningful aesthetic challenges.
The project structure provides procedural clarity and temporal organization essential for complex creative tasks. Students knew the project sequence: learn poetic concepts → plan observation → conduct environmental investigation → compose poetry → share and reflect. This predictable structure reduces the cognitive load associated with navigating ambiguous tasks, freeing mental resources for creative work. The timeline with specified milestones (observation session, draft completion, final submission) imposed productive constraints, preventing procrastination while allowing sufficient time for quality work (Taneja, 2025).
The collaborative planning phase, in which students participated in determining observation subjects and procedures, fostered ownership and investment. Students did not merely follow teacher directives but implemented their own collectively designed investigations. Research on motivation consistently demonstrates that autonomy support enhances intrinsic motivation and engagement, —precisely what collaborative planning achieves.
The monitoring and facilitation phase, particularly as refined in Cycle II with intensive individual conferencing, provided critical scaffolding during composition. Vygotsky's concept of the Zone posits that learners accomplish more challenging tasks with guidance than independently. The teacher's circulating presence, brief consultations, and specific feedback provided "just-in-time" scaffolding to support students as they stretched beyond their current independent capability. This responsive, individualized support contrasts sharply with the typical pattern of initial explanation followed by unsupported independent work in conventional instruction.

F. *Outdoor Learning Contributions*
The outdoor learning component addressed what might be called the "inspiration problem" in creative writing instruction. Students cannot write vivid nature poetry through imagination alone, particularly when their lived experiences provide a limited basis for such imagination. Urban and indoor-focused lifestyles imply that many students have minimal sustained engagement with natural environments. Asking such students to "write a

nature poem" without providing a concrete experiential foundation predictably yields generic, clichéd compositions lacking authentic observation and genuine feeling.
Outdoor learning sessions solved this problem by providing direct multisensory engagement with natural phenomena. Students did not imagine trees abstractly but observed specific trees their trunk textures, leaf movements, branching patterns, and seasonal conditions. They did not conceptualize water generically but attended to particular water features—how light reflected, how movement sounded, how temperature felt. This specificity transformed writing from an abstract exercise into a concrete translation of lived experiences into language.
The progression from pre-cycle to Cycle II imagery scores (53.3% to 92.0% 38.7-point gain) provides quantitative evidence for this transformation. Pre-cycle poems contained minimal imagery because students lacked concrete sensory referents to describe. Post-intervention poems employed rich sensory language because students possessed actual memories of observed details to articulate. The outdoor experience did not merely provide "something to write about" but fundamentally enabled the cognitive processes underlying effective imagery creation: sensory attention, detail observation, memory encoding, and linguistic articulation of sensory experience.
The motivational effects of the outdoor environment also warrant attention. The consistently high engagement levels (86.7-93.3%) reflect not only novelty but also the inherent pleasure of environmental interaction. Humans possess evolutionary predispositions for natural environment preference (biophilia hypothesis), suggesting that outdoor learning environments may provide inherent motivational advantages over indoor one. The students' unanimous agreement that outdoor learning was enjoyable (100%) supports this interpretation.
Additionally, the outdoor setting disrupted typical classroom social dynamics in productive ways. Students who might remain passive in conventional classroom discussions often engage enthusiastically during outdoor observations. Physical movement, informal social arrangements, and novel settings appeared to lower social inhibitions and support broader participation. Several students explicitly noted in the interviews that they felt more comfortable asking questions and sharing ideas during outdoor activities than in traditional classroom contexts.

G. *Integration Synergies*

The central contribution of this study lies in demonstrating that PBL and Outdoor Learning function synergistically rather than merely additively. Each approach complements the limitations of the other while amplifying its strengths.
PBL without outdoor learning might provide an effective structural framework but lacks concrete experiential content. Students could follow project phases collaboratively but struggled to generate substantive material without an authentic observational foundation. Outdoor learning without a PBL structure might provide an enjoyable experience but lacks systematic integration with academic learning objectives. Students might enjoy outdoor activities without translating their experiences into developed compositional skills.
The integration addresses both of these limitations. PBL provides the "how" of learning procedural structure, collaborative framework, assessment criteria, and temporal organization. Outdoor Learning provides the "what" authentic subject matter, sensory content, and inspirational stimulus. Together, they create a coherent learning ecology in which meaningful experiences are systematically transformed into developed competence through structured pedagogical support.

H. *Comparison with Conventional Instruction*

The effectiveness of the intervention becomes most apparent when compared with the pre-cycle baseline performance under conventional instruction. Traditional poetry teaching achieved only a 40% mastery rate, with a mean score of 65.3, indicating that the majority of students failed to reach competency standards despite presumably competent teachers and adequate instructional time. The intervention, employing a similar time allocation with the same students and teacher, achieved 90% mastery with a mean score of 89.0 a transformation attributable specifically to the pedagogical approach rather than student ability or instructional time.
This comparison suggests that the limitations of conventional poetry instruction stem not from insufficient explanation or practice but from a fundamental mismatch between the instructional approach and learning task demands. Poetry writing as a complex creative act requires inspiration, authentic experience, sustained engagement, collaborative discussion, individualized feedback, and iterative revision precisely what conventional lecture-and-assign pedagogy fails to provide. The intervention's success derives from the alignment between the pedagogical approach and task requirements: authentic experience (outdoor learning) + structured support (PBL framework) = conditions enabling creative development.

