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From Project to Creativity: How Academic Culture Shapes the Success of Project-Based Learning in Creative Writing Programs?

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ABSTRACT

This research is motivated by the low ability of students to write descriptive texts in German, which is largely caused by the use of conventional learning methods and limited active student involvement in the learning process. The aim of this study is to improve students' writing skills through the implementation of PjBL that emphasizes collaborative and reflective project activities. This classroom action research was conducted in two cycles, involving 36 eleventh-grade students as subjects. Data collection techniques included observations of student activities and descriptive text writing tests, while data analysis was carried out using both quantitative and qualitative descriptive approaches by comparing learning outcomes between cycles. The results indicated a significant improvement in students' writing performance: the average score increased from 65 in cycle I to 82 in cycle II, while the completion rate rose from 30.56% to 86.11%. Observational data revealed that students actively engaged in group discussions, confidently expressed ideas, responded to peer feedback, and demonstrated higher motivation in completing writing tasks. Furthermore, the quality of their descriptive texts improved, particularly in terms of structure, vocabulary, grammar accuracy, and creativity. These findings suggest that the PjBL model effectively enhances not only students' descriptive writing skills but also their collaboration, critical thinking, and creative expression. The study theoretically contributes to the growing literature on PjBL in foreign language education, providing evidence of its impact on student learning outcomes. Practically, the findings serve as a valuable reference for teachers aiming to develop innovative, student-centered, and effective strategies for teaching descriptive writing in German, promoting active learning and sustained engagement in the classroom.

Keywords: Descriptive Writing, Project-Based Learning, Learning Outcomes, German Language Teaching

INTRODUCTION

In the past two decades, the Project-Based Learning (PjBL) model has rapidly developed as a learning approach that emphasizes complex, collaborative, and product-based tasks. PjBL is considered capable of integrating critical thinking, collaboration, creativity, and communication skills, which are core 21st-century skills (Alemneh & Gebrie, 2024). This approach provides opportunities for students to engage in a more meaningful learning process because the designed projects are directly related to real-world contexts. Several meta-analyses have shown that PjBL has a positive impact on academic achievement, including writing skills (Gao et al., 2024; Rosli et al., 2024). However, the effectiveness of PjBL implementation globally still depends heavily on appropriate project design, teacher scaffolding, and support from the educational institution context (Irwandi et al., 2024).

The theoretical basis for implementing PjBL in writing learning is rooted in Vygotsky's social constructivism, which emphasizes the importance of social interaction, scaffolding, and authentic task completion in building writing competence (Wang et al., 2023). In the context of descriptive writing, PjBL provides a zone of proximal

development (ZPD) through peer review, teacher feedback, and project collaboration that allows students to produce writing that is more complex than their individual abilities. Furthermore, genre theory and task-based approaches emphasize the social function of texts, linguistic structures, and explicit practices of specific genres, which are appropriate for PjBL because projects encourage writing production in real-life communication contexts (Redmann, 2024). Theories of motivation and authenticity in language learning also support the implementation of PjBL, as meaningful projects increase students' intrinsic motivation, autonomy, and sense of competence, which have been shown to be positively correlated with writing quality and the regularity of writing practice (Yang et al., 2025).

Many factors influence students' writing skills. Usanova et al. (2023) noted that multilingual engagement and digital practices enhance flexibility of expression, although linguistic accuracy remains challenging. Göktaş (2023) emphasized that using writing portfolios helps students improve their revision process and coherence. Bin Saran (2024) demonstrated that collaborative strategies and explicit grammar instruction positively impact writing accuracy and coherence. Wendt et al. (2025) emphasized the importance of teacher training focused on literacy and linguistic diversity to improve students' writing skills in multilingual vocational schools. Thus, mastery of German writing requires a combination of digital, collaborative approaches, and appropriate teacher support.

The main problems in learning German writing lie in linguistic complexity and limited authentic input. Students often face difficulties in mastering typical German grammar, such as verb position (verbstellung), the case system (Nominativ, Akkusativ, Dative, Genitiv), and noun capitalization, which impacts the cohesion and clarity of the descriptive texts they produce (Dayu, 2018). Limited exposure to German outside the classroom slows vocabulary development and genre understanding. These factors are often exacerbated by teaching materials that do not emphasize descriptive writing practice or a lack of authentic and life-relevant assignments (Husemann, 2023).

