Writing with Cultural Insight: Elevating Analytical Exposition through Local Culture and Project-Based Learning

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Abstract
This study examines the effectiveness of integrating project-based learning (PjBL) with the *Latemmamala* cultural approach in enhancing the analytical exposition writing skills of grade XI students at SMA Negeri 3 Soppeng. Utilizing a quantitative research design, the study assessed improvements in students' writing abilities through pre-test and post-test evaluations, focusing on grammar, vocabulary, mechanics, fluency, and organization. Results indicated a notable increase in students' writing skills, with the mean score rising from 1425 to 2240. The standard deviation decreased from pre-test (4.811) to post-test (3.185), suggesting a more uniform improvement among students post-intervention. The paired samples t-test further substantiated the efficacy of the intervention (t(observational) = 7.14, p < 0.05), indicating a significant enhancement in writing skills attributable to the culturally infused PBL methodology. The study revealed that integrating PBL with a cultural perspective not only improved students' writing proficiency but also enhanced their motivation, creativity, and engagement with the learning process. It demonstrated that the *Latemmamala* cultural theme enriched the learning environment, fostering a closer bond between teacher and students through continuous monitoring and support during the project work. Significant improvements were observed in various facets of writing, reflecting the approach's comprehensive impact. By demonstrating the potential of culturally responsive teaching strategies, this study provides a valuable model for educators seeking to foster more inclusive, engaging, and effective learning environments. It underscores the importance of integrating cultural heritage within a PjBL framework to enhance language

education, offering new insights into the potential of culturally enriched PBL. This research contributes to the growing body of literature on the benefits of cultural approaches in education and highlights the efficacy of integrating the *Latemmamala* cultural approach in improving students' academic skills and cultural understanding.

Keywords: writing skills; project-based learning; cultural approach; *Latemmamala*

Introduction

In the realm of language learning, writing stands as a crucial skill, integral to the academic and professional success of students (Hyland, 2003). As a core aspect of English language proficiency, writing enables learners to articulate thoughts, share information, and engage in scholarly and communicative discourse. However, the ability to write well in English is a challenging milestone for many, marked by difficulties in generating ideas, selecting appropriate vocabulary, structuring arguments, and adhering to grammatical norms (Hannay et al., 2014; Arham & Ariani, 2020). These challenges necessitate innovative teaching methodologies that not only address these issues but also inspire and cultivate a passion for writing. In Indonesia, mastering writing is essential for English language learners as it is a productive skill in the English language (Arham & Ariani, 2020; Bahnar, 2021). The proficiency of students in studying English can be assessed through their command of practical English skills, particularly their writing abilities. Therefore, it is imperative for students in Indonesia to acquire proficiency in writing abilities. Despite the undeniable importance of writing abilities, students' proficiency in writing remains unsatisfactory. Many students continue to struggle with generating ideas to initiate their writing. In addition to that, students frequently struggle to select the suitable word for their work.

Nowadays, students often struggle with the task of structuring their work by organizing their ideas and information. Furthermore, students often have a deficient command of grammar, as they struggle to employ correct grammatical structures. They lack the incentive to further explore the English language. Hence, in order to surmount this predicament, it is important to employ instructional methodologies that can stimulate students' writing abilities. Project-based learning (PBL) has emerged as a dynamic and effective approach to teaching writing. It immerses students in real-world and meaningful tasks, requiring them to apply language skills in active, problem-solving contexts (Jaleniauskienᴸ, 2016). PBL's emphasis on authentic, student-centered learning experiences promotes engagement, critical thinking, and collaboration, all of which are essential for developing proficient writing skills. Within this framework, the incorporation of cultural elements into English writing instruction emerges as a powerful catalyst for enhancing the educational experience.

A compelling and widely-discussed subject that merits consideration in academic writing is culture. As per Brown (1994), culture can be defined as a set of customs, beliefs, and behaviors that characterize a particular group or society. Culture encompasses all aspects of a person's daily life that are consistently practiced and utilized. It serves as the fundamental framework that influences individuals' thoughts, emotions, and interactions with others. Culture has inadvertently been incorporated into classroom instruction, usually through verbal means. When students address, greet others, and utilize specific expressions, they effectively embody the local or target culture. Topics that may be derived from culture include lifestyle, attire, arts, family dynamics, and others. The teacher is barely aware that they have imparted a portion of the culture. Thus, culture can be incorporated into academic writing as a subject that aims to inspire students' critical thinking.

This study introduces the *Latemmamala* cultural approach as a novel aspect of project-based learning in the context of teaching analytical exposition writing. *Latemmamala*, a revered tradition among the Soppeng people (Ramdani, 2022), embodies a rich tapestry of cultural values, storytelling, and community wisdom. By integrating this cultural heritage into the PBL framework, the research explores how a culturally anchored approach can motivate students, deepen their connection to the writing content, and enhance their analytical skills (Miller & Krajcik, 2019). The synergy between PBL and cultural context is posited to provide a more stimulating, relevant, and immersive learning environment, leading to improved writing proficiency. Furthermore, this research delves into the pedagogical implications of combining cultural heritage with language instruction. It posits that such an integration not only aids in the development of writing skills but also contributes to the preservation and appreciation of local culture among young learners (Nurlia & Arini, 2017; Rosmayanti et al., 2019). This study, therefore, seeks to extend the boundaries of conventional writing pedagogy, offering new insights and strategies for educators aiming to enrich their teaching practices and foster a more inclusive and engaging learning atmosphere.

Harmer (2007) suggests that while teaching writing, we have the option to emphasize either the writing process or the resulting output. To promote the students' writing as a systematic approach, it was crucial to assist them in familiarizing themselves with the many stages of such approach. Consequently, it is imperative to provide students with training and guidance to enhance their writing proficiency. While the significance of acquiring proficient writing abilities is apparent, students often have unsatisfactory writing capabilities. According to Richards and Renandya (2002, p. 303), second language learners find writing to be the most challenging skill to achieve mastery in. Consequently, the instruction of writing necessitates the implementation of targeted tactics. It may be referred to as such due to the numerous issues and challenges that arise when teaching and studying writing in the EFL classroom. According to the initial assessment carried out at SMA Negeri 3 Soppeng, where students study English as a foreign language, several challenges were observed in the teaching and learning of writing. This writing difficulties can be attributed to various causes, including student-related variables, writing-related factors, teacher-related issues, and teaching media-related factors.

