

Coding Connections: Intercultural Competence Through Peer-Assisted Learning Among Digital Media and Technology Students

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The Asian Conference on Education 2025
Official Conference Proceedings

Abstract

This study explores how peer-assisted learning with Burmese international mentors contributes to the development of intercultural competence among Thai students majoring in digital media and technology. Grounded in Byram's model of IC and Vygotsky's Sociocultural Theory, the research engaged 30 undergraduates in a 10-week PAL program at a Thai university. Using pre- and post-program questionnaires alongside English language assessments, the findings revealed strong student satisfaction with the PAL sessions—particularly in terms of collaborative project work, cross-cultural communication, and problem-solving support. Participants reported perceived growth in intercultural sensitivity, confidence when working in multicultural environments, and greater openness to diverse perspectives, skills that are increasingly vital in globally networked technology fields. However, the program did not produce measurable gains in English proficiency. Nonetheless, the study underscores PAL's potential to promote intercultural learning and global readiness in STEM-related education, reinforcing the value of Internationalization at Home. It recommends expanding PAL initiatives within digital and technological curricula to prepare students for global collaboration in the tech sector.

Keywords: peer-assisted learning, intercultural competence, Internationalization at Home

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Introduction

Background of the Study

Internationalization has become a central priority in Thai higher education, with universities increasingly seeking ways to equip students with the intercultural awareness, communication skills, and global competencies needed to thrive in diverse environments. Although study-abroad programs remain a common strategy, institutions worldwide are turning to Internationalization at Home (henceforth IaH) to expand intercultural learning opportunities for students who do not travel abroad (Bacon & Torremucha, 2025b; Feng et al., 2025). In Thailand, the number of international students has steadily increased, creating opportunities for meaningful intercultural engagement; however, language barriers, limited interaction, and social distance continue to hinder sustained cultural exchange between Thai and international students. As a result, structured, socially mediated learning environments are needed to bridge these gaps and promote deeper intercultural understanding on campus (Bacon & Maneerutt, 2024).

Peer-Assisted Learning (henceforth PAL) is one such environment. Widely implemented globally, PAL has been shown to enhance academic outcomes, student engagement, and collaborative learning skills (Asare, 2025; Bacon et al., 2021). More recently, scholars have highlighted its potential to foster intercultural dialogue, empathy, and mutual understanding, especially when local students work closely with peers from diverse cultural backgrounds (Bacon & Maneerutt, 2024; Ellison et al., 2023). Yet, despite growing interest in IaH initiatives, empirical research on how PAL supports IC, particularly among Thai university students, remains limited.

Advancing Cultural Understanding Through Peer-Assisted Learning

PAL provides structured, low-pressure spaces where students interact regularly through discussion, problem-solving tasks, and peer-supported activities (Asare, 2025; Bacon et al., 2021). Drawing on Vygotsky's sociocultural theory (henceforth SCT), learning occurs through guided social interaction, making PAL an ideal context for intercultural learning (Bacon & Torremucha, 2025b; Ellison et al., 2023; Vygotsky, 1978). Likewise, Byram's IC model emphasizes attitudes of openness, curiosity, and respect, qualities that can be developed through purposeful engagement with culturally diverse peers (Alred & Byram, 2002; Byram, 1997; Davis & Knight, 2023). When Thai students collaborate with international peer-mentors, PAL sessions can function as localized sites of cultural learning, enabling students to share perspectives, negotiate meaning, and reflect on cultural similarities and differences. Such engagement not only supports cognitive development but also promotes social integration, reduces cultural barriers, and strengthens communicative confidence.

Research Problem

Although Thai universities host growing numbers of international students, meaningful intercultural interaction between local and international peers remains inconsistent. Studies indicate that Thai students often experience limited exposure to foreign cultures, while international students face linguistic and social barriers that prevent integration (Pratama et al., 2024). Existing PAL programs at Thai universities focus primarily on academic support, with little empirical evidence documenting their role in cultural learning, personal development, or the cultivation of IC. Consequently, there is a need to examine how PAL sessions, already

embedded in the university's learning ecosystem, can serve as structured platforms for intercultural engagement and cultural understanding between Thai students and international peer-mentors.

Research Objectives

This study aims to:

1. Identify the mechanisms through which PAL sessions facilitate cultural exchange between Thai students and international peer-mentors.
2. Examine how PAL participation enhances Thai students' cultural awareness, sensitivity, and broader intercultural competence.
3. Assess the personal and academic development outcomes associated with culturally diverse PAL interactions.
4. Evaluate Thai students' satisfaction with cultural exchange opportunities in PAL sessions and gather recommendations for improvement.

Research Questions

To achieve these objectives, the study investigates the following research questions:

1. How do PAL sessions facilitate cultural exchange between Thai students and their international peer-mentors?
2. In what ways do PAL sessions influence Thai students' cultural awareness, sensitivity, and intercultural competence?
3. What personal development outcomes do Thai students experience as a result of participating in intercultural PAL sessions?
4. How satisfied are Thai students with the cultural exchange opportunities in PAL sessions, and what improvements do they recommend?

Significance of the Study

This study offers several important contributions. Empirically, it addresses a gap in the literature by examining the cultural, not only academic, functions of PAL within a Thai higher-education context. The findings have the capacity to strengthen institutional understanding of how IaH can be operationalized through structured PAL environments. Practically, the results will inform the development of culturally responsive PAL programs, mentor training curricula, and intercultural engagement strategies at Rangsit University and other institutions aiming to cultivate global readiness among local students. More broadly, the study highlights PAL's potential as a scalable, sustainable mechanism for fostering IC, building inclusive learning communities, and preparing students for participation in multicultural academic and professional environments.