Pedagogical and motivational aspects also pose challenges. The focus on oral skills often neglects writing skills, while assessment tends to be summative, resulting in students rarely receiving formative feedback to improve their writing (Rexhepi & Suka, 2025). This hinders the writing process, which ideally involves a cycle of drafting, feedback, and revision. Furthermore, students' attitudes toward writing in German vary widely: some are demotivated by technical complexity, while others are motivated by meaningful and contextual tasks, such as writing descriptions for blogs or tourism presentations (Yaprak, 2025). This variation highlights the need for more innovative instructional approaches, one of which is the implementation of PjBL, which integrates linguistic aspects, authenticity, and student motivation.

Numerous empirical studies demonstrate the effectiveness of PjBL in improving writing skills in foreign language learning. Globally, PjBL improves students' writing skills, collaboration, and motivation through engagement in authentic tasks (Beckett & Slater, 2005; Fragoulis & Tsiplakides, 2009; Rocha et al., 2025). Furthermore, PjBL promotes critical thinking skills and improved learning outcomes (Baş & Beyhab, 2010; Kokotsaki et al., 2016). In the context of language teaching, PjBL strengthens descriptive and narrative writing skills because students are engaged in contextualized, project-based activities (Lenz et al., 2015; Markham, 2011). PjBL improves various sub-aspects of writing, such as ideation, organization, and motivation, although its effects on traditional test scores vary depending on the study design (Alemneh & Gebrie, 2024; Steinlen, 2018).

In the realm of German language learning, several studies are also relevant. For example, PjBL improves the quality of students' writing by providing space for creative expression (Fragoulis & Tsiplakides, 2009; Larmer et al., 2015; Moursund, 1999). The role of PjBL in fostering student learning autonomy and intrinsic motivation (Bell, 2010; Shin, 2018). Studies on the use of Padlet for writing levels A2-B1 and irregular verb teaching projects through writing projects. The results are generally positive, namely increased student engagement and improvements in certain aspects of writing competence (Steinlen, 2018). In Indonesia, a study by Dayu (2018) proved that the use of PjBL can improve German writing skills, although obstacles were still found in aspects of time management and teacher readiness. Therefore, further research is needed specifically in the context of learning descriptive writing in German to obtain a more specific and applicable understanding.

Studies specifically highlighting descriptive writing skills in German language learning using PjBL are still limited. The curriculum demands and standards of the Gemeinsame Europäische Referenzrahmen für Sprachen (GER) place descriptive writing as one of the basic competencies for foreign learners. This study aims to implement PjBL in German language students' descriptive writing learning to improve learning outcomes. This research provides an important contribution for the future. This study fills the gap in studies linking the PjBL approach to German language writing skills in high school students. In addition, the relevance of Vygotsky's constructivism theory and experiential learning in supporting project-based learning practices is able to integrate students' cognitive, affective, and psychomotor aspects.

LITERATURE REVIEW

Descriptive Writing

Writing skills are a person's language competence in generating main ideas, supporting those ideas, summarizing expert concepts, having adequate knowledge of diction selection, topic selection, punctuation, establishing good relationships between sentences, and finding appropriate references (Suastra & Menggo, 2020). Effective writing skills are important in higher education. Improvement in writing skills is considered a good indicator of the added value provided by higher education (Fields et al., 2014; Purwanto et al., 2024). From this perspective, writing skills are a person's ability to communicate and convey meaningful messages to interact with readers in a context (Hakim, 2019).

One of the activities in German writing at level A1 is writing descriptions. According to Oshima & Hogue (2007), descriptive writing appeals to the senses at least, so it tells how something looks, feels, smells, tastes, and sounds. A good description is a word picture; the reader can imagine the object, place, or person in their mind. Carroll et al (2018) explains that descriptive text presents sensory information that makes the writing come alive. According to Hyland (2004) , descriptive text is a text that has a social purpose to provide an overview of imagination or factual events. Hyland (2004) further explains that descriptions tend to use the present tense, and descriptions use be and have. Another definition is conveyed by Knapp & Watkins (2005) that descriptive text is a text that tells about something such as a person, place, or anything that has a general description with additional information created to attract the attention and interest of the reader.