According to the School-Based Curriculum (Depdiknas: 2004), Senior High School students should be capable of effectively conveying ideas through concise, uncomplicated, and practical texts and essays, namely in the forms of reports, narratives, and analytical expositions, within the framework of everyday life. According to other prior studies, including one conducted by Ridianur & Utami in 2015, students still find it challenging to create explanation texts due to their complexity. Ridianur & Utami (2015) also noted that students encounter several challenges, such as a lack of enthusiasm for studying the genre of exposition text, difficulty in transforming ideas into a coherent text, and an increasingly stagnant learning environment characterized by repetitive approaches. Thus, it is necessary to possess a pedagogical framework for constructing analytical exposition texts that can stimulate students' ingenuity in consolidating their thoughts into a cohesive written piece. This argument aligns with the educational goals outlined in the 2013 Curriculum, namely focusing on enhancing the proficiency of high school students in composing analytical exposition texts.

The 2013 Learning Curriculum Guidelines found in the appendix of Minister of Education and Culture Number 103 of 2014, which pertains to learning at the elementary and high school level, the main principles of the 2013 Curriculum involve providing students with the means to acquire knowledge through diverse sources using scientific methods. They can utilize cultural values, exemplars, and student innovation through engaging and demanding learning approaches.

Project-based learning (PBL) centered around the theme of the Latemmamala is highly appropriate for fostering a stimulating learning environment that encourages student engagement and indirectly promotes the preservation of Soppeng's culture among young people. This educational strategy would further facilitate students in comprehending the indispensable significance of preserving the cultural values of Soppeng. Consequently, there may be aspects that do not align with students' perspectives on the culture they cultivate. Nevertheless, students must possess the ability to identify and uphold the beneficial aspects of that culture. It will facilitate the achievement of the character education objective, which is to imbue students with national cultural values that can foster positive character development. Implementing Latemmamala as the central theme in the project-based learning model will effectively promote one of the goals of the Curriculum of 2013, which is to imbue students with cultural values throughout their educational journey (Agustin, 2019, June). Latemmamala, a moniker associated with Soppeng, encompasses cultural values derived from diverse elements like dances, tourist attractions, legends or historical narratives, customs or rituals, and local community-generated mythology. The topic of local culture will be more stimulating for students' viewpoints to evolve into an analytical exposition piece.

The investigation of learning abilities in creating analytical exposition text has been conducted utilizing a variety of techniques, approaches, and learning models. Therefore, it is imperative to carry out and advance these research endeavors. In this study, scholars employed a pedagogical approach aligned with the 2013 curriculum, specifically project-based learning with a straightforward research objective, to foster the development of ideas or arguments in high school students' analytical exposition texts. This learning paradigm facilitates the exploration of the Latemmamala subject. This local cultural subject will assist students in uncovering and comprehending the cultural values of Soppeng that require preservation. Students in this learning paradigm indirectly undertake cultural preservation tasks (Jannah & Arham, 2016). The researchers have identified the main challenges and objectives of the study as investigating the effectiveness of implementing a project-based learning model with a Latemmamala cultural approach in enhancing students' proficiency in producing analytical exposition texts. The objective of this research is to apply the project-based learning model, incorporating the Latemmamala cultural approach, in order to enhance students' proficiency in writing analytical exposition texts. In investigating the impact of a culturally infused PBL approach on students' ability to write analytical exposition texts, this research contributes to a growing body of literature on effective language teaching strategies. It provides empirical evidence on the benefits of cultural integration in education and offers practical implications for teachers, curriculum designers, and policymakers interested in enhancing the quality and relevance of language instruction. By bridging cultural heritage with modern educational methodologies, this study aims to inspire a more nuanced, engaging, and effective approach to teaching English writing, with the ultimate goal of empowering students to become proficient, motivated, and culturally aware writers (Cummins, 2000).

Cultural approaches in education

The integration of cultural elements into educational settings is increasingly recognized for its importance in fostering an inclusive, engaging, and effective learning environment (Watkins, 2012). Cultural approaches in education consider students' cultural backgrounds, values, and perspectives as assets that enrich the learning process rather than barriers to overcome (Heidari et al., 2014). By incorporating culturally relevant teaching materials and strategies, educators can create more relatable and meaningful learning experiences that respect and affirm students'

identities, potentially leading to increased motivation, engagement, and academic success (Walker et al., 2010).

Numerous cultural approaches have been studied and implemented across different educational contexts, each with its unique focus and methodology. For instance, culturally responsive teaching emphasizes the need for educators to be aware of and responsive to the cultural experiences of students in their teaching practice (Heidari et al., 2014). Another approach, multicultural education, advocates for a curriculum that represents diverse cultural perspectives and promotes equity and justice in the classroom (Nieto, 1999). These approaches are not mutually exclusive but rather complement each other in the goal of making education more culturally inclusive. Empirical studies have shown that when students feel their culture is valued and integrated into the curriculum, they are more likely to participate actively in the learning process and achieve academic success (Cummins, 2000).

In the context of writing education, cultural approaches can play a pivotal role in enhancing students' motivation and understanding. By allowing students to explore and express their cultural identities through writing, educators can tap into their intrinsic motivation and encourage a deeper engagement with the writing task (Drew, 1999; Kelly et al., 2020). Furthermore, when students can relate the content of their writing to their cultural background, they are likely to have a richer and more nuanced understanding of the subject matter, which translates into more complex and effective writing (Graham, 2019). This is particularly relevant in the teaching of analytical exposition writing, where students need to analyze and articulate complex arguments. By integrating culturally relevant content and examples, educators can help students make meaningful connections between their writing and their lived experiences, thus enhancing the quality and depth of their analytical work.

