



DOI: <https://doi.org/10.52714/dthu.14.06S.2025.1696>

A INTEGRATING LOCAL CULTURE INTO VOCABULARY INSTRUCTION: A PRE-EXPERIMENTAL STUDY IN A SPORTS GIFTED HIGH SCHOOL

Tran Thi Ngoc De^{1*} and Vo Phan Thu Ngan²

¹Postgraduate, Dong Thap University, Cao Lanh 870000, Vietnam

²Foreign Languages Faculty, Dong Thap University, Cao Lanh 870000, Vietnam

*Corresponding author, Email: tngocde@gmail.com

Article history

Received: 07/11/2025; Received in revised form: 20/11/2025; Accepted: 29/11/2025

Abstract

This pre-experimental study employed a one-group pretest–posttest design to examine the effect of integrating local cultural elements into vocabulary instruction for 30 eleventh-grade students at a Sports Gifted School in Vietnam. Over a 10-week intervention based on the Grade 11 Global Success textbook, a range of local cultural items and activities was incorporated into Units 6 and 10 (lesson Getting started, Speaking, and Communication and Culture/CLIL). Data were collected through a 20-item vocabulary test administered before and after the intervention, as well as through semi-structured interviews with five students. For the quantitative data, a paired-samples t-test was conducted using SPSS to compare students' vocabulary performance before and after the intervention, revealing a statistically significant improvement ($p < .001$). The thematic analysis of interview responses indicated that cultural integration fostered greater motivation, confidence, and word retention by linking new terms with familiar contexts and interactive tasks. Some challenges, including long and limited opportunities for oral practice, were also reported. Overall, the study highlights the pedagogical value of embedding local culture in vocabulary lessons and suggests directions for future research with larger and more diverse samples.

Keywords: *Local culture, pre-experimental study, sports gifted students, vocabulary learning.*

Cite: Tran, T. N. D., & Vo, P. T. N. (2025). A integrating local culture into vocabulary instruction: A pre-experimental study in a sports gifted high school. *Dong Thap University Journal of Science*, 14(06S), 319-336. <https://doi.org/10.52714/dthu.14.06S.2025.1696>

Copyright © 2025 The author(s). This work is licensed under a CC BY-NC 4.0 License

TÍCH HỢP VĂN HÓA ĐỊA PHƯƠNG VÀO DẠY TỪ VỰNG: NGHIÊN CỨU TIỀN THỰC NGHIỆM VỚI HỌC SINH NĂNG KHIẾU THỂ THAO

Trần Thị Ngọc Dề¹ và Võ Phan Thu Ngân²

¹*Học viên cao học, Trường Đại học Đồng Tháp, Việt Nam*

²*Khoa Ngoại ngữ, Trường Đại học Đồng Tháp, Việt Nam*

**Tác giả liên hệ, Email: ttngocde@gmail.com*

Lịch sử bài báo

Ngày nhận: 07/11/2025; Ngày nhận chỉnh sửa: 20/11/2025; Ngày duyệt đăng: 29/11/2025

Tóm tắt

Nghiên cứu tiền thực nghiệm này sử dụng thiết kế tiền kiểm – hậu kiểm trên một nhóm duy nhất nhằm khảo sát tác động của việc tích hợp các yếu tố văn hoá địa phương vào giảng dạy từ vựng tiếng Anh cho 30 học sinh lớp 11 tại trường trung học phổ thông năng khiếu thể dục thể thao. Trong suốt 10 tuần can thiệp, dựa trên sách giáo khoa Tiếng Anh 11 – Global Success, nhiều mục từ vựng và hoạt động liên quan đến văn hoá địa phương được lồng ghép vào Unit 6 và Unit 10 (phần Getting Started, Speaking và Communication and Culture/CLIL). Dữ liệu được thu thập thông qua bài kiểm tra từ vựng gồm 20 câu hỏi được thực hiện trước và sau can thiệp, cùng với phỏng vấn bán cấu trúc với 5 học sinh. Đối với dữ liệu định lượng, phép kiểm định t có cặp (paired-samples t-test) được thực hiện bằng phần mềm SPSS nhằm so sánh kết quả học từ vựng của học sinh trước và sau can thiệp, cho thấy sự cải thiện có ý nghĩa thống kê ($p < .001$). Phân tích chủ đề từ phỏng vấn cho thấy việc tích hợp yếu tố văn hoá giúp tăng động lực học tập, sự tự tin và khả năng ghi nhớ từ vựng nhờ liên kết các từ mới với bối cảnh quen thuộc và các hoạt động tương tác. Tuy nhiên, nghiên cứu cũng ghi nhận một số khó khăn như các từ dài và ít cơ hội thực hành nói. Nhìn chung, nghiên cứu nhấn mạnh giá trị sư phạm của việc lồng ghép văn hoá địa phương vào bài học từ vựng, đồng thời đề xuất hướng nghiên cứu tiếp theo với mẫu lớn hơn và đa dạng hơn.

Từ khóa: *Học từ vựng, học sinh năng khiếu thể thao, nghiên cứu tiền thực nghiệm, văn hoá địa phương.*

1. Introduction

Since the Vietnamese Ministry of Education and Training (MOET) launched the General Education Curriculum in 2018, English language teaching in Vietnam has undergone significant changes, most notably with the introduction of the Global Success textbook series co-published by MOET and Pearson under the revised Education Law (Vietnam National Assembly, 2019). One key feature of this series is the inclusion of dedicated Cultural/CLIL sections, which reflect the principle that language and culture are inseparable and that learners require cultural context to use language meaningfully (Kramsch, 1993).