Students must master many components in descriptive writing, such as grammar, spelling, content, conjunctions, word choice, and sentence structure to produce a cohesive paragraph (Kurt & Atay, 2007). Gerot & Wignell (1995) added that there are two generic structures of descriptive text; namely identification and description. In identification, learners will identify the phenomenon or subject to be described. Meanwhile, in description, learners will specifically describe the parts, qualities, and characteristics of the object being described.

Knapp & Watkins (2005) also explained that in descriptive writing, paragraphs must have descriptive grammatical features such as: (1) using the present tense when describing things about technicalities or points of view; (2) although the present tense can be used in literal descriptions, the past tense can also be used; (3) relational verbs are used when classifying and describing the appearance, quality, and parts or functions of something; (4) action verbs are used when describing behavior or use; (5) mental verbs are used when describing feelings; (6) adjectives can be used as part of nouns; (7) adverbs are used to add information to verbs to add detailed descriptions; (8) groups of adverbs are used in descriptions to add information about manner, place, or time; and (9) sentences and paragraphs are thematically related to the topic of the description.

Learning to write is not easy. According to Taylor (2009), for most people, writing is a very difficult task because they have to grapple with new ideas and new ways of viewing those ideas in their language. However, it is a challenging task for teachers to develop students' writing skills. Puteh et al. (2010) stated that students must master writing skills because this skill is considered a basic skill that is very important for every student. Therefore, many students have difficulty in the writing process.

Many problems have been identified that cause students to experience difficulties in writing. These problems include a lack of ideas, difficulty thinking of interesting or important topics to write about, and an inability to find the right words to use. These problems can be clearly observed among students with low abilities. Van Weijen et al. (2009) believe that writing becomes difficult because it involves many highly interactive cognitive activities simultaneously. These cognitive activities are content creation and organization, text organization and production, and revision. To solve problems related to writing skills, there are several techniques that teachers can apply in teaching writing, namely project-based learning.

Project Based Learning (PjBL)

The term project-based learning has been hotly debated by a large number of academics. PjBL is an innovative learning model as an alternative to develop students' 21st-century skills (Paris et al., 2024; Pattiasina et al., 2024). PjBL provides opportunities for students to gain knowledge, improve understanding, and acquire new skills. The advantage of the PjBL model is that it can accommodate students' learning interests (Praba et al., 2018). Because of the freedom to plan learning activities, determine projects to solve problems, and work on assignments collaboratively, it can improve student cooperation, build attitudes, and develop skills (Rehman et al., 2024).

The concept of PjBL implies collaboration between two or more teachers at some level when planning, implementing, and/or evaluating a course, which essentially involves the exchange of training expertise and reflective conversations (Chang & Lee, 2010). It has been shown that the PjBL approach provides varied and valuable learning experiences for inexperienced teachers and supports their professional and personal development (Tsybulsky & Muchnik-Rozanov, 2021). The benefits of PjBL for teachers and students through professional and emotional support include increased professional learning (e.g., educational skills) and personal development (e.g., increased self-confidence) (Simons & Baeten, 2016). PjBL learning practices should be carried out through interaction and exchange of experiences (Rickard & Walsh, 2019).

PjBL has emerged as a potential approach to teaching relevant skills in language classes because it has the ability to help students integrate knowledge (Gomez-del Rio & Rodriguez, 2022). Guo et al. (2020) conducted a systematic literature review in which they noted that PBL in advanced learning allows learners to develop knowledge and skills from various disciplines. Even Ismuwardani et al. (2019) in their study showed that there was a significant increase in the implementation of PjBL on student creativity and independence.

Furthermore, PjBL helps improve personal and collaborative skills. Students develop mutual respect and self-confidence (Ghosheh Wahbeh et al., 2021; Musa et al., 2011). From a teacher's perspective, PjBL often increases student engagement and motivation due to its real-world relevance and practical approach. Meanwhile, from a student perspective, PjBL provides a more meaningful learning experience and increases motivation because students can apply their language knowledge to real-life tasks. They also value collaboration with classmates, more effective communication, and the development of essential skills such as creativity, time management, and problem-solving (Petersen & Nassaji, 2016).

The steps in project-based learning, as developed by Fisher et al (2020) consist of: (1) Starting with basic questions; (2) Establishing project planning rules; (3) Creating an activity schedule; (4) Monitoring the progress of student projects; (5) Evaluating student work results; (6) Evaluating student learning experiences. A number of studies conducted by (Williams, 2016; Izzeldeen, 2017; Grant, 2017) have shown the significant impact of PjBL in developing writing skills. As claimed by Williams Project-based writing activities provide opportunities for learners to create open-ended questions, solve problems, reflect on their learning, and work in groups to achieve common goals (Alotaibi, 2020; Cook et al., 2019).