PjBL (Project-Based Learning)

According to Blumenfeld et al. (1991), project-based learning is a holistic approach that involves students in the process of investigation. Within this framework, students engage in the process of seeking solutions to complex problems through activities such as formulating and refining inquiries, engaging in debates, making predictions, designing plans and experiments, gathering and analyzing data, drawing logical conclusions, effectively communicating their opinions and findings, generating new inquiries, and producing tangible creations. According to Sutirman (2013), project-based learning is an educational approach where students actively participate in setting learning objectives and creating concrete products or projects. Project-based learning has significant potential to enhance learning experiences by making them more engaging and purposeful for students. Based on the aforementioned comprehension, it can be inferred that project-based learning is an instructional approach that assigns students with project tasks, enabling them to actively engage in self-directed learning with the objective of independently seeking information on a given topic.

The process of building project-based learning involves six primary elements: authenticity, where projects assigned to students are connected to real-world issues; academic rigor, ensuring adherence to academic standards; expert relationships, fostering connections with subject matter experts; The efficacy of project-based learning resides in the engagement of external experts, active exploration, practical application of information, and assessment. Furthermore, George Lucas asserts that the stages of the project-based learning model encompass initiating with the fundamental inquiry, formulating the guidelines for project execution, devising a timetable of

activities, overseeing the advancement of project participants, appraising students' work, and evaluating the educational encounter of students.

Project-based learning entails a systematic approach that assists the teacher in designing and facilitating the project, while also providing guidance to students throughout their engagement with the project. The design encompasses the stages of implementing project-based learning and serves as the basis for executing the project-based learning process in the classroom. Various scholars, education practitioners, and higher institutions, including Grabe et al, (2002) and The George Lucas Educational Foundation (2005), have put out a series of stages for establishing project-based learning. However, the project development processes suggested by The George Lucas Educational Foundation appear to be the most efficient and suitable approach followed in this research. Hence, the researcher choose to utilize this methodology in carrying out her investigation. The system outlined above commences by formulating a fundamental inquiry, devising a comprehensive project blueprint, establishing a timetable, overseeing both the students and the project's advancement, appraising the final result, and evaluating the whole experience.

Latemmamala: a cultural approach to learning
Profile

Latemmamala, originating from the Soppeng region, represents a unique cultural heritage characterized by its rich traditions, values, and communal practices. It is an embodiment of the wisdom and living practices of the Soppeng people, encompassing a wide array of cultural expressions, including language, arts, rituals, and social norms (Nur & Duli, 2021). Deciding on the theme of the local culture of Latemmamala is an effective way to cultivate students' awareness of the intrinsic virtues of Soppeng culture. The term Latemmamala is synonymous with the name Soppeng. Soppeng is a region in Indonesia characterized by its numerous ethnicities, languages, customs, and other aspects. The civilizations sampled for this research include Pattaungeng, Maccera' Tappareng, Mallangi Arajang, Mappadendang, Mattoana Arajang, and Maddoja Bine. The first ritual is the Pattaungeng ceremony, also known as Mallangi Balubu, in the Bugis community. The Pattaungeng rites, which are conducted periodically and passed down from one generation to another, are performed by the datu-datu (kings) in Marioriwawo District and the Goarie village. The essence of this customary ritual involves the collective act of cleansing locations and artifacts associated with the narrative of the unearthing of To Manurung Ri Goarie. This customary ritual involves the cleansing of the jars that are said to have housed the finding of To Manurung. It serves as a commemoration and tribute to our forefathers, as well as an opportunity to interpret the esteemed values embedded inside.

Furthermore, the purpose of the event is to serve as a collective reminder of the narrative surrounding the finding of an infant, which the local community regards as To Manurung. The second tradition is the Maccera' Tappareng ceremony, an annual event that celebrates the fishing season in Tempe Lake. The execution of the event is distinguished by attitudes, behaviors, and symbolic expressions that hold cultural importance. The cultural significance attributed to the ceremonial emblems mirrors the intricate connection between the noble value system and the community residing in the vicinity of Tempe Lake, where this system has been steadily evolving and flourishing. The Mallangi Arajang custom, a ritual practice within the Soppeng culture, involves the cleansing of ancestral artifacts as an expression of appreciation towards Dewata Seuwae (Allah SWT). Such activities occur either once every three years or upon mutual agreement between the community owner and the ritual leader. During the celebration, many relics from the Arajang empire, including as drums, spears, and musical instruments of different shapes,

are used and shown. The ceremony in which the souls of ancestors reside within these relics and manifest themselves to their owners when necessary. The Mappadendang tradition involves a dance performance accompanied by the rhythmic sound of hammering pestle mortars or other traditional equipment. This ritual serves as an expression of appreciation towards the farmers following the completion of the rice harvest. Farmers undertake several processes prior to harvesting, which include seed selection, field preparation, harvesting, and expressing gratitude. Furthermore, the period preceding and following the harvest, leading up to the Thanksgiving celebration, served as a representation of collaboration. During the event, there was a convivial gathering where individuals fostered camaraderie throughout the community. The sixth ceremony is the Mattoana Arajang, characterized by the communion between ancestor spirits and their descendants.

The engagement is being conducted through intermediaries of royal heritage artifacts. The ceremony serves the objective of commemorating the ancestors as an expression of affection and appreciation towards Allah SWT (Dewata Seuwae). The supportive community holds the belief that by doing these rites, they will get blessings from Allahu SWT. The Mattoana Arajang ceremonial rite also tries to strengthen the bonds between individuals. Multiple groups were present at the ceremony to enhance its liveliness. The sixth ceremony is Maddoja Bine, which our forefathers performed as an expression of appreciation for the bountiful harvest. The activities inside it involve the slaughter of chickens and the provision of cakes and other traditional dishes. Maddoja bine refers to the act of transporting and collecting crops from the fields. Therefore, the farmers get bountiful crops during this occasion.

How Latemmamala can be integrated into PBL to enhance writing skills?

Integrating Latemmamala into Project-Based Learning (PBL) involves utilizing the cultural elements and values of Latemmamala as a thematic and methodological foundation for projects. In the context of teaching analytical exposition writing, this could mean engaging students in projects that explore cultural topics, narratives, and issues relevant to the Soppeng community and beyond. By doing so, students are not only learning to write effectively but are also gaining a deeper appreciation and understanding of their cultural heritage. This integration encourages students to draw upon their cultural knowledge and perspectives, enriching their writing with unique insights and fostering a sense of ownership and pride in their work.

