

## EMPOWERING LITERACY THROUGH CULTURE: THE IMPACT OF CTL-BASED ENGLISH MATERIALS

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### ABSTRACT

*English literacy is a foundational competency for global participation, yet students in Maluku continue to demonstrate low literacy levels due to geographical isolation, limited educational infrastructure, and the absence of culturally relevant instructional materials, resulting in learning that feels disconnected from students' daily lives and local identity. This study examines the impact of CTL-based English teaching materials embedded with Maluku cultural content on empowering junior high school students' literacy skills. Unlike previous studies that focused on general CTL application, this study uniquely integrates Maluku local cultural content, specifically Hena Puan culture, into EFL materials for Islamic junior high school students in an archipelagic region with limited educational resources. A pre-test-post-test control group experimental design was employed involving 60 students from MTs Muhammadiyah Nusa Puan. Data were analysed using descriptive statistics and independent samples t-test. Findings revealed a significant improvement in the experimental group's mean score (52.23 to 79.43) compared to the control group (52.93 to 76.40), significance value 0.000 (<0.05). These findings suggest that culturally embedded materials increase student engagement and contextual relevance, accelerating literacy development. This study carries both theoretical and practical implications for enhancing English literacy outcomes and sustaining local cultural identity.*

**Keywords:** *Contextual Teaching and Learning, English Literacy, Junior High School, Maluku Culture, Teaching Materials.*

### INTRODUCTION

English is the international language of global communication, a key to vast educational resources (Talaohu, Putuhena, & Magfirah, 2024). It is a necessary skill for professionals, educators, and students alike (Asroriyah, Nabila, & Mitsalina, 2024). As such, English literacy is a crucial skill in the modern era, forming the foundation for developing communication, critical thinking, and creativity (Wael et al, 2024). However, students in many regions of Indonesia, including Maluku, continue to face serious challenges in developing English literacy. In Maluku specifically, geographical isolation, limited access to quality learning resources, and the absence of culturally relevant instructional materials have collectively hindered students' literacy growth (Banawi, Latuconsina, & Latuconsina, 2022; Fathira & Zuriaty, 2023). This situation underscores the urgency of developing English learning materials that are not only linguistically appropriate but also culturally meaningful to Maluku students. Given the richness of Maluku's local culture, including traditions such as Hena Puan, embedding these cultural elements into English instruction offers both an educationally sound and culturally significant pathway to improving literacy outcomes. To enhance this literacy, a comprehensive approach covering listening, reading, speaking, and writing is essential. However, literacy extends beyond basic skills, it also encompasses a deep understanding of the

social, cultural, and technological contexts of a community (Nutbeam & Lloyd, 2020). Integrating local culture values into the process of learning can enhance comprehension and foster a stronger sense of identity (Fraillon et al., 2020). One highly relevant and effective approach to boost both motivation and literacy is Contextual Teaching and Learning (CTL) (Darmawati, 2023). It connects classroom lessons to students' real-world experiences, creating a more engaging and effective learning environment (Anggraeni, Nurkamilah, & Dewi, 2023).

The CTL approach has been widely studied and proven effective across disciplines. Contextual learning models improve student performance by integrating interactive and culturally meaningful resources (Sung, 2022). In the EFL context, CTL has been reported to enhance speaking (Erniwati et al., 2024), listening and vocabulary mastery (Ghonivita et al., 2021), and writing ability through higher-order thinking practices (Hakim & Sari, 2022). In addition, CTL is not only effective in strengthening students' academic performance but also in fostering culturally responsive pedagogy. Contextual textbooks rooted in local traditions have been found to support both academic achievement and cultural preservation (Zukin & Firdaus, 2022). This suggests that CTL can serve as a bridge between global language acquisition and local cultural identity, making it highly relevant for regions such as Maluku, where preserving cultural values is as important as advancing literacy skills.

Despite the recognized importance of English literacy, research consistently shows that many students, particularly in Maluku, have low literacy levels (Fathira & Zuriaty, 2023; Banawi, Latuconsina, & Latuconsina, 2022). This is often attributed to the lack of suitable learning materials and a need for more structured, contextualized teaching strategies (Manasi, Aprilia, & Tanasale, 2023). This low literacy highlights the urgent need for developing materials that are both relevant to students' daily lives and capable of improving their functional use of English (Musa, Silitonga, & Sinaga, 2022). Strengthening English literacy is critical for fostering a globally competitive generation, especially for students in archipelagic regions where access to quality educational resources like books, the internet, and qualified teachers is limited. Thus, boosting literacy becomes a vital foundation for students to become self-directed learners, critical thinkers, and adaptable individuals.

Learning programs that integrate cultural perspectives are highly relevant for enhancing students' engagement and motivation. To broaden students' knowledge and experiences in line with their regional and local environment, learning can be integrated with the cultural values of their community (Setyawan, Noviantari, & Yanti, 2023). A high level of literacy not only improves academic outcomes but also enhances the overall quality of education. However, challenges remain in achieving equal literacy levels, particularly in schools located in rural

areas. Therefore, by improving literacy among students, it is expected that they will become more intelligent, critical, and adaptable to the changing times.