When facilitating learning through PjBL, teachers should consider the following principles of Boss & Krauss (2022): (a) Students' interests should be respected by giving them the opportunity to choose the projects they want to work on. This helps them take ownership of the projects and ultimately develop intrinsic motivation to complete them; (b) Tasks should involve knowledge and skills from multiple disciplines to help learners learn how to connect and use the knowledge and skills they have acquired from different disciplines; (c) Problems solved by students in PjBL should be valuable to the community to help them develop a sense of responsibility towards others; (d) The final product of students' collaborative work should be shared with the global community to recognize their efforts; and (e) Teachers should invest time and energy to support students throughout their involvement in the projects.

Bloom's Taxonomy in Learning

Bloom's Taxonomy is a conceptual framework used to classify educational objectives into systematic categories. This concept was introduced by Benjamin S. Bloom and a team of educational experts in 1956 with the aim of providing guidance for educators in designing, implementing, and evaluating learning in a more targeted and measurable manner. In practice, Bloom's Taxonomy helps develop learning objectives that encompass three main domains: cognitive, affective, and psychomotor. The cognitive domain relates to thinking and intellectual abilities, ranging from remembering, understanding, applying, analyzing, evaluating, to creating. The affective domain emphasizes aspects of attitudes, values, emotions, and motivation, which include the processes of receiving, responding, appreciating, organizing, and internalizing values. Meanwhile, the psychomotor domain relates to physical and motor skills, such as coordination, manipulation, and the effective use of tools (Moran, 2023).

In 2001, Anderson and Krathwohl revised Bloom's Taxonomy with several important changes. One major change was the use of active verbs in the cognitive domain, for example, the term "knowledge" was changed to "remembering," and "synthesis" was changed to "creating." Furthermore, this revision added a knowledge dimension that includes factual, conceptual, procedural, and metacognitive knowledge (Arlianty et al., 2018). These changes aim to make Bloom's Taxonomy more in line with the needs of modern education, which emphasizes active and competency-based learning.

Bloom's Taxonomy not only serves to create a structured learning experience, but also plays a crucial role in developing higher-order thinking skills in students (Momen et al., 2023; West, 2023) . In its application, this taxonomy can be used at various levels of education and in various subjects, making it one of the most versatile and influential tools in the world of education (Barari et al., 2022; Panthalookaran, 2022; Sharunova et al., 2022).

Cognitive Domain

The six levels of cognitive domain according to Bloom consist of remembering, which is the ability to recall information that has been learned; understanding, which is the ability to explain the meaning of information; applying, which is using knowledge in real situations; analyzing, which is breaking down information into parts to understand the relationships within it; evaluating , which is the ability to assess or make decisions based on certain criteria; and creating, which is the ability to produce new ideas, works, or solutions by integrating existing knowledge. (Reigeluth & Moore, 2013).

Affective Domain

The affective domain is a learning domain that focuses on individual feelings, emotions, and reactions, in contrast to the cognitive domain, which emphasizes reasoning (Savickiene, 2010; Zubair et al., 2023). This domain encompasses various emotional aspects, such as feelings, interests, attitudes, and values. In its development, the affective domain consists of several levels, namely: acceptance, namely the willingness to pay attention to a phenomenon; participation (responding), namely active involvement in an activity; assessment or attitude determination (valuing), namely giving appreciation to a value; organization (organization), namely the ability to organize and integrate values into a personal system; and the formation of lifestyle patterns (characterization by a value), namely the stage when believed values are manifested in behavior and become part of the personality (Nelson et al., 2020).

Psychomotor Domain

The psychomotor domain encompasses not only physical activities and sports, but also fine motor skills such as handwriting, typing, or using input devices that involve hand, eye, and brain coordination (Alobaidi, 2020; Ullah et al., 2024). The classification of the psychomotor domain includes: First, perception, which refers to an individual's ability to receive stimuli through the senses and adapt them to appropriate motor actions. Second, readiness (set), which is a person's mental, physical, and emotional state of readiness to perform a movement. Third, guided response, which is the initial stage of motor skills performed by following examples or guidance, so that individuals can imitate the given movements. Fourth, habitual movement (mechanical response), where skills begin to be performed more smoothly and repeatedly so that they become habits, although they still require some attention. Fifth, complex movement (complex response), which is a higher stage of motor skills, characterized by the ability to perform movements quickly, precisely, and efficiently (Begam & Tholappan, 2018). The psychomotor domain does not only describe physical activity alone, but also the gradual development from basic abilities to complex motor skills.