Previous studies and theoretical basis for using Latemmamala in education

While Latemmamala may not have been widely studied in the context of educational theory, its principles align with broader concepts of culturally responsive and community-based education (Alim et al., 2020). The cultural approach is grounded in the belief that education should be relevant to students' lives and cultures, and that honoring and incorporating students' cultural backgrounds can enhance learning (Ladson-Billings, 2021). In this vein, Latemmamala can be seen as an extension of these pedagogical frameworks, offering a specific, culturally rich approach to learning that is deeply rooted in the community and traditions of the Soppeng people. Embracing such an approach in the classroom can lead to more meaningful and engaging learning experiences, fostering a sense of cultural continuity and relevance in students' education. As an educational approach, Latemmamala emphasizes learning through cultural immersion and community engagement, promoting a deep connection between education and cultural identity. This approach fosters a learning environment where students can explore and appreciate their cultural heritage while developing critical thinking and creative expression skills.

Identification of research gaps

Despite the extensive body of literature on PBL and cultural approaches in education, there remain significant gaps, particularly concerning the integration of specific cultural practices like Latemmamala in language learning. First, there is a limited empirical investigation into how the Latemmamala cultural approach specifically influences students' writing skills, particularly in analytical exposition. Second, while the benefits of culturally responsive education are well-documented, there is less understanding of how these approaches can be tailored and implemented within the unique context of Latemmamala, with its distinct cultural narratives and traditions. Third, there is a need for more nuanced studies that explore the intersection of culture, language, and education (Jester, 2017), particularly in non-Western contexts, to provide a more diversified understanding of how cultural identity can impact learning processes and outcomes.

This study aims to fill these gaps by empirically investigating the impact of the Latemmamala cultural approach within a PBL framework on students' analytical exposition writing skills. It seeks to contribute to the theoretical understanding of culturally responsive education by providing a detailed case study of Latemmamala, thereby enriching the discourse with insights from a non-Western educational context. Practically, this research intends to offer educators and curriculum designers evidence-based strategies for integrating cultural approaches into language education, thereby making learning more engaging, relevant, and effective for students. By addressing these gaps, the study aims to advance the field of language education and provide meaningful contributions to the practices of teaching and learning.

Research method

This study employs a quasi-experimental approach known as the pretest-posttest control group design. The pretest-posttest control group design necessitates the formation of at least two groups, with each group being randomly constituted. Both groups underwent a pretest, after which one group was subjected to a therapy. Finally, both groups were administered a posttest at the conclusion of the study. The pretest and posttest scores were compared to determine if there was an improvement in students' abilities before and after the treatment. The posttest scores from both groups were compared to assess the efficacy of the treatment. The research is conducted at SMAN 3 Soppeng. The location is Dare Ajue, Donri-Donri, Soppeng. The investigation was conducted during the eleventh grade in early December of the 2019/2020 school year. The study's population comprises all students enrolled in the second grade of SMA Negeri 3 Soppeng for the academic year 2019/2020. The samples consist of 40 students that were picked using a basic random sampling procedure. The 40 students were divided into two groups, each consisting of 20 students. The study was conducted over the course of four sessions, each lasting 8 x 45 minutes. There would be a single meeting for the initial examination (pretest), two sessions for the learning processes or treatments, and one meeting for the final examination (posttest). Student learning outcomes or achievement data is gathered through the administration of student learning outcomes assessments. Pretest and posttest assessments were administered to measure the effects of the treatment. Pretests are administered to students in order to assess their initial aptitudes prior to receiving any intervention. The researcher's pretest requires the compilation of an analytical English explication text on the theme of "education." The posttest was administered to students after they received treatment to assess the improvement in their abilities. In this study, the researcher administered a posttest to students, instructing them to create an analytical English exposition text on the topic of "Latemmamala Culture."

Experimental researchers provide various treatments based on the specific settings of the experiment. It signifies that researchers establish variables. Researchers refer to treatment factors as experimental variables, manipulated variables, or independent variables. On the other hand, the remaining variables in this study are outcome variables or dependent variables, which can be measured as a result of the treatment. The research focuses on project-based learning with a cultural approach as the independent variable.

The dependent variable in this study pertains to the learning results of students, when compared to other factors. The students' proficiency in writing analytical exposition texts was assessed by a test of learning outcomes, which was devised by researchers. This assessment was conducted after the students participated in learning activities that utilized project-based learning with a cultural perspective. Learning outcomes refer to the results achieved by students when they answer the posttest after engaging in the treatment. An operational definition is a precise statement that includes multiple observable and measurable signs for identifying the variable or concept in question. The measure of success in this study is the observed improvement in the skill of composing analytical exposition texts following the implementation of project-based learning with the Latemmamala local culture approach, surpassing the previous level.

Additionally, the data analysis approaches employed in this study are derived on the work of Gay et al. (2009). Descriptive statistical analysis offers a comprehensive overview of the attributes of student learning outcomes for both the experimental class and the control class. Descriptive statistics encompass the display of tables, graphs, mean values, medians, modes, standard deviations, variances, minimum values, and maximum values computed using statistical software, specifically SPSS.

Results

In this section, the authors detail the findings related to students' proficiency in analytical exposition text writing. The data encompasses scores from both pre-test and post-test assessments, aimed at evaluating the impact of the project-based learning integrated with the Latemmamala cultural approach. The analysis compares the performance outcomes between two distinct groups: the experimental group, which received the targeted intervention, and the control group, which did not. This comparison provides a comprehensive view of the intervention's effectiveness in enhancing students' writing abilities.