A closer analysis of the Grade 11 textbook shows that these sections integrate texts and visuals to present Vietnamese culture, native-speaker culture, and modernised global culture (Vuong et al., 2025). However, Vuong et al. (2025) also noted that the Getting Started lessons tend to highlight modern and international cultural themes rather than local, familiar contexts, which may make the content feel distant from students' lived experiences. Meanwhile, within the national curriculum, students also study *Giáo dục địa phương* (Local Education). However, because this subject is taught entirely in Vietnamese, learners do not acquire the English vocabulary needed to express or discuss these cultural topics. This situation creates a mismatch between students' cultural knowledge and their linguistic ability.

Taken together, these limitations underscore the need to incorporate culturally relevant and locally grounded content into English lessons to make the curriculum more engaging and to provide meaningful contexts for vocabulary development, an approach shown to enhance learners' motivation and participation (Nguyen & Newton, 2019; Hoa & Vien, 2018).

A growing body of international research has shown that incorporating cultural content into language lessons supports vocabulary retention and encourages more active participation, primarily when the materials draw on learners' familiar cultural contexts (Alwasilah, 2024; Ratri et al., 2024; Lee, 2023; Manurung & Harjanto, 2015; Sariana et al., 2022). In Vietnam, emerging studies have also highlighted the value of embedding regional cultural themes in English instruction, noting improvements in students' confidence and vocabulary use (Ton, 2025; Hung et al., 2025). Even with these positive results, there remains limited research on how to effectively incorporate local culture into specialized schools, such as sports gifted schools, within a specific region. To bridge the gap, this study employed a pre-experimental one-group pretest–posttest design, using vocabulary tests and semi-structured interviews as the primary instruments to answer two guiding questions: (1) What is the effect of local culture integrations on students' vocabulary retention? (2) What are the students' perceptions of the process of local culture integration?

2. Literature review

2.1. Local culture integration framework

In this study, two theoretical frameworks are applied. First, Byram's Intercultural Communicative Competence model (Byram, 1997) emphasises that language learning is inseparable from cultural understanding. Using familiar cultural elements such as local heritage, festivals, and landscapes helps learners connect new vocabulary to their lived experiences, making word learning more meaningful. Second, Vygotsky's Sociocultural Theory (Vygotsky, 1978) highlights that learning develops through interaction and the support from others. Together, these two theories provide a clear rationale for using culturally based vocabulary lessons, as -integrating local culture responds directly to learners' real needs, which in turn can enhance their motivation, participation, and overall learning outcomes. (Hung et al., 2025).

2.2. Vocabulary in EFL learning and retention techniques

Vocabulary plays an important role in the process of learning and using a foreign language. Recent research highlights that vocabulary plays a fundamental role in second language learning, influencing learners' comprehension, expression, and overall proficiency (Sun et al., 2023). Similarly, Nation (2013) views vocabulary as the heart of language learning, because words are the primary carriers of meaning in any communicative act. In EFL contexts such as Vietnam, where exposure to English outside the classroom is limited, vocabulary instruction becomes even more crucial. Learners heavily depend on classroom input to expand their lexical range and use English with confidence (Alqahtani, 2015). Research has consistently shown that a strong vocabulary base enhances learners' reading comprehension, listening fluency, and writing quality (Feng & Webb, 2020). Moreover, vocabulary knowledge supports grammatical accuracy and pragmatic appropriateness, enabling learners to understand and produce language that is contextually and culturally appropriate (Gass & Mackey, 2013).

Word retention refers to the ability to store and recall vocabulary over time, and several techniques have been shown to support this process. First, explicit techniques, for example, clear explanations, translation, word cards, and deliberate practice, help learners form accurate initial representations of new words (Nation, 2013; Schmitt, 2010). Second, incidental learning, which occurs through reading, listening, and communicative exposure, strengthens retention by providing repeated encounters with vocabulary in meaningful input (Batterink & Neville, 2011; Webb & Nation, 2017). Third, retention is also enhanced through semantic processing, as deeper engagement with word meaning leads to more durable memory traces (Craik & Lockhart, 1972). In addition, repeated review is crucial for consolidating vocabulary over time (Nation, 2013). Together, these techniques show that combining purposive instruction with frequent and meaningful exposure promotes stronger long term vocabulary retention.

2.3. Previous relevant studies

A growing body of international research highlights that integrating local cultural elements into English lessons can make vocabulary learning more engaging and effective.

From the Asian context, several studies have explored the role of local culture in vocabulary learning. In Indonesia, Manurung and Harjanto (2015) used an action research approach that incorporated folk stories and traditional games into English lessons. Their results showed that students became more motivated and retained vocabulary more effectively when the content reflected familiar cultural themes. Building on this idea, Sariana et al. (2022) conducted a quasi-experimental study in Malaysia, utilizing local folktales as teaching materials. They found that cultural storytelling not only improved students' vocabulary scores but also made learning more enjoyable, although the study did not measure long-term retention. Extending the evidence from Indonesia, Langi (2024) adopted a qualitative design and found that photographs of Luwu cultural activities helped learners better understand and recall new words, highlighting how visual cultural materials can further reinforce vocabulary learning. Together, these studies confirm that integrating local cultural elements—whether through stories, games, or images—can make vocabulary instruction more meaningful and memorable for EFL learners in the region.

In a different context, Chouaf (2017) explored the experiences of Moroccan university students through classroom interviews and teacher feedback. The study revealed that linking new vocabulary to familiar customs encouraged deeper engagement, though many teachers still relied on imported materials that offered few cultural connections. Similarly, Franco (2025) employed a mixed-methods design with Spanish-speaking learners and found that

embedding vocabulary in culturally familiar situations resulted in more meaningful and lasting learning experiences.