RESEARCH METHOD

Design

Classroom action research was used to address the learning challenges of descriptive German writing in the classroom and improve the quality of education. We employed the Kemmis et al. (2014) model , which consists of planning, acting, observing, and reflecting. The initial stage was carried out in Cycle I, followed by Cycle II as an improvement effort on the previous cycle.

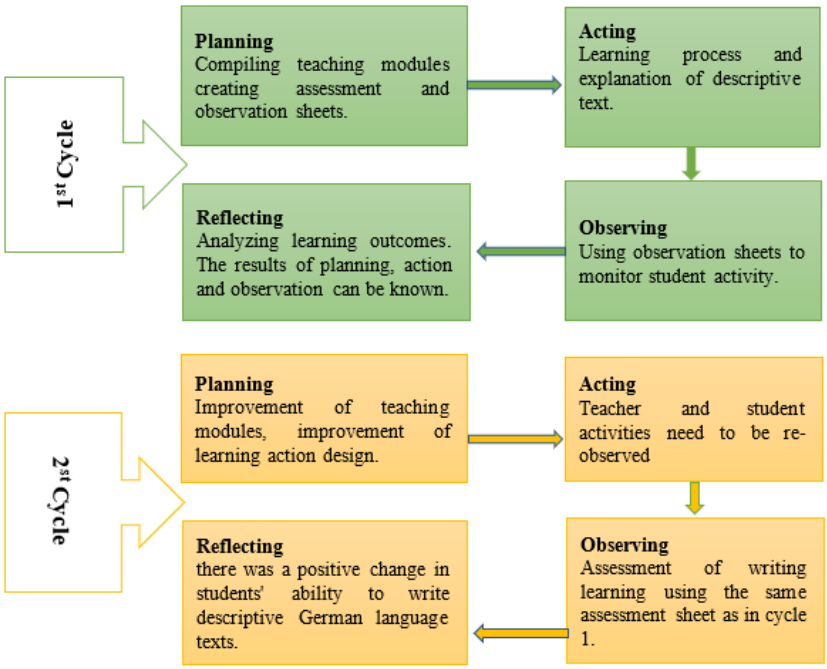

Figure 1. Research cycle flow

Cycle I began with planning German descriptive writing lessons, which involved discussions with teachers about the use of the Project-Based Learning (PjBL) model. This stage included determining teaching materials, preparing learning materials, developing teaching modules, and creating assessment and observation sheets. During

the lesson, students participated in the lesson, which included explanations and examples of descriptive texts. Observations were conducted using observation sheets to monitor student activity. During the reflection stage, the researcher analyzed the learning outcomes, and if many writing errors were found, a second cycle was conducted to improve students' writing skills.

In the planning stage of cycle II, improvements were made to the teaching module, the design of the learning actions, and the preparation of observation sheets and assessment sheets for student learning outcomes to make the learning process more effective. The actions were implemented to correct deficiencies in the previous cycle. The teacher re-explained the material and gave students the opportunity to ask questions about anything they did not understand. During the learning process, the researcher observed the teacher and students' activities to see if there were any improvements. During the observations, the researcher used the same assessment sheets as in cycle I, with the hope that student learning outcomes would show better improvement. It is hoped that after the observations and actions, there will be positive changes in students' ability to write descriptive German texts. These changes are evident in the improvement in ideas and language use in their writing.

Population and Sample

The population in this study was homogeneous, including the total number of eleventh-grade students at State Senior High School Jakarta, which is eight classes. The sample size was determined using a purposive sampling method. Based on the observations, the researchers then decided to select one class with 36 students.

Data Collection

In this study, two data collection methods were used. Observation was conducted to monitor each teaching and learning process, including students and teachers during their activities. The purpose of this observation was to collect data during the learning activities. Tests were used to demonstrate students' ability to write descriptive German texts and to determine whether the research objectives had been achieved.