Table 1. The result of pre-test and post-test scores of experimental group

No	Student	Pre-test Score (X)	Post-test Score (Y)	Point differences (D)	D^2
1	AKB	14 (4.67)	21 (7.00)	7	49
2	AO	12 (4.00)	23 (7.67)	11	121
3	AKP	7 (2.33)	19 (6.33)	12	144
4	AS	10 (3.33)	23 (7.67)	13	169
5	NFI	7 (2.33)	21 (7.00)	14	196
6	CFS	13 (4.33)	17 (5.67)	4	16
7	CPR	9 (3.00)	24 (8.00)	15	225
8	DYR	20 (6.67)	28 (9.33)	8	64
9	DRK	14 (4.67)	18 (6.00)	4	16
10	EM	16 (5.33)	23 (7.67)	7	49
11	EV	11 (3.67)	17 (5.67)	6	36
12	ES	10 (3.33)	24 (8.00)	14	36
13	FA	20 (6.67)	20 (6.67)	0	0

14	IERY	14 (4.67)	26 (8.67)	12	144
15	IAL	13 (4.33)	26 (8.67)	13	169
16	IRM	15 (5.00)	21 (7.00)	6	36
17	JT	17 (5.67)	22 (7.33)	5	25
18	JWK	24 (8.00)	27 (9.00)	3	9
19	LFA	16 (5.33)	23 (7.67)	7	49
20	PEB	23 (7.67)	25 (8.33)	2	4
	N = 20	$\sum$X=285	$\sum$Y=425	$\sum$D=140	$\sum D^2$=1380
		=4590	=9239	=84100	=180625
		Mx = 14.25	My = 21,25		
		= 4.75	= 7.47		

Table 1 showed that from the experimental group pre-test and post-test scores, only one student had equal 0 points (FA), one student had increased 15 points (CPR) as the highest increase, and no student had decreased the score.

Table 2. The result of pre-test and post-test scores of control group

No	Subject	Pre-test Score (X)	Post-test Score (Y)	Point differences (D)	D^2
1	SA	14 (4.67)	14 (4.67)	0	0
2	IA	10 (3.33)	17 (5.67)	7	49
3	SRT	13 (4.33)	15 (5.00)	2	4
4	MT	11 (3.67)	14 (6.67)	3	9
5	TAR	7 (2.33)	16 (5.33)	9	81
6	SUK	14 (6.67)	11 (3.67)	-3	9
7	S	13 (4.33)	18 (6.00)	5	25
8	ND	21 (7.00)	15 (5.00)	-6	36
9	NM	17 (5.67)	13 (4.33)	-4	16
10	D	11 (3.67)	19 (6.33)	8	64
11	A	16 (5.33)	15 (5.00)	-1	1
12	AY	11 (3.67)	16 (5.33)	5	25
13	SS	22 (7.33)	21 (7.00)	-1	1
14	DM	13 (4.33)	22 (7.33)	9	81
15	AP	8 (2.67)	12 (4.00)	4	16
16	AON	15 (5.00)	21 (7.00)	6	36
17	ANI	18 (6.00)	21 (7.00)	3	9
18	AMY	20 (6.67)	20 (6.67)	0	0
19	MM	16 (5.33)	16 (5.33)	0	0
20	RL	22 (7.33)	17 (5.67)	-5	25
	N = 20	$\sum$X=285	$\sum$Y=333	$\sum$D=41	$\sum D^2$=487
		=4501	=5739	=81225	=110889
		Mx = 14.25	My = 16.65		

Table 2 shows that from the control group pre-test and post-test scores, three students had equal 0 points (SA, AMY, and MM), two students had increased 9 points (TAR and DM) as the highest increase, and there are six students had decreased the scores (SUK, ND, NM, A,

SS, and RL).

Based on the post-test data, the value that students must achieve is a maximum score of 10.0 and a standard score of 7.5. In order, the number of classes is 4 (excellent, good, average, and poor categories), while the length of the interval class is 0.8. Here is the interpretation of the scores:

< 7.5   : Poor
7.5 – 8.2: Average
8.3 – 9.0: Good

So that, the interpretation of the data scores can be made as follows:

Table 3. The data interpretation

Interpretations	scores	Experimental Group				Control Group			
		Pre-test		Post-test		Pre-test		Post-test	
		f	%	f	%	f	%	f	%
Poor	< 7.5	18	90	9	45	20	100	20	100
Average	7.5 – 8.2	2	10	6	30	0	0	0	0
Good	8.3 – 9.0	0	0	4	20	0	0	0	0
Excellent	9.1 – 10.0	0	0	1	5	0	0	0	0
		20	100	20	100	20	100	20	100

Pre-requisite test
Normality test

The normality test is conducting to know that the sample is in the normal distribution. Each test presents in the following section: The sample is in normal distribution if Lo (L obtained) is lower than Lt (L table), $\alpha = 5\%$. It finds the normality test using chi-square.

- Normality test in experimental group
  After doing the normality test in the experimental group found H_0 is accepted. That is, students' pre-test score data in the experimental group is in a normally distributed tutoring. While in post-test is found that H_0 is accepted. That is, students' post-test score data in the experimental group is in a normally distributed tutoring.

- Normality test in control group
  The normality test in the control group session found H_0 is accepted. That is, students' post-test score data in the control group is in a normally distributed tutoring. While, in post-test found that H_0 is accepted. That is, students' post-test score data in the control group is in a normally distributed tutoring.

Homogeneity test

A homogeneity test is implementing to investigate whether two groups have the same variance or not. A homogeneity test is done to know that the data are homogeneous. In this study, the researchers used F Test.

- Experimental group

Table 4. Experimental group homogeneity data

Experimental Group	df = n – 1	S^2
Pre-Test (1)	19	23.14
Post-Test (2)	19	10.96

Based on the result of the experimental group above found that H_0 is accepted, it means that the variances of the population are homogeneous.

- Control Group

Table 5. Control group homogeneity data

Experimental Group	df = n − 1	S^2
Pre-Test (1)	19	19.54
Post-Test (2)	19	10.24

The result of a control group of homogeneity test found that H_0 is accepted then it means the variances of the population is homogeneous.

Hypothesis testing

Hypothesis testing can be conducted if the conditions of normality and homogeneity tests have been met. The data analysis was conducted using an independent sample t-test. The null hypothesis is rejected when the calculated t-value (tob) is greater than the critical t-value (ttable), indicating the presence of a significant difference. The process of doing a t-test for independent samples are as follows:

- Calculation of the value of the difference between the pre-test and the post-test of the experimental group.