In Vietnam, most previous studies on local culture integration have focused on its broader educational benefits rather than its direct effects on vocabulary learning. Hoa and Vien (2018), through classroom observations and interviews with high school students, found that culturally enriched materials improved students' confidence, comprehension, and participation. Similarly, Nguyen and Newton (2019), employing a mixed-methods design with secondary and tertiary teachers, reported that cultural content increased lesson relevance and learner motivation, although challenges such as limited time and resources persisted. Recent intervention studies have also reported positive outcomes. For instance, Ton (2025) used a quasi-experimental design with non-English major university students and identified gains in cultural awareness and language identity. Hung et al. (2025) demonstrated that integrating local culture through project-based learning enhanced learners' communication skills, cultural competence, and autonomy.

Research across contexts indicates that integrating local culture can make vocabulary learning more meaningful and enduring. Yet in Vietnam, empirical studies directly linking cultural integration to vocabulary retention remain limited. Most have focused on cultural awareness and engagement rather than long-term word learning, and few have been carried out in specialized settings such as sports schools, where students' heavy training schedules restrict their exposure to English and cultural content. Moreover, few studies have adopted mixed-methods approaches that combine test data with learners' reflections, resulting in an incomplete understanding of both learning outcomes and perceptions. To fill these gaps, the present study examines the impact of incorporating Dong Thap's local cultural elements into English vocabulary lessons at Dong Thap Sports Gifted School. Using a mixed-methods approach, this study aims to provide empirical evidence on how culturally responsive vocabulary instruction can enhance learners' motivation, comprehension, and long-term retention within the Vietnamese high school context.

3. Methods

3.1. Research design

This study adopted a pre-experimental one-group pretest–posttest design (Creswell & Cresswell, 2017) to examine the effect of integrating local culture into English vocabulary instruction. This design was chosen because only one Grade 11 class was available in Dong Thap province, making it impossible to form a control group. Because there was no control group, it was difficult to confirm that the improvement in students' vocabulary was entirely due to the intervention, as other factors might also have played a role. However, the design was appropriate for the school context and effective for detecting within-group improvement over time. It also served as a preliminary investigation, providing foundational evidence for future studies employing more rigorous experimental designs.

The participants were 30 grade 11 students at Dong Thap Sports Gifted School, comprising 21 males and nine females. Nineteen of them were 16 years old, and eleven were 17 years old. Based on their final exam results at the end of the first semester of academic year 2024 -2025, three students were rated as excellent, six as good, ten as relatively good, eight as average, and three as weak in English. Regarding their backgrounds, three students came from other provinces, 27 students lived in Dong Thap province, Vietnam. The researcher was an external English teacher who conducted the twelve-week intervention for research purposes. Ensuring the consistent lesson implementation and maintaining some objectivity as an outside practitioner. However, since the researcher was directly involved in teaching and data

collection, potential bias could have arisen. To minimise this, objective test scoring procedures were used. Identical test formats appeared in both the pretest and posttest to ensure reliability.

The research lasted twelve weeks and had four stages: (1) a pretest measured students' starting vocabulary; (2) a ten-week intervention featured a lesson for one or two weeks using local cultural topics; (3) a posttest measured vocabulary improvement; and (4) semi-structured interviews explored student perceptions and retention.

3.2. Integration of local culture in vocabulary instruction

The instruction focused on integrating local cultural vocabulary into English lessons. In total, a range of culturally embedded target words was incorporated across Units 6 and 10. These items were selected because they align more closely with the themes of the Grade 11 English textbook and the orientations of the 2018 General Education Programme, which emphasises the integration of local identity and real-life contexts into language learning. In addition, although this school specialises in sports training, sports-related vocabulary was not selected as the main focus because the range of pedagogically useful vocabulary in this domain is relatively limited, with many terms being technical or academic. The choice of this participant group was also intentional, as there has been very little research conducted in specialised learning environments such as a sports gifted school, where students must balance intensive sports training with academic study. Therefore, making them a unique group for exploring how culturally contextualised vocabulary instruction operates in such a specialised environment.

The integrated sessions were conducted mainly during the Getting Started, Speaking, and Communication and Culture/CLIL lessons of the textbook, where the selected cultural vocabulary items were introduced alongside other target words. Throughout the intervention, the teacher followed the sequence of activities in the Grade 11 Global Success textbook, while embedding additional questions and tasks related to local culture to enrich the lessons. However, in the practice stage, certain activities in the book were replaced or adapted with tasks connected to local culture. Instead of following a routine pair-work drill, they might prepare a short talk about a cultural site, act out a short role-play, or design a poster to present, using words from the lesson and local culture vocabulary. In this way, the class still followed the textbook sequence, but the activities were more closely tied to the students' own environment. The timeline protocol of a full 12-week intervention is summarised in the table below.

Table 1. The timeline protocol of a full 12-week intervention

Phase	Description	Week(s)
Phase 1: Pilot Study	Testing the initial vocabulary test and interview questions on students from other grades and a teacher, adjusting the difficulty.	Week 1
Phase 2: Pretest	Administering a vocabulary test to participants.	Week 2
Phase 3: Intervention	10-week program integrating local culture vocabulary.	Weeks 3–10
Phase 4: Posttest	Same test format as pretest to compare results.	Week 11
Phase 5: Interview	A semi-structured interview was conducted with 5 participants	Week 12

3.3. Data collection instruments

3.3.1. Pretest and posttest

The vocabulary test was designed based on Nation's Vocabulary Levels Test (2013). It included 20 questions divided into three sections: Matching, Gap-fill with a Word Bank, and Multiple Choice on Usage. All questions came from the Grade 11 Global Success textbook and used local cultural references. This setup measured how well students could recall, understand, and use vocabulary. The design enhanced the validity and reliability of the assessment. (Appendix A)

Both the pretest and posttest were administered in class under standard exam conditions. Students were instructed to complete the test individually without the use of dictionaries or mobile devices. The researcher and the class teacher monitored the sessions to ensure compliance with testing protocols and to answer procedural questions without giving hints about the answers.