Data Analysis

The data collected from the research will be analyzed using descriptive statistics. The assessment aspects of student work are based on the structure of German descriptive texts. The following table illustrates the components of these aspects:

Table 1. Assessment rubric for descriptive writing in German at level A1

Criteria	Points	Explanation
Communicative and long design/content	3 points	The text produced is in accordance with the assignment and has reached 30 words.
	2 points	The text produced mostly corresponds to the assignment and the word count is between 20 and 30.
	1 point	The text produced is less appropriate to the assignment and has too few words.
	0 points	The text produced does not match the assignment.
Formal precision	3 points	There are no/only a few syntax, morphology (and spelling/punctuation) errors.
	2 points	There are minor syntax, morphology (and spelling/punctuation) errors that may affect comprehension slightly).
	1 point	There are several errors in syntax, morphology (and spelling/punctuation) which greatly affect understanding).
	0 points	There are so many syntax, morphology (and spelling/punctuation) errors that the meaning can no longer be understood).

Source: (Dayu, 2018).

RESULTS

In this study, the researcher plans to implement PjBL as a strategy to improve students' skills in writing descriptive texts in German. The learning process is conducted in two cycles. Cycle I is the initial stage, PjBL is not implemented. Observations from cycle I indicate that students still have difficulty understanding the teacher's explanations. This difficulty causes obstacles in students' ability to write descriptive texts. Cycle II is a remedial stage to address the problems found in the previous cycle, so PjBL is implemented.

Implementation of cycle 1

Based on the results of the post-test involving 36 students, where PjBL was not implemented, the average score was 65. This score indicates that students' ability to write short story texts is in the sufficient category. The highest score achieved by students was 88, while the lowest score reached 46. This finding illustrates the differences in achievement levels between students, where some have shown good results, while others still face difficulties in writing descriptive German texts during the learning process.

Table 2. German descriptive writing skills

Mark	**Results**
Mean	65.6365
Median	66,5000
Mode	56.00
Standard Deviation	14.05260
Minimum	46
Maximum	88

Source: SPSS Data Processing Results

The median, or middle, score of 66 indicates that half of the students scored 66, while the other half scored below that number. The mode, the most frequently occurring score, was 56, indicating that most students scored in that range. Meanwhile, the standard deviation of 14.05260 indicates the degree of variation or spread of scores from the mean. Based on these data, the grouping of student competency achievement levels can be explained as follows:

Table 3. Categories of German descriptive writing skills

No	**Category**	**Interval**	**Frequency**	**Percentage (%)**
1	Very skilled	86-100	4	11.11
2	Skilled	76-85	7	19.44
3	Quite skilled	60-75	14	38.89
4	Not yet skilled	10-59	11	30.56
			36	100

Based on table 3, students' writing skills are divided into four categories based on the results of their work assessment. In the "very skilled" category with a score range of 86–100, there are 4 students who reached this level, so it can be concluded that very few students have truly mastered the material on writing German descriptive texts. The "skilled" category with a score range of 76–85 has a frequency of 7 students or 19.44%, which indicates that even though PjBL has not been implemented in this cycle 1, there are students who are skilled in descriptive writing. Furthermore, the "quite skilled" category with a score of 60–75 is 14 students or 38.89%, indicating that most students are starting to understand the teacher's explanation regarding the material on writing descriptive texts. Meanwhile, the "not yet skilled" category with a score range of 10–59 is obtained by 11 students or 30.56%, which indicates that there are still students who do not understand the material presented by the teacher.

The results of observations and data analysis in cycle I, obstacles were found that needed to be addressed to increase the effectiveness of learning. The main problem found was the low level of active student involvement, both in discussions, text preparation, and during the learning process. Many students also experienced difficulties in conveying ideas and thoughts, which impacted the final results of the descriptive texts they created. In addition, many students had not reached the minimum passing criteria standard of 75. There were 11 (30.56%) of 36 students who met the passing score, while 25 (69.44%) students had not achieved it.

Implementation of Cycle 2

Based on the results in Table 4, the average score for students' writing skills was 82, indicating their overall achievement level during the learning process. The highest score was 92, while the lowest was 73, indicating that students improved their writing of descriptive German texts after the implementation of PjBL.