Table 6. Paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Test	14,25	20	4,811	1,076
	Post Test	22,40	20	3,185	,712

The results of the analysis show that the number of samples used was 20 samples with a std deviation value in the pre test of 4,811 and a std deviation in the post test of 3,185, while the average value of the pre test was 1,076 and the post test was 0.712.

Table 7. Paired samples correlations

		N	Correlation	Sig.
Pair 1	Pre Test & Post Test	20	,419	,066

The person correlation analysis indicates a significant value of 0.066, which is greater than the threshold of 0.05. Therefore, there is no discernible association between the pre-test and post-test.

Table 8. Paired samples test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Pre Test - Post Test	-8,150	4,522	1,011	-10,266	-6,034	-8,060	19	,000

Based on the results of data analysis, the sig (2-tailed) value is 0.000 < 0.05, it can be concluded that there are differences in learning outcomes in the Experiment class (pre test and post test).

- Calculation of the value of the difference between the pre-test and the post-test of the control group.

Table 9. Paired samples statistics

		Mean	N	Std. Deviation	Std. Error Mean
Pair 1	Pre Test	14,60	20	4,418	,988
	Post Test	16,65	20	3,200	,716

The analysis results show that the number of samples used was 20 samples with a std deviation value in the pre-test of 4,418 and a std deviation in the post test of 3,200, while the average value of the pre-test was 0.988 and the post test was 0.716.

Table 10. Paired Samples Correlations

		N	Correlation	Sig.
Pair 1	Pre Test & Post Test	20	,302	,195

The person correlation analysis yielded a significant value of 0.195. Since the calculated value of 0.195 is greater than the threshold of 0.05, it may be concluded that there is no statistically significant relationship between the pre-test and post-test.

Table 11. Paired samples test

	Paired Differences					t	df	Sig. (2-tailed)
	Mean	Std. Deviation	Std. Error Mean	95% Confidence Interval of the Difference				
				Lower	Upper			
Pair 1 Pre Test - Post Test	-2,050	4,605	1,030	-4,205	,105	-1,991	19	,061

According to the data analysis results, the significance value (2-tailed) is 0.061, which is greater than 0.05. Therefore, it can be inferred that there is no significant difference in learning outcomes between the control class's pre-test and post-test.

The analysis of the experimental class, which was subject to the project-based learning integrated with the *Latemmamala* cultural approach, indicates a significant improvement in students' writing skills. The mean scores rose markedly from the pre-test to the post-test, with the paired samples t-test revealing a substantial difference (t = -8.060, p < 0.05). This improvement is not just reflected in the increased mean scores but also in the reduced standard deviation, suggesting a more consistent performance across the student group after the intervention. Such results underscore the effectiveness of the culturally infused project-based learning methodology in enhancing the analytical exposition writing skills of students. The change is indicative of the approach's impact on students' ability to structure their writing, use of vocabulary, and overall fluency and coherence, which are critical components of writing proficiency in any language.

In contrast, the control class, which did not receive the *Latemmamala* cultural approach, did not exhibit a statistically significant improvement in their writing skills. The mean scores between the pre-test and post-test exhibited a smaller increase, and the paired samples t-test did not reveal a statistically significant difference (t = -1.991, p > 0.05). This comparison underscores the added value of the integrated *Latemmamala* cultural approach within the project-based learning

framework, highlighting its role in enhancing the educational experience and outcomes for students.

The correlation analysis in both groups provided additional insights into the relationship between the pre-test and post-test scores. While there was some degree of correlation in the experimental group, it was not statistically significant, suggesting that while the intervention influenced the students' performance, individual differences and other factors also played a role in the outcome. This aspect highlights the complexity of educational interventions and the multifaceted nature of learning and performance improvement.

Discussion

Based on the results of the study, the teaching and learning process was effectively structured into three distinct stages. Initially, a pre-test was administered, requiring students to produce an analytical exposition text, serving as a baseline measure of their writing proficiency. Following this, a targeted instructional treatment was applied, focusing on enhancing students' skills in crafting analytical exposition texts through a project-based learning methodology, enriched by the Latemmamala cultural approach. This treatment was designed to immerse students in both the structural techniques of writing and the cultural contexts that make the content more engaging and meaningful.

Post-treatment, a marked increase in students' enthusiasm and skill in writing analytical exposition texts was noted. The post-test conducted subsequent to this treatment phase revealed significant improvements in students' writing abilities. Statistically, the mean scores from the pre-test to the post-test exhibited an increase from 1425 to 2240, a clear indication of the intervention's effectiveness. The standard deviation, which measures the extent of variance in the sample, showed a decrease from the pre-test (4.811) to the post-test (3.185), indicating a more consistent performance across the student cohort after the intervention. This suggests not only an overall enhancement in writing skills but also a more uniform improvement among the students.

The paired samples t-test further substantiated these findings, demonstrating a significant difference in writing skills before and after the intervention (t(observational) = 7.14), which far exceeded the critical value needed to reject the null hypothesis. This statistical significance, with a noted mean difference of 8150, strongly supports the hypothesis that the project-based learning approach integrated with the Latemmamala cultural context significantly enhances students' analytical exposition writing skills.

The study conclusively demonstrates that the project-based learning model, especially when coupled with the Latemmamala cultural approach, significantly benefits the writing proficiency of senior high school students in grade XI at SMA Negeri 3 Soppeng. The findings underscore the efficacy of culturally responsive teaching strategies and project-based learning in not only improving academic skills but also in making learning a more engaging, immersive, and effective process. The notable disparities in pre and post-intervention scores highlight the potential of such integrated approaches in educational settings, particularly in enhancing critical language skills among students.

This study discovered that using diverse strategies and employing project-based learning methodologies might enhance students' writing skills, specifically in the genre of analytical exposition. The kids demonstrated notable progress and enhancements in various facets of their writing, including grammar, vocabulary, mechanics, fluency, and organization. The justification was based on the gain score obtained from the research, which demonstrated increases in students' writing skills before and after the study was conducted. The gain score provided concrete evidence

of the remarkable improvement in the students' writing skills. The inclusion of the Latemmamala cultural approach, together with the diverse range of activities, tasks, and exercises, played a significant role in enhancing the students' comprehension of language meanings and structure.