3.3.2. Interview

To better understand students' perceptions, the study used a semi-structured interview. The questions were adapted from Howard (2011), a doctoral study that focused on parents' views of early education. While Howard's interview explored general experiences, motivation, and challenges, the questions in this study were adjusted to suit the context of vocabulary learning through local culture. (Appendix B)

For the present study, these items were carefully modified to address the research focus on local culture-based vocabulary instruction. In particular, references to online learning and early education were rephrased to highlight cultural topics, vocabulary retention, and students' cultural pride. After the 10-week intervention, five students from the participating class were voluntarily invited to join the interview. The final interview guide consisted of five open-ended questions organised into two major areas:

(a) Effects on vocabulary learning

- Compared with regular vocabulary lessons, how do you feel about learning English vocabulary through local cultural topics (such as festivals, heritage sites)?
- Which local-culture activity or lesson did you find most enjoyable and helpful for remembering new vocabulary? Why?
- Among the new English words you learned, which ones do you remember best, and what helped you remember them?

(b) Students' perception

- Did learning vocabulary related to your hometown make you feel more motivated or proud? Do you feel more willing to use English when talking about your local culture? Why or why not?
- What difficulties, if any, did you face when learning vocabulary through local cultural topics, and what suggestions do you have to improve these lessons?

3.4. Data collection and analysis

3.4.1. Pretest and posttest

The study lasted twelve weeks and used pretest–posttest measures to examine students' vocabulary development. Before the main intervention, the vocabulary test was piloted with

three students not involved in the main study. Their feedback identified minor wording issues and ensured that the test instructions and format were clear. To increase content validity, the test was reviewed by three teachers who met established criteria for reviewers, including subject expertise, familiarity with the learner group, and sufficient teaching experience (Kalkbrenner, 2021; Grant & Davis, 1997; Zamanzadeh et al., 2015). The group included a university lecturer in English methodology, the English teacher of the participating class, and another English teacher from the same school not involved in the intervention. Their comments on clarity, difficulty level, and the balance between textbook and cultural items were used to improve the instrument before administering it.

In week 2, the pretest was administered to the eleventh-grade students in a 45-minute classroom session. From weeks 3 to 10, the intervention was implemented in the Getting Started lesson, the Speaking lesson, and the Communication and Culture/CLIL lesson, in which local cultural content was integrated into vocabulary and activity instruction. In week 11, the posttest was conducted to measure students' vocabulary development. The same version of the test was used for both the pretest and the posttest to maintain consistency and reduce students' anxiety about encountering unfamiliar formats.

The scoring followed the rubric of the Nation's Vocabulary Levels Test (2013): one point for each correct answer, zero for incorrect or blank responses, and no partial credit. As the test consisted entirely of objective items, including matching, gap-fill, and multiple-choice formats, all papers were scored directly by the researcher and another English teacher at this school to ensure accuracy and efficiency. With 20 items, the maximum possible score was 20, and the minimum was 0. For interpretation, a score of 13 or higher (65%) was set as the standard for satisfactory vocabulary mastery. This cut-off was based on practices in vocabulary testing (Webb et al., 2017) and aligns with grading norms widely applied in Vietnam, where 6.5 out of 10 is considered a fair pass. Scores below this mark were classified as limited mastery, while higher scores indicated a stronger command of the vocabulary taught.

After scoring, all test results were entered into IBM SPSS Statistics (version 26.0) for analysis. Descriptive statistics (mean, standard deviation, minimum, and maximum) were calculated to provide an overview of student performance and to assess whether the differences between pretest and posttest scores were statistically significant. A paired-samples t-test was then performed. This combination of descriptive and inferential analyses enabled the researcher to evaluate both the extent of vocabulary gains and the reliability of the observed changes.

3.4.2. Interview

Five students took part in semi-structured interviews after the intervention in week 12. Each interview lasted approximately 10 to 15 minutes and was conducted in a different classroom during the break to minimise disruptions and make students feel more at ease sharing their views. During the interviews, students responded in Vietnamese to express their ideas more clearly. With their permission, the conversations were recorded on a mobile phone, and all recordings were later anonymised by removing personal details to ensure confidentiality.

Thematic analysis was carried out by following Braun and Clarke's (2006) framework, which involved becoming familiar with the transcripts, developing initial codes, grouping these codes into potential themes, refining and reviewing the themes, defining them clearly, and finally reporting the findings. This systematic process ensured that the analysis transparently and reliably reflected the content and depth of students' responses.

3.5. Ethical considerations

Before the study began, the researcher sought the official approval of the administration of Dong Thap Sports Gifted school to use their 11th-grade students in the research. The study's goal, steps, and predicted benefits were made clear to the participating school leaders and students. Participants did not have to participate and were told they could quit the study without punishment.

All responses and personal information were kept confidential and used solely for the study. Codes were used instead of real names to protect privacy. The study followed the ethical guidelines for educational research, ensuring everyone was treated with care and that all procedures were consistently transparent.