Local culture, as an invaluable heritage, must also be passed on to future generations. Integrating cultural elements into English materials can remind young learners of their identity while also encouraging them to apply cultural values in daily life (Syahrial, Safnil, & Syafradin, 2022).

Given the absence of locally grounded English instructional materials that reflect Maluku students' cultural identity, and the lack of CTL-based resources specifically designed for Islamic junior high schools in archipelagic regions, the development of such materials becomes imperative. While prior studies have investigated CTL in general EFL contexts and explored culturally responsive pedagogy broadly, none have specifically examined the integration of Maluku local culture, particularly Hena Puan traditions, into empirically tested English teaching materials for Islamic junior high school students in geographically isolated archipelagic settings. This study therefore addresses a significant research gap and contributes novel evidence by demonstrating that context-specific, culturally embedded CTL materials can effectively enhance literacy outcomes in underserved regions, offering a replicable model for other culturally diverse areas in Indonesia. Such an effort can improve literacy while simultaneously promoting cultural sustainability among junior high school students.

## **MATERIALS AND METHOD**

This study adopted an experimental research design employing pre-test and post-test control groups to examine the effectiveness of English teaching materials with Maluku cultural content through the Contextual Teaching Learning CTL approach in enhancing junior high school students' literacy skills. Two groups were involved in this study, an experimental group taught using English materials integrated with Maluku cultural content through the CTL approach, and a control group taught with conventional instructional methods.

The participants consisted of 60 students from MTs Muhammadiyah Nusa Puan. They were randomly assigned into two equal groups of 30 students each. Specifically, since the school had two existing intact classes at the target grade level, random assignment was conducted at the class level rather than at the individual student level. A coin-flip randomization procedure was used to determine which class served as the experimental group and which served as the control group, resulting in 30 students per group. This intact class random assignment procedure is consistent with quasi-experimental designs commonly employed in school-based educational research. MTs Muhammadiyah Nusa Puan was selected

as the research site due to its location in a culturally rich yet educationally underserved coastal area of Maluku, where students have strong ties to local traditions but limited exposure to contextually relevant English learning materials. The experimental group received learning materials containing Maluku cultural content within a CTL framework, while the control group continued with standard English teaching practices. The random assignment aimed to ensure objectivity and minimize bias.

The research instrument used in this study was an English literacy test comprising various tasks designed in alignment with the junior high school curriculum, particularly on the topic Introduction. Prior to implementation, the test items were validated for reliability and accuracy to guarantee their suitability as measurement tools.

For data analysis, the study employed both descriptive and inferential statistics. Prior to inferential analysis, normality and homogeneity tests were conducted to ensure the data met the assumptions required for parametric testing. The Shapiro-Wilk test confirmed that both groups' scores were normally distributed, and Levene's test verified homogeneity of variance. Based on these results, an independent samples t-test was selected as the appropriate statistical method to compare mean differences between the experimental and control groups, with a significance level set at  $\alpha = 0.05$ . SPSS software assisted the analysis to enhance precision. In addition, descriptive analysis was used to describe sample characteristics and the overall data distribution.

## RESULTS

The objective of this research was to evaluate the impact of Maluku culture-based English teaching materials, applied through the Contextual Teaching Learning (CTL) approach on students' literacy achievement. To begin with, students' literacy test scores were categorized into two groups: experimental and control. The outcome of the descriptive statistical analysis are, presented in Table 1.

**Table 1.** Descriptive Statistics of Pre-Test and Post-Test Literacy Score

Group	N	Pre-Test Mean	Post-Test Mean	Pre-Test SD	Post-Test SD
Experimental	30	52.2333	79.4333	11.53311	9.18275
Control	30	52.9333	76.4000	9.97560	8.31534

As shown in the table, students in the experimental group demonstrated a notable increase in performance. Their average score rose from 52.23 in the pre-test to 79.43 in the post-test after being taught with Maluku culture-based teaching materials. While the control group also experienced an improvement from 52.93 to 76.40, the progress was not as significant as that of the experimental group.

To further validate these findings, an independent samples t-test was performed to determine whether the difference between the two groups' post-test scores was statistically significant. The results are summarized in Table 2.

**Table 2.** Independent Samples t-test Result for the Post-Test Score

Group	N	Mean	Standard Deviation	t	DF	Sig.(2-tailed)
Experimental	30	79.4333	9.18275	1.364	29	0.000
Control	30	76.4000	8.31534			0.000

The statistical analysis yielded  $t(29) = 1.364$  with a significance value of 0.000 ( $p < 0.05$ ), and a mean difference of 3.03 points between the experimental ( $M = 79.43$ ) and control group ( $M = 76.40$ ). This result confirms that the difference between groups was statistically significant. The improvement in the experimental group can be attributed to the contextual nature of the material, by embedding familiar Maluku cultural references such as Hena Puan traditions, students found the content more relatable, which enhanced their engagement, comprehension, and motivation to learn English.