Table 4. German descriptive writing skills

Mark	Results
Mean	82.3483
Median	85,0000
Mode	87.00
Standard Deviation	4.599543
Minimum	73
Maximum	92

Source: SPSS Data Processing Results

The median, or middle, score of 85 indicates that half of the students scored 85, while the other half scored below that number. The mode, the most frequently occurring score, was 87, indicating that most students scored in that range. Meanwhile, the standard deviation of 4.599543 indicates the degree of variation or spread of scores from the mean. Based on these data, the grouping of student competency achievement levels can be explained as follows:

Table 5. Categories of German descriptive writing skills

No	Category	Interval	Frequency	Percentage (%)
1	Very skilled	86-100	13	36.11
2	Skilled	76-85	18	50
3	Quite skilled	60-75	5	13.89
4	Not yet skilled	10-59	0	0
			36	100

Based on table 5 above, it can be seen that out of 36 students, there has been an increase in learning outcomes after PjBL was implemented in the learning process. There are 13 students or 36.11% included in the "very skilled" category (scores 86–100), which indicates an increase in the quality of learning compared to before. Then, 18 students or 50% are in the "skilled" category (scores 76–85), which indicates that most students have good abilities in writing German descriptive texts, although some have not yet reached the expected standard of completion. Meanwhile, 5 students or 13.89% are included in the "quite skilled" category (scores 60–75), which indicates an improvement in learning outcomes although not optimal. No students are included in the "not yet skilled" category (scores 10–59), which means that all students have understood the learning quite well. Thus, there are 31 (86.11%) of 36 students who meet the completion score, while 5 (13.89%) students have not achieved it.

The implementation of PjBL has proven effective in increasing student engagement during the learning process, particularly in group work and understanding short story writing material. Students become more active participants, expressing ideas, asking questions, and responding to other groups. This has positively impacted the quality of their writing.

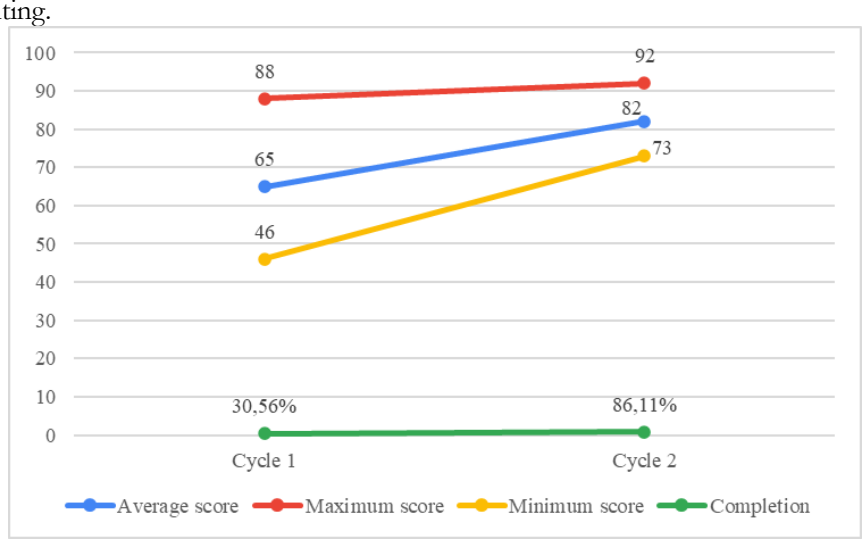

Figure 1. Data on improvements in student learning outcomes in cycle 1 and cycle 2

Based on the student learning outcomes data in Figure 1 above, there was a 55.56% increase in learning completion from cycle I to cycle II. These results indicate that the implementation of PjBL has a positive impact on students' final grades. In addition to being more active in learning, students also showed greater enthusiasm and passion in completing project assignments. This is reflected in the quality of the writing produced in cycle II, which was better than the previous cycle. Thus, PjBL is an effective learning model for improving students' descriptive writing skills.

DISCUSSION

The average score of 65 in cycle 1, with significant variation, indicates that traditional learning methods have not been able to consistently improve writing. This finding aligns with systematic reviews that in many studies, control groups showed lower improvement than experimental groups (Guo et al., 2020). Meta-analytic studies confirm that PjBL significantly improves learning outcomes compared to conventional methods (Grant, 2017b; Zhang & Ma, 2023).

The low level of student engagement in discussions, idea generation, and collaboration in cycle 1 reinforces the argument that conventional methods tend to minimize active student interaction. Literature supports that one of the advantages of PjBL is that it provides space for collaboration, reflection, and artifact production that encourages student engagement (Markula & Aksela, 2022). Studies have shown that PjBL can increase motivation, sense of ownership, and learning engagement compared to traditional approaches (Condliffe, 2017). Research also shows that students view PjBL as a method that increases their confidence, participation, and learning experience (Turcotte et al., 2022).