4. Results and discussion

4.1. Pretest and posttest findings

The quantitative findings were obtained from a vocabulary test administered before and after the intervention. The test consisted of three sections—Matching, Gap-fill, and Multiple-choice—and included many target words related to local heritage and ecosystems. These target items (e.g., *biodiversity, relic area, accident house, flower village, mausoleum, ecotourism, heritage, ecosystem, monument, conservation, national park, architecture, wetlands, national hero, campaigns,...*) were embedded across all sections to measure students' recall and recognition of vocabulary taught through cultural integration. The complete score list is provided in Appendix C to illustrate students' performance on each subsection before and after the treatment. As shown in the score list, most students improved after the 10-week intervention. To analyse these gains, descriptive statistics, reliability indices, and a paired-samples t-test were conducted.

4.1.1. Descriptive statistics of matching, gap-fill, multiple choice section

The researcher analysed the pretest and posttest results using IBM SPSS 26 (IBM Corp., 2019). A descriptive statistics of three sections in the vocabulary test, a paired-samples t-test was applied to compare their vocabulary scores before and after the course to check whether students made progress. Table 2 presents the detailed results.

Table 2. Descriptive statistics of matching, gap-fill, MCQ (n = 30)

Section	Test	N	Mean	SD	Std. Error Mean
Matching	Pretest	30	3.07	1.20	0.22
	Posttest	30	3.90	0.99	0.18
Gap-fill	Pretest	30	3.13	1.17	0.21
	Posttest	30	3.83	1.46	0.27
MCQ	Pretest	30	2.47	0.86	0.16
	Posttest	30	3.37	1.19	0.22

The increases in mean scores across all three sections of Matching, Gap-fill, and MCQ demonstrate that students produced more correct responses to the target vocabulary items in the posttest than in the pretest. In the Matching section, which contained six target items, the mean score rose from 3.07 in the pretest to 3.90 in the posttest. This means that, on average, students moved from correctly matching roughly half of the words to correctly matching almost two thirds of them. The increase of 0.83 points corresponds to nearly one additional

correct word per student in this section alone. The standard deviation also decreased slightly (from 1.20 to 0.99), suggesting that not only did students, on average, answer more items correctly, but their scores also became more consistent across the group. This pattern indicates that more students correctly linked the target vocabulary (e.g., biodiversity, relic area, fauna, heritage, mausoleum, ecotourism) to their meanings after the intervention.

For the Gap-fill section, which required learners to recall and produce eight target words, the mean increased from 3.13 to 3.83. Although this section is cognitively more demanding than simple matching, students still gained around 0.70 points, equivalent to almost one more correctly supplied word per learner. The minimum score remained 1.00, but the maximum rose from 5 to 7, indicating that the highest performing students correctly produced most of the target items in context. The larger posttest standard deviation (1.46) reflects that some students made substantial gains, while others improved more modestly, a pattern typical of productive vocabulary tasks. Overall, this pattern suggests that more students were able to retrieve and use the culturally embedded vocabulary appropriately in sentence contexts after instruction.

The Multiple-choice (MCQ) section focused on recognising and selecting the correct vocabulary in context. Here, the mean score improved from 2.47 to 3.37 out of six, an increase of 0.90 points. This nearly one-item gain indicates that students correctly identified more target words in the posttest than in the pretest. The maximum score also increased from 4 to 6, indicating that some students answered all MCQ items correctly after the intervention, whereas no one had reached full marks before. This improvement in recognition-based performance complements the gains seen in Matching and Gap-fill and further supports the claim that the target words were not only introduced but successfully learned and retained.

4.1.2. Paired-sample t-test

A paired-sample t-test was performed using SPSS to determine the statistical significance of the difference between pretest and posttest scores. This assessment is appropriate for a one-group pretest–posttest design, as it measures the same participants' performance before and after an instructional intervention. Table 3 presents the findings.

Table 3. Paired-sample t-test results (Pretest – Posttest)

Comparison	Mean Difference	t	df	Sig. (2-tailed)
Pretest – Posttest	–2.36	–5.84	29	0.000 ***

***p < 0.001

As shown in Table 3, the mean difference was –2.36, indicating that on average, students scored 2.36 points higher in the posttest than in the pretest. The negative t-value ($t(29) = -5.84$) indicates a significant difference in direction, with posttest scores being higher than pretest levels. The p-value was less than 0.001, which is far lower than the usual cutoff of 0.05. This shows that the difference was statistically significant.

This conclusion indicates that the improvement in students' vocabulary knowledge is not solely due to chance but is likely a result of the educational intervention. In other words, adding local cultural context to vocabulary classes consistently and positively affected students' vocabulary performance.

4.2. Interview findings

The qualitative data not only support the evidence from the pretest and posttest, but also allow participants to share their perspectives. Following Braun and Clarke's (2006) thematic

analysis, two overarching themes were identified from the interviews.

4.2.1. Effects on vocabulary learning

In the interviews, many students said they no longer tried to memorise words by heart but understood them better when linked to real places or tasks. One student explained that connecting the word architecture to the Huỳnh Thủy Lê Ancient House made it easier to remember. As S1 reflected: *“When learning about monuments or architecture from the textbook, I immediately related to the Huỳnh Thủy Lê Ancient House in my hometown so that I could remember them longer.”* Similarly, S3 admitted: *“Biodiversity was a long and difficult word, but after the teacher explained it with examples of birds, fish, and trees in Gao Giong or Tram Chim National Park, I understood it right away and remembered it for a long time.”* This shows that when learners connect new vocabulary with familiar images from their own environment, the meaning becomes easier to grasp and recall.

Task designs that required purposeful language use—such as role-plays, guided tours, and poster projects—also reinforced retention through repeated, contextualised production. For example, S4 shared: *“My favourite activity is planning a mini-tour for Gao Giong. When I had to use the words ‘promote’ or ‘preserve,’ I understood how to apply them in context. Preparing and presenting also helped me remember them for longer.”* This shows that tasks which mimic real-life situations gave students more chances to practice words in a meaningful way. Another student, S2, talked about the poster activity: *“When we designed a poster and chose a slogan in English, I had to think of ways to use some phrases like worship ancestors, take a photo, or go sightseeing. In this way, it helps me remember words for a long time.”* The student explained that designing the poster required them to use the words more than once, which helped the vocabulary stay in their memory longer.