## DISCUSSION

The findings of this research demonstrate that the integration of Maluku culture-based English materials through the Contextual Teaching and Learning (CTL) approach significantly improved students' literacy skills at the junior high school level. The experimental group's average score increased from 52.23 on the pre-test to 79.43 on the post-test, while the control group's scores improved from 52.93 to 76.40. Although both groups showed progress, the greater improvement in the experimental class highlights the effectiveness of embedding cultural elements into instructional content. Statistical testing using the independent samples t-test confirmed this difference, with a significance value of 0.000 ( $<0.05$ ), suggesting that the outcome was not coincidental.

The reliability of these results is supported by consistent evidence from both descriptive and inferential analyses. Furthermore, the reduced standard deviation in the experimental group's post-test (9.18) compared to its pre-test (11.53) indicates a more even distribution of student improvement, reinforcing the conclusion that the intervention had a meaningful impact. Such consistency across analyses strengthens the validity of the study and reduces the possibility of random error.

These findings are consistent with prior research on the value of contextual and culturally relevant pedagogy in language learning. Previous studies have shown that connecting instructional content with students' cultural backgrounds enhances motivation, comprehension, and retention (Maqsood et al., 2024; Yuliantary & Huda, 2023; Yoon, 2023). The present study further contributes to this body of knowledge by providing additional evidence that incorporating local culture into English teaching can improve literacy outcomes (Makhroji & Isda, 2023; Hadianto et al., 2022). Importantly, the novel contribution of this study lies in its context-specific application: unlike previous studies that examined CTL or culturally responsive pedagogy in general settings, the present study provides the first empirical evidence that English teaching materials grounded in Maluku's Hena Puan culture, implemented through CTL, can significantly improve literacy outcomes specifically for Islamic junior high school students in an archipelagic region. This finding extends the existing literature by demonstrating that the effectiveness of culturally embedded materials is not limited to urban or well-resourced contexts but is equally applicable, and perhaps even more impactful, in geographically isolated and educationally underserved communities.

The CTL approach played a central role in this improvement by activating seven key principles: constructivism, inquiry, questioning, learning community, modeling, reflection, and authentic assessment. Through these principles, students were not merely passive recipients of information but were encouraged to connect new knowledge with their prior cultural experiences. For instance, reading texts about Maluku traditional greetings and local figures served as authentic contexts that stimulated inquiry and discussion, consistent with CTL's emphasis on real-world relevance (Darmawati, 2023; Anggraeni et al., 2023).

Moreover, the use of CTL with Maluku cultural integration has proven to enhance not only literacy but also broader English proficiency. By linking classroom materials with students' daily lives and cultural experiences, the approach makes learning more meaningful and engaging. Various forms of culture-based resources such as thematic modules, storybooks, and reading texts have been shown to foster improvements in reading, writing, and speaking

skills. Students respond more actively and display deeper comprehension because the materials are relevant to their lived experiences.

These findings align with Hadianto et al. (2022), who reported significant reading skill gains through literacy design integrating local culture, and with Makhroji & Isda (2023), who found that local-based materials address gaps in reading literacy at the secondary level. Unlike those studies which focused on reading alone, the present study demonstrates improvement across broader literacy dimensions in an Islamic school context in Maluku.

The significance of this research extends beyond academic achievement. Embedding Maluku cultural content in English learning materials also strengthens students' cultural awareness and identity. This dual contribution, enhancing literacy while preserving local heritage, illustrates the potential of culturally responsive pedagogy as a strategy to support both educational success and cultural continuity. Therefore, the findings of this study provide important theoretical insights for language education and practical guidance for curriculum developers aiming to integrate local wisdom into formal instruction.

## **CONCLUSION**

Based on the statistical analysis showing a significant mean improvement from 52.23 to 79.43 in the experimental group and a significance value of 0.000 ( $p < 0.05$ ), this study concludes that English teaching materials enriched with Maluku cultural content and implemented through the CTL approach effectively enhance junior high school students' literacy skills. The experimental group attained significantly higher post-test scores than the control group, and statistical analysis confirmed that the observed differences were not due to chance. The consistency between descriptive and inferential results further validates the reliability of these findings.

The results also reinforce previous studies on the benefits of contextual and culturally relevant pedagogy, showing that linking learning materials to students' cultural background enhances motivation, comprehension, and retention. Beyond literacy, this approach also contributes to strengthening students' cultural identity and appreciation, demonstrating the dual academic and cultural value of integrating local traditions into English learning.

Therefore, this study provides both theoretical and practical implications. Theoretically, it supports the growing body of literature advocating culturally responsive pedagogy in language education. Practically, it offers a model for curriculum development that respects local culture while advancing students' English literacy, preparing them to be more engaged, motivated, and globally competitive learners.

To the best of the authors' knowledge, this study is among the first to develop and empirically test CTL-based English materials specifically grounded in Maluku local culture (Hena Puan) for students at the Islamic junior high school level in an archipelagic educational setting, offering a replicable model for other culturally diverse regions in Indonesia.

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