Integrating project-based learning into the English teaching and learning process increased the students' motivation. Project-based learning provided students with engaging and demanding tasks that encouraged them to approach the teaching and learning process with enthusiasm, critical thinking, and creativity (Butarbutar et al., 2023). The implementation of project-based learning provided students with additional opportunities to engage in writing exercises. This technique enabled the students to comprehend the lesson with great effectiveness and efficiency, as they tackled a real-world problem while working on the project.

Furthermore, the collective endeavors undertaken by the students during the project creation bolstered their engagement in the learning activities. The collaborative nature of the group activities facilitated the students' ability to contribute their knowledge, expertise, and information. They were capable of actively participating and making valuable contributions to the project by using their specialized knowledge and skills. The group had students with varying degrees of skill. It fostered a sense of collaboration and mutual learning among them. Additionally, it fostered a constructive rapport among the kids. Project-based learning strategies have been shown to enhance the writing skills of grade XI students at SMA Negeri 3 Soppeng, based on factual evidence and explanations. The actions undertaken during the implementation of the research enhanced students' knowledge and comprehension. The activities, objectives, and exercises provided additional opportunity for students to practice the target language.

This study's findings corroborate existing research indicating significant enhancements in students' writing skills through diverse strategies and project-based learning methodologies. The progress in grammar, vocabulary, mechanics, fluency, and organization aligns with Bakar et al. (2019), who asserts the effectiveness of project-based learning in improving various aspects of language proficiency. The Latemmamala cultural approach's contribution to this success echoes Muñiz's (2002) findings, emphasizing the importance of culturally responsive teaching in understanding language meanings and structures. Furthermore, the increase in student motivation and engagement through project-based learning is supported by Blumenfeld et al. (1991), who highlight the role of authentic tasks in fostering student interest and deeper learning. The collaborative nature of this learning approach, fostering constructive classroom dynamics, aligns with Johnson and Johnson's (1994) research on the benefits of cooperative learning environments in educational settings.

The empirical evidence provided by the rise in mean scores and the decreased standard deviation suggests the effectiveness of integrating project-based learning with cultural approaches, resonating with Cummins (2000), who advocates for the integration of cultural elements in educational settings to enhance learning outcomes. This study extends the work of Ladson-Billings (2021), who emphasized the importance of culturally relevant pedagogy in improving academic achievement.

The study's limitations, including its specific context and demographic focus, point to the need for broader research, as suggested by Abocioglu et al. (2020), to explore the generalizability of these findings across different cultural and educational contexts. Future research might draw upon Alim et al. (2020) work on culturally sustaining pedagogy to explore the effectiveness of various cultural approaches in project-based learning environments.

Conclusion

Based on the aforementioned data, it can be concluded that utilizing project-based learning methods can serve as a viable approach to teaching English, specifically in the context of writing instruction. Furthermore, the students' comprehension of the various components of writing acquired during the teaching and learning process indicates that the methods employed were effective in enhancing their understanding. This study has demonstrated that employing a combination of diverse strategies within a project-based learning (PBL) framework, particularly when integrated with the Latemmamala cultural approach, significantly enhances students' analytical exposition writing skills. The notable improvements observed in students' grammar, vocabulary, organization, fluency, and mechanics underscore the efficacy of this innovative teaching methodology. The inclusion of Latemmamala, a culturally responsive teaching strategy, has not only augmented the students' linguistic abilities but also deepened their engagement and understanding of the language through a connection to their cultural heritage.

The research novelty lies in its integration of the Latemmamala cultural approach within a PBL framework, an exploration that has not been extensively documented in the field of language education. This study contributes to the body of knowledge by demonstrating how a culturally enriched PBL approach can effectively improve writing skills, thereby offering a new perspective and a practical approach to language teaching. It extends the dialogue on the importance of culture in education and highlights the benefits of culturally responsive teaching strategies, especially in diverse and dynamic learning environments. As educators and curriculum developers seek more effective, engaging, and inclusive methods of instruction, this study provides a compelling case for the integration of cultural approaches into educational strategies. The findings suggest that embracing cultural diversity, especially in language learning, not only enhances academic skills but also fosters a deeper sense of identity and community among students.

Future research should look to replicate this study in different cultural and educational contexts to further validate the effectiveness of the Latemmamala cultural approach in project-based learning environments. Additionally, studies might explore other cultural traditions and their potential to enhance educational outcomes across various disciplines. As the educational landscape continues to evolve, the integration of culturally responsive teaching methods will undoubtedly play a crucial role in shaping inclusive and effective learning experiences for students worldwide.

By highlighting the significance of culturally responsive pedagogy and project-based learning, this study not only contributes to academic discourse but also to the practical field of education, offering insights and strategies for teachers seeking to enrich their pedagogical practices. The successful implementation and positive outcomes of the Latemmamala approach in enhancing students' writing skills offer a promising path forward for educators aiming to integrate more culturally relevant and engaging methods into their classrooms.

References

Abacioglu, C. S., Volman, M., & Fischer, A. H. (2020). Teachers' multicultural attitudes and perspective taking abilities as factors in culturally responsive teaching. *British Journal of Educational Psychology*, *90*(3), 736-752.

Agustin, E. W. (2019, June). Development of Curriculum 2013 as an Effort to Improve the Quality of Education in Indonesia. In *3rd International Conference on Current Issues in Education (ICCIE 2018)* (pp. 178-182). Atlantis Press.

Alim, H. S., Paris, D., & Wong, C. P. (2020). Culturally sustaining pedagogy: A critical framework for centering communities. In *Handbook of the cultural foundations of learning* (pp. 261-276). Routledge.

Arham, M., & Ariani, N. (2020). An analysis of EFL test takers' problems in IELTS writing task. *Tamaddun*, *19*(2), 132-140.

Bahnar, S. H. (2021). Developing Students' Writing Ability Through Google Application. *ELT Worldwide*, *8*(1), 90-96.