Multimodal input (images, videos, labelled pictures, mind maps) further helped decode abstract or technical items. S3’s comment about the word *“conservation”* shows that when a difficult scientific word is linked to familiar things, students can understand it more quickly and remember it for longer.

At the same time, interviews indicate persistent barriers. Some high-syllable, discipline-specific words (*biodiversity, organism*) remained difficult even after repeated exposure. One student admitted struggling with pronunciation: *“The word biodiversity is too long. Even though I know the meaning now, it is hard to say it correctly in class.”* Such comments highlight the need for explicit teaching cycles and targeted pronunciation practice alongside cultural contextualization.

The interview data revealed that students were able to retain vocabulary for longer, understand meanings more deeply, and apply words in context when supported by cultural references, visual aids, and task-based activities such as posters, role-plays, and tour planning. However, long and technical items continued to pose difficulties and required repeated explanation and scaffolding. These findings align with the quantitative results; the interviews help explain why this improvement occurred—students benefited from contextualization, creativity, and repeated use. At the same time, the interviews showed that not all students improved equally, as some still struggled with complex academic terms.

4.2.2. Students’ perceptions

Students described the lessons as more engaging, lively, and closer to real life than previous vocabulary classes. S5 remarked: *“I felt that learning vocabulary with local culture made the lesson meaningful. I did not feel bored like before.”* They felt that cultural topics made English more familiar, and the classroom atmosphere more active and relevant to daily lives.

Other students mentioned feeling proud of their culture and more confident when using English to discuss their identity. As one student shared: *“When I can talk about Sa Dec Flower Village in English, I feel proud. It is not only a new word but also a way to show my hometown.”* Some participants explained that they wanted to use English to present their hometown culture, not just to prepare for tests.

Learners also reported clear preferences for activity types from a motivational standpoint. S2 commented that designing posters was enjoyable, while S4 stressed the excitement of playing the role of a tour guide. Even a student who comes from another province notes, *“Although I am not from Cao Lãnh, these lessons helped me know more about Đồng Tháp culture.”* Such responses suggest that creative, authentic tasks enhanced motivation and cultural awareness.

At the same time, students voiced concerns and suggestions. Some felt that large group sizes limited opportunities to speak: *“Sometimes I wanted to say more, but the group was too big, and time was short.”* Others admitted difficulty relating to sites they had never visited: *“I have never been to Tram Chim, so it was hard to imagine, even though the teacher showed pictures.”* Pronunciation also emerged as a challenge, with students asking for more practice and review games. These perceptions point to classroom design adjustments that could support more equitable participation.

4.3. Discussion

In conclusion, the study indicates that students made clear progress after the intervention. The quantitative results showed consistent increases in scores across all sections of the vocabulary test and a significant difference between the pretest and posttest ($p < .001$). Interview data further supported this pattern, as students reported that visuals, local examples, and communicative tasks helped them remember and reuse new words more confidently. Therefore, integrating new words through familiar cultural sites and experiencing them helped students understand the target vocabulary more effectively and remember it longer.

This finding is consistent with previous research from Indonesia, Malaysia, and Morocco (Manurung & Harjanto, 2015; Sariana et al., 2022; Chouaf, 2017), which found that culturally relevant materials enhance learners’ motivation and support vocabulary learning. They also align with Vietnamese studies showing that cultural content increases engagement, lesson relevance, and cultural awareness (Hoa & Viên, 2018; Nguyen & Newton, 2019; Ton, 2025; Hung et al., 2025), although these works mainly focused on attitudes, participation, and broader learning outcomes rather than direct measures of vocabulary gain. The present study extends this literature by providing statistical evidence of vocabulary improvement and by examining a context that has been largely overlooked. This positive vocabulary development in a sports gifted high school shows that local culture based instruction can remain effective even in learning environments where students have limited time for English and restricted exposure outside the classroom.

5. Conclusion and implications

The result of this study provide clear answers to the two guiding research questions. Regarding the first, the pretest–posttest results showed that integrating local cultural content into vocabulary instruction improved students’ retention. The gains were moderate but indicated that cultural familiarity supported the learning and recalling of new words. For the second question, the interview revealed positive perceptions: learners felt that cultural topics made vocabulary lessons more engaging, meaningful, and easier to remember, while also increasing their sense of pride in seeing their own culture reflected in English lessons.

The findings also suggest practical implications for English teaching. Teachers may enrich vocabulary lessons with local cultural elements to enhance achievement and motivation. At the same time, schools and curriculum designers can consider embedding culture more systematically to strengthen language skills and cultural awareness. Besides, the study has limitations. It involved only one grade 11 class in a sports gifted school and lasted for twelve weeks. Because this study used a one-group pre-experimental design without a control group, the findings cannot be widely generalised. Future studies should involve larger and more diverse samples, run the intervention over a longer period, and apply stronger experimental designs. Using other data sources, such as classroom observations or students' journals, may also give a fuller understanding of how cultural integration supports vocabulary learning.