I. *Limitations and Boundary Conditions*

While the results strongly support the intervention's effectiveness, several limitations constrain generalizability and warrant acknowledgment. This study employed an action research design without a control group, limiting the capacity for causal inference. The observed improvements might reflect maturation, test-retest effects, or Hawthorne effects (performance changes due to research attention) rather than purely pedagogical intervention effects. However, the magnitude of improvement (23.7-point gain, 50 percentage-point mastery increase) and specificity to dimensions targeted by instruction (imagery and figurative language showing the largest gains) suggest genuine intervention effects beyond artifacts.

The rural school setting with extensive natural environment access represents a specific contextual condition that is not universally available. Urban schools that lack accessible green spaces or natural features may face implementation challenges. However, even minimal outdoor access (small gardens, nearby parks, and street trees) can provide sufficient observational stimuli. The essential principle grounding creative writing in direct sensory experience could be adapted to the environmental resources available in specific contexts.

The two-cycle design with a four-week duration provides limited evidence regarding long-term retention. However, whether students maintain enhanced poetic competence without continued specialized instruction remains unknown. Longitudinal studies tracking students across academic terms would clarify whether the effects of interventions persist or dissipate over time.

This study focused exclusively on poetry writing in Indonesian language education. Generalizability to other writing genres (narrative, exposition, argumentation) or curricular domains requires empirical verification. Although theoretical principles suggest potential broad applicability, domain-specific research remains necessary.

IV. CONCLUSIONS

This classroom action research provides compelling empirical evidence that Project-Based Learning integrated with Outdoor Learning effectively enhances poetry writing competence among Indonesian secondary students. The intervention addressed persistent challenges in poetry instruction low motivation, limited creative inspiration, inadequate sensory language, weak imagery through systematic integration of authentic environmental observation within structured project-based pedagogical framework. Quantitative findings document substantial improvement across all measured dimensions. Student mean performance increased 23.7 points from 65.3 to 89.0, while mastery rates rose 50 percentage points from 40% to 90%, exceeding established success criteria. Dimensional analysis revealed particularly strong gains in imagery creation (38.7-point increase) and figurative language usage (33.3-point increase) precisely the competencies most dependent on concrete experiential foundations. These improvements reflect not merely incremental skill development but fundamental transformation in students' capacity for creative expression through poetic language. Qualitative evidence corroborates quantitative findings while illuminating experiential dimensions of the learning process. Students reported unprecedented enthusiasm for poetry writing, describing outdoor observation as both enjoyable and genuinely helpful for generating creative ideas. Teachers observed enhanced engagement, collaborative learning, and creative risk-taking compared to conventional instruction. The near-universal positive student response (97.5% endorsement) indicates that the intervention succeeded in making poetry writing meaningful and accessible rather than merely technically proficient. The research contributes to educational theory by demonstrating how constructivist learning principles operationalize in creative writing instruction. The documented success validates Vygotsky's emphasis on knowledge construction through authentic experience and social interaction while extending understanding of specific mechanisms through which experiential and project-based pedagogies support creative development. The finding that direct environmental engagement most powerfully enhances imagery and figurative language provides empirical support for theoretical claims about concrete experience as foundation for abstract symbolic expression.

Funding Statement

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Ethical Compliance

All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

Data Access Statement

A Data Access Statement is a section in a scientific publication or research report that explains how the data used or generated in the study can be accessed by the readers or other researchers. This statement aims to promote transparency, support research reproducibility, and comply with open-access policies, where applicable.

Common Elements in a Data Access Statement:

1. Data Location: Specifies where the data are stored, such as online repositories (e.g., Zenodo, Dryad, or institutional repositories).
2. Access Instructions: Provides information on how to access the data, such as direct links, DOI (Digital Object Identifier), or contact details.
3. Data Availability: Indicates whether the data are publicly accessible, available upon request, or restricted due to ethical, legal, or privacy considerations.
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1. Open Data:
   - "The data supporting this study are openly available in Zenodo at [DOI:10.xxxx/zenodo.xxxx]."
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   - "No datasets were generated or analyzed during the current study."
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   - "The data supporting this study are available under restricted access and can be obtained upon reasonable request from the corresponding author and with the permission of the ethics committee."

Purpose of a Data Access Statement:

- Reproducibility: Enables other researchers to replicate or verify the findings.
- Collaboration: Encourages further collaboration by sharing data.
- Compliance: Adheres to the policies of funding agencies or journals that require open access to data.

Conflict of Interest Declaration

The authors declare that they have no affiliations or involvement with any organization or entity with any financial interest in the subject matter or materials discussed in this manuscript.

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