Bakar, N. I. A., Noordin, N., & Razali, A. B. (2019). Effectiveness of project-based learning in improving listening competency among ESL learners at a Malaysian TVET College. *The English Teacher*, *48*(1).

BUTARBUTAR, R., MONIKA, S., & LEBA, S. M. R. (2023). Leveraging Collaborative Project-Based Learning to Encourage Speaking Proficiency in EFL classroom: A Case Study in Engineering Department. *Research and Innovation in Applied Linguistics [RIAL]*, *1*(2), 68-79.

Blumenfeld, P. C., Soloway, E., Marx, R. W., Krajcik, J. S., Guzdial, M., & Palincsar, A. (1991). Motivating project-based learning: Sustaining the doing, supporting the learning. *Educational psychologist*, *26*(3-4), DOI: <u>10.1080/00461520.1991.9653139</u>

Brown, H.D. (1994). Principles of Language Learning and Teaching. London: Prentice-Hall, Inc.

Cummins, J. (2000). Biliteracy, empowerment, and transformative pedagogy. *The power of two languages*, 9-19.

Depdiknas, K. (2004). Standar kompetensi mata pelajaran bahasa inggris. *Jakarta: Depdiknas*, 49.

Drew, J. (1999). (Teaching) Writing: Composition, Cultural Sudies, Production. *JAC*, 411-429.

Gay, L. R., Mills, G. E., & Airasian, P. W. (2009). Educational research: competencies for analysis and applications (9th ed*.)*. Upper Saddle River, N.J.: Merrill/Pearson.

Grabe, William & Fredricka L. Stoller. (2002). Teaching and Researching Reading. Malaysia: Pearson Longman.

Graham, S. (2019). Changing how writing is taught. *Review of Research in Education*, *43*(1), 277-303.

Hannay, M., Mackenzie, J. L., & Wekker, H. (Eds.). (2013). *Effective writing in English: A resource guide*. Springer Science & Business Media.

Harmer, Jeremy. (2007). The Practice of English Language Teaching, Fourth Edition. Pearson Longman: Harlow.

Heidari, A., Ketabi, S., & Zonoobi, R. (2014). The role of culture through the eyes of different approaches to and methods of foreign language teaching. *Journal of Intercultural communication*, *14*(1), 1-15.

Hyland, Ken. (2003). Second Language Writing. New York: Cambridge University Press.

Jaleniauskienᴸ, E. (2016). Revitalizing foreign language learning in higher education using a PBL curriculum. *Procedia-Social and Behavioral Sciences*, *232*, 265-275.

Jannah, H., & Arham, M. (2016). Exploring the Politeness Expression of Buginese Language in Bulukumba. *Tamaddun*, *15*(2), 99-104.

<u>Jester, T.E.</u> (2017), "Preparing Culturally Sustaining/Revitalizing Educators: Lessons from Field Experiences in Alaska Native Village Schools", *Culturally Sustaining and Revitalizing*

Pedagogies (*Advances in Research on Teaching, Vol. 29*), Emerald Publishing Limited, Leeds, pp. 127-146. https://doi.org/10.1108/S1479-368720150000029012

Kelly, K., Becker, W., Lipscomb, G., & Robards, A. (2020). Centering culture through writing and the arts: Lessons learned in New Zealand. *The Reading Teacher*, *74*(2), 147-158.

Ladson-Billings, G. (2021, July). Three decades of culturally relevant, responsive, & sustaining pedagogy: What lies ahead?. In *The Educational Forum* (Vol. 85, No. 4, pp. 351-354). Routledge.

Miller, E. C., & Krajcik, J. S. (2019). Promoting deep learning through project-based learning: A design problem. *Disciplinary and Interdisciplinary Science Education Research*, *1*(1), 1-10.

Muñiz, J. (2019). Culturally Responsive Teaching: A 50-State Survey of Teaching Standards. *New America*.

Nurlia, R., & Arini, F. (2017). Effect of bringing local culture in English Language Teaching on students' writing achievement. *KnE Social Sciences*, 187-194.

Nur, M., & Duli, A. (2021, December). Changes in the Utilization of the Proto-Historical Landscape, Soppeng Regency, Indonesia. In *International Congress of Indonesian Linguistics Society (KIMLI 2021)* (pp. 334-339). Atlantis Press.

Ramdani, F. (2022). Makna Dan Nilai Pendidikan Dalam Cerita Rakyat Assalenna Cakkelle 'Asal-Usul Burung Kakaktua'di Kabupaten Soppeng (Pendekatan Sosiologi Sastra). *Aufklarung: Jurnal Kajian Bahasa, Sastra Indonesia, dan Pembelajarannya*, *1*(4), 236-246.

Richard, J.C.and Renandya, W.A.(2002). Methodology in Language Teaching an Anthology of Current Practice, Cambridge University Press.

Ridianur, F., & Utami, S. P. T. (2015). Peningkatan Keterampilan Menyusun Teks Eksposisi Menggunakan Model Pembelajaran Berbasis Proyek Dengan Media Karikatur Berpidato Bertema Kebudayaan Indonesia. *Lingua: Jurnal Bahasa dan Sastra*, *11*(1).

Rosmayanti, E., Supriyanto, T., & Sunarso, A. (2019). Developing poetry writing teaching materials based on environment and local culture for the fourth graders. *Journal of Primary Education*, *8*(4), 25-32.

Sutirman. (2013). Media dan Model-Model Pembelajaran Inovatif. Yogyakarta : Graha Ilmu.

The George Lucas Educational Foundation. (2005). *Instructional Module Project Based Learning*. Accessed on 26 November 2019 dari http://www.edutopia.org/modules/PBL/whatpbl.php

Walker, R., Pressick-Kilborn, K., Sainsbury, E., & MacCallum, J. (2010). A sociocultural approach to motivation: A long time coming but here at last. In *The decade ahead: Applications and contexts of motivation and achievement* (pp. 1-42). Emerald Group Publishing Limited.

Watkins, D. (2012). Learning and teaching: A cross-cultural perspective. In *School Leadership and Administration* (pp. 61-76). Routledge.