References

- Alqahtani, M. (2015). The importance of vocabulary in language learning and how to be taught. *International Journal of Teaching and Education*, 3(3), 21-34.
- Alwasilah, I. A. (2024). Sundanese cultural integration in English learning: Insights from young learners and parents. *Elementary School Forum (Mimbar Sekolah Dasar)*, 11(3), 528–541. Indonesia: Indonesia University of Education. Accessed from <https://ejournal.upi.edu/index.php/mimbar/index>
- Anderson, L. W., & Krathwohl, D. R. (Eds.). (2001). *A taxonomy for learning, teaching, and assessing: A revision of Bloom's taxonomy of educational objectives*. New York: Longman.
- Batterink, L., & Neville, H. (2011). Implicit and explicit mechanisms of word learning. *Journal of Cognitive Neuroscience*, 23(3), 814–828.
- Braun, V., & Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, 3(2), 77-101.
- Byram, M. (1997). *Teaching and assessing intercultural communicative competence (Multilingual Matters)*. Multilingual Matters.
- Chouaf, C. (2017). Integrating students' own culture in the teaching of vocabulary. *Revue des Sciences Humaines*, 28(4), 129–148.
- Craik, F. I. M., & Lockhart, R. S. (1972). Levels of processing: A framework for memory research. *Journal of Verbal Learning and Verbal Behavior*, 11(6), 671–684.
- Creswell, J. W., & Creswell, J. D. (2017). *Research design: Qualitative, quantitative, and mixed methods approaches*. Sage publications.
- Feng, Y., & Webb, S. (2020). Learning vocabulary through reading, listening, and viewing: Which mode of input is most effective?. *Studies in Second Language Acquisition*, 42(3), 499-523.
- Franco, R. E. F. (2025). Integrating vocabulary and cultural contexts: A key strategy for Spanish-speaking EFL students. *Спутник высшей школы, 13.[Bulletin of Higher School]*
- Gass, S. M., & Mackey, A. (Eds.). (2013). *The Routledge handbook of second language acquisition*. Routledge.
- Grant, J. S., & Davis, L. L. (1997). Selection and use of content experts for instrument development. *Research in Nursing & Health*, 20(3), 269-274.
- Hoa, N. T., & Viên, N. T. (2018). Intercultural materials in English language education: Benefits and challenges in Vietnamese contexts. *VNU Journal of Foreign Studies*, 34(4), 15–30.

- Howard, K. (2011). *Early education from a parental perspective: A qualitative study*
- Hung, D. M., Ngan, V. P. T., & Trang, P. T. (2025). Benefits from integrating local culture into English classes via project-based learning in Vietnam context. *Forum for Linguistic Studies*, 7(10), 1298–1310. <https://doi.org/10.30564/fls.v7i10.11220>.
- IBM Corp. (2019). *IBM SPSS Statistics for Windows, Version 26.0*. Armonk, NY: IBM Corp.
- Kalkbrenner, M. T. (2021). a practical guide to instrument development and score validation in the social sciences: the measure approach. *Practical Assessment, Research & Evaluation*, 26, 1.
- Langi, N. T. (2024). Using picture of Luwu culture activity for teaching vocabulary. *English Language Teaching Methodology*, 4(3), 482–488.
- Lee, T. Y., Ho, Y. C., & Chen, C. H. (2023). Integrating intercultural communicative competence into an online EFL classroom: An empirical study of a secondary school in Thailand. *Asian-Pacific Journal of Second and Foreign Language Education*, 8(1), 4.
- Manurung, F., & Harjanto, I. (2015). Improving elementary school students' English vocabulary through local cultural content materials. *Beyond Words*, 3(1), 123–142.
- Nation, I. S. P. (2013). *Learning vocabulary in another language* (2nd ed.). Cambridge University Press.
- Sariana, S., Dollah, S., & Talib, A. (2022). Using local short stories to improve students' vocabulary. *Journal of Excellence in English Language Education*, 1(1), 11–21.
- Schmitt, N. (2010). *Researching vocabulary*. Palgrave Macmillan.
- Sun, D., Chen, Z., & Zhu, S. (2023, November). What affects second language vocabulary learning? Evidence from multivariate analysis. In *Frontiers in Education* (Vol. 8, p. 1210640). Frontiers Media SA.
- Ton, V. S. (2025). Enhancing local cultural education for English non-major students at a Vietnamese university. *International Journal of Engineering, Management and Humanities*, 6(1), 180–185. Accessed from <https://www.ijemh.com>.
- Vietnam Ministry of Education and Training. (2018). General Education Program: English Curriculum.
- Vietnam National Assembly. (2019). *Educational Law*, No. 43/2019/QH14 dated June 14, 2019.
- Vuong, K. T. M., Trakulkasemsuk, W., & Zahabi, A. (2025). English textbooks in the modern world: Cultural representation in an EFL textbook from Vietnam. *PASAA*, 70, 204–238.
- Vygotsky, L. S. (1978). *Mind in society: The development of higher psychological processes* (Vol. 86). Harvard University Press.
- Webb, S., & Nation, I. S. P. (2017). *How Vocabulary Is Learned*. Oxford University Press.
- Webb, S., Sasao, Y., & Ballance, O. (2017). The updated Vocabulary Levels Test: Developing and validating two new forms of the VLT. *ITL-International Journal of Applied Linguistics*, 168(1), 33–69.
- Zamanzadeh, V., Ghahramanian, A., Rassouli, M., Abbaszadeh, A., Alavi-Majd, H., & Nikanfar, A. R. (2015). Design and implementation content validity study: development of an instrument for measuring patient-centered communication. *Journal of Caring Sciences*, 4(2), 165.

Appendix A

ENGLISH VOCABULARY TEST

Time: 25 minutes

(Adapted from Nation's Vocabulary Levels Test, 2013; and the Grade 11 "Global Success" textbook – Units 6 & 10, with cultural integration)

Name: _____ Class: _____

Mark: _____ Teacher's Comment: _____

Part A

Match the word column A with the meaning in column B.