In cycle 2, the average score increased to approximately 82 with a narrower range. This indicates that PjBL is effective in improving writing scores while simultaneously equalizing achievement. Research shows that PjBL significantly improves writing skills in terms of content, organization, and language use compared to the control group. The proportion of students in the "highly skilled" and "skilled" categories increased drastically in cycle 2, while the "not yet skilled" category disappeared. This indicates that PjBL not only encourages students at the top but also improves those who are weak (Boardman et al., 2024). PjBL narrows the gap between students. PjBL has a positive impact not only on the average but also on the distribution of achievement.

The narrowing of the standard deviation from cycle 1 to cycle 2 indicates a more even distribution of scores. PjBL literature provides a theoretical framework that scaffolding, incremental revision, and peer collaboration in projects can help students develop together, not just a select few (Markula & Aksela, 2022). Project activities allow students with diverse abilities to contribute and grow. In fact, students in the experimental group demonstrated more stable scores (fewer extreme deviations) than those in the control group (Condliffe, 2017). The achievement of 86.11% of students meeting the completion criteria after the PjBL intervention indicates that this method not only improves averages but also improves practical success. Chen et al. (2022) reported that PjBL has a significant positive effect on learning achievement, including the percentage of students passing assessment instruments. PjBL results in more students achieving minimum targets than traditional methods. This is because the model facilitates independent learning and the achievement of higher standards among students.

Improved writing quality and student engagement in expressing ideas and group presentations align with the key characteristics of PjBL, which emphasizes collaboration, reflection, and iterative learning. Implementing PjBL with teacher guidance has been shown to help students develop ideas and cohesion in their writing (Gibbes & Carson, 2014). However, the effectiveness of PjBL can decrease if it is not implemented consistently or without adequate support. Therefore, the success of PjBL depends heavily on student readiness and instructional support from teachers (Grant, 2017). The duration of implementation and the context significantly influence the effectiveness of PjBL. PjBL implemented over a long period of time has been shown to provide more consistent results, especially when applied to specific subjects (Wang et al., 2023).

This study shows that the implementation of PjBL effectively improves German descriptive text writing skills. However, the success of PjBL depends heavily on the project design, student readiness, and teacher support. Students who are less prepared do not always achieve optimal benefits. Therefore, further research is recommended to examine moderating variables and analyze writing aspects in more depth for more comprehensive results.

CONCLUSION

Based on the research results and discussion, it can be concluded that the implementation of PjBL significantly improved students' ability to write descriptive German texts. There was an increase in the average score from 65 in cycle I to 82 in cycle II, as well as an increase in the percentage of learning completion from 30.56% to 86.11%.

PjBL has been proven to increase students' activeness, collaboration, and courage in expressing ideas during the learning process. This project-based approach provides a more authentic, contextual, and student-centered learning experience, resulting in improvements not only in the content aspect of the writing, but also in the organization, vocabulary, and cohesion of the text. Thus, PjBL can be widely implemented as an alternative effective learning strategy in teaching foreign languages, such as German.

This study has several limitations that need to be considered. First, the study was conducted in only one school with a limited number of respondents (36 students), so the results cannot be generalized to a broader context. Second, the relatively short research period (two cycles) did not fully capture the long-term dynamics of PjBL implementation, particularly in shaping students' writing and critical thinking habits. Third, the measurement of writing skills still focused on the product aspect (written results), while writing processes such as planning, revision, and reflection were not explored in depth. Fourth, this study did not control for external variables such as individual differences in motivation, initial German language ability, and technological support that can influence learning outcomes. Recommendations include that teachers continue to develop and expand the application of PjBL in teaching writing other types of texts, such as narrative and argumentative texts, by considering students' characteristics and needs. Teachers are advised to provide more intensive guidance during the project planning and reflection stages so that students can be more directed in developing their ideas and writing structures. For future researchers, it is recommended to expand the scope of the study by involving more schools or different levels of education, and to examine the integration of PjBL with digital media or interactive learning technologies. This is important to enrich understanding of the effectiveness of PjBL in improving writing skills in various learning contexts and strengthen the results of previous research.

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