- | A | B |
|-----------------|---|
| 1. biodiversity | a. the variety of living things in an area |
| 2. relic area | b. a place that preserves historical remains |
| 3. fauna | c. animals of a certain region |
| 4. mausoleum | d. a building where a famous person is buried |
| 5. ecotourism | e. travelling to enjoy and protect nature |
| 6. heritage | f. cultural traditions passed from generation to generation |
| 1. _____ | 2. _____ |
| 3. _____ | 4. _____ |
| 5. _____ | 6. _____ |

Part B

Complete the sentences with the correct form of the words in the box.

biodiversity monument conserve flower ecosystem
protection reef mausoleum fauna fauna

1. U Minh Thuong National Park is famous for its rich _____ of plants and animals.
2. Nguyen Sinh Sac _____ is one of the most visited places in Dong Thap.
3. Many people come to Sa Dec _____ Village to enjoy colourful flowers.
4. Students took part in a local _____ project to protect wetlands.
5. Coral _____ are disappearing because of human activities.
6. The _____ of a country can be damaged by pollution.
7. We should _____ nature by reducing waste and planting trees.
8. The _____ was built to honour a national hero.

Part C

Choose the correct answer to complete each sentence.

1. We should join local _____ to protect endangered animals.
a. architecture b. campaigns c. traditions d. monuments
2. Nguyen Sinh Sac _____ is an important cultural site in Dong Thap.
a. relic b. festival c. mausoleum d. campaign

3. Coral _____ are being destroyed because of water pollution.
a. reefs b. forests c. flowers d. parks
4. Huynh Thuy Le Ancient House has unique French-style _____.
a. biodiversity b. architecture c. awareness d. organism
5. Many students take part in forest _____ activities to save nature.
a. conservation b. construction c. celebration d. communication
6. Tram Chim National Park is rich in flora and _____.
a. culture b. fauna c. cuisine d. campaign

Answer Key

Part A: 1–a, 2–b, 3–c, 4–d, 5–e, 6–f

Part B: 1. biodiversity, 2. mausoleum, 3. flower, 4. conservation, 5. reefs, 6. ecosystem, 7. protect, 8. monument

Part C: 1–b, 2–c, 3–a, 4–b, 5–a, 6–b

Scoring and Weighting

The scoring and weighting were designed according to Bloom’s Revised Taxonomy (Anderson & Krathwohl, 2001) and Nation’s framework (2013). Part A measures recall, Part B assesses comprehension, and Part C evaluates the application of vocabulary knowledge. These components correspond directly to the categories outlined in the referenced frameworks. The 3–4–3 point distribution provides a balanced evaluation of recognition, comprehension, and application skills.

Table 4. Scoring and Weighting of the Vocabulary Test

Part	No. of Items	Cognitive Level	Type of Knowledge	Skill Assessed	Weight (Points)
A. Matching	6	Remember	Receptive (form–meaning link)	Word recognition	6 pts
B. Gap-fill (Word Bank)	8	Understand	Receptive (meaning–use link)	Contextual comprehension	8 pts
C. Multiple Choice (Usage/Collocation)	6	Apply	Controlled productive (word use)	Usage and collocations	6 pts
Total	20	—	—	—	20 pts

Appendix B

Interview Questions

Questions about demographics

1. How old are you?
2. Where are you from?
3. What was your academic standing in the first semester (excellent, good, reasonably good, average, or poor)?
4. How long have you been learning English?

Questions about students' perception?

Effects on Vocabulary Learning

1. Compared with regular vocabulary lessons, how do you feel about learning English vocabulary through local cultural topics (such as local activities, heritage sites, or local destinations)?
2. Which local-culture activity or lesson did you find most enjoyable and helpful for remembering new vocabulary? Why?
3. Among the new English words you learned, which ones do you remember best, and what helped you remember them?

Students' Perceptions

1. Did learning vocabulary related to your hometown make you feel more motivated or proud? Do you feel more willing to use English when talking about your local culture? Why or why not?
2. What difficulties, if any, did you face when learning vocabulary through local cultural topics, and what suggestions do you have to improve these lessons?

Appendix C
Students' Score List
Teacher: Tran Thi Ngoc De

Student code	Matching		Gap fill		MCQ		Total		Note
	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	Pretest	Posttest	
1	3	4	3	5	4	3	10	12	
2	3	5	3	7	3	4	9	16	
3	2	5	5	4	3	4	10	13	
4	6	6	3	4	3	3	12	13	
5	4	5	3	5	2	4	9	14	
6	3	2	5	3	1	3	9	8	reduce
7	4	5	4	5	4	5	12	15	
8	5	3	4	4	2	3	11	10	reduce
9	2	3	3	3	3	2	8	8	same
10	5	4	3	5	2	4	10	13	
11	3	4	3	5	2	3	8	12	
12	4	3	2	3	2	5	8	11	
13	4	3	2	3	3	3	9	9	same
14	2	3	1	2	2	3	5	7	
15	2	3	2	1	2	2	6	6	same
16	3	5	4	2	1	3	8	10	
17	2	3	3	4	2	2	7	9	
18	3	4	4	5	3	6	10	15	
19	3	4	3	3	1	5	7	11	
20	3	2	2	1	1	2	6	5	reduce
21	4	5	4	3	4	2	12	10	reduce
22	1	4	5	3	3	4	9	11	
23	2	3	4	6	3	2	9	11	
24	2	4	1	3	3	3	6	10	
25	2	4	4	4	2	5	8	13	
26	4	5	3	5	2	4	9	14	
27	2	3	2	2	3	3	7	8	
28	4	4	3	5	3	3	10	12	
29	1	5	5	6	2	1	8	12	
30	4	4	1	4	3	5	8	13	