Literature Review

This literature review synthesizes research on PAL, IC, cultural adjustment among Thai students, and the role of PAL as an IaH strategy. While PAL is well documented as an academic support model, recent research suggests that it may also facilitate cultural exchange, particularly when local students work with international peer mentors. The following sections examine the integrative functions of PAL, key theories of IC, cultural barriers among Thai students, the intercultural value of PAL, and existing gaps that justify the present study.

The Integrative Function of Peer-Assisted Learning

PAL is a structured approach in which trained mentors guide students through collaborative tasks and discussion. Studies consistently show that PAL improves academic achievement, confidence, and engagement (Asare, 2025; Bacon et al., 2021). Drawing on Vygotsky's SCT, PAL emphasizes learning through social interaction, allowing students to clarify ideas, share strategies, and engage in dialogue that promotes deeper understanding (Bacon & Torremucha, 2025b; Ellison et al., 2023). Its collaborative, low-pressure structure reduces anxiety and encourages participation, making it a supportive environment for relationship-building (Bacon & Maneerutt, 2024; Slabbert & Du Plessis, 2021). These characteristics position PAL as not only as an academic support mechanism but also as a socially interactive learning environment in which students engage meaningfully through collaboration, discussion, and peer interaction, creating opportunities for connection among students from diverse backgrounds (Bacon & Torremucha, 2025a; Hidayat et al., 2023).

Intercultural Competence and the Process of Cultural Integration

IC refers to the attitudes, knowledge, and skills needed for effective communication across cultures (Acosta-Mosquera et al., 2017). Byram's model highlights openness, curiosity, interpretive skills, and critical cultural awareness as central components (Wang & Teo, 2024). IC develops through repeated encounters that require learners to reflect on differences, question assumptions, and negotiate meaning (Bartel-Radic & Cucchi, 2025). Cultural integration in PAL contexts involves becoming comfortable with shared social norms and developing meaningful relationships across culturally diverse peer groups (Bacon & Torremucha, 2025b; Ellison et al., 2023). Higher education institutions increasingly emphasize IC as an essential set of knowledge, attitudes, and skills that graduates must develop to function effectively in culturally diverse contexts (Acosta-Mosquera et al., 2017). Research on IaH indicates that structurally embedded, campus-based initiatives, such as PAL, can foster IC by enabling students to develop intercultural awareness and sensitivity through regular interaction with culturally diverse peers and faculty within the home institution (Choi & Khamalah, 2017).

Barriers Thai Students Encounter in Cultural Adjustment

Despite growing international enrollment, meaningful interaction between Thai and international students remains limited. Language anxiety, fear of miscommunication, and uncertainty about appropriate cultural behavior discourage many Thai students from initiating intercultural conversations (Pratama et al., 2024). These hesitations can limit students' interaction across cultural groups, thereby reducing opportunities for intercultural learning and contributing to the tendency for students to socialize primarily within culturally familiar peer networks (Waters & Day, 2022). Furthermore, concerns about misunderstanding cultural norms and unintentionally causing offense function as psychological barriers that can inhibit students' willingness to engage actively in multicultural interactions (Witayarat, 2023). International students also experience adjustment challenges, such as unfamiliar academic expectations and social norms, which widen the interaction gap (Bacon & Torremucha, 2025b). These dynamics highlight the need for structured environments that encourage safe, guided intercultural engagement.

The Contribution of Peer-Assisted Learning to Cultural Exchange and Integration

PAL offers a strong platform for cultural exchange because it relies on frequent interaction, shared activities, and collaborative discussion (Bacon & Maneerutt, 2024; Ellison et al., 2023). Research indicates that PAL facilitates supportive peer interaction and collaborative engagement, enabling students to exchange experiences, seek assistance, and develop mutual understanding, while also contributing to the formation of socio academic relationships that enhance students' sense of connection within learning communities (Asare, 2025; Bacon et al., 2021). Through PAL, Thai students can build communication confidence, develop cultural awareness, and broaden their perspectives when working with international mentors. The informal, conversational nature of PAL allows cultural insights to emerge naturally during academic collaboration (Bacon & Torremucha, 2025a; Slabbert & Du Plessis, 2021). The multi-week structure of PAL facilitates repeated peer interaction within a low-pressure, cooperative environment, supporting the gradual development of interpersonal relationships and conditions associated with intercultural learning (Bacon et al., 2021). These features position PAL as an effective IaH strategy for promoting cultural integration within Thai universities.

Identified Gaps in the Scholarly Evidence

Although PAL's academic benefits are well established, research on its intercultural impact remains sparse, especially in Southeast Asia contexts. Few studies examine how PAL enhances IC in Thailand, cultural awareness, or personal development among host-country students. Existing research focuses heavily on international students' adjustment, leaving Thai students' experiences underrepresented. Moreover, little empirical work identifies how cultural learning occurs within PAL sessions in Thailand or what challenges students encounter in intercultural collaboration. These gaps underscore the need for research that investigates PAL as an IaH mechanism capable of developing IC and cultural integration among Thai university students.

Methodology

Research Design

This study used a mixed methods research design to examine how PAL supports the development of IC among Thai students majoring in digital media and technology. The approach was informed by Byram's IC framework and Vygotsky's SCT, which emphasize learning through guided interaction and meaningful communication. A questionnaire and semi structured interviews were used to gather both numerical and descriptive data, allowing for a comprehensive understanding of students' experiences in PAL sessions.

Population and Sample

The population consisted of Thai undergraduate students enrolled in a digital media and technology program at a private university in Thailand. A total of 30 students participated in the study. All participants were first year students who regularly attended PAL sessions as part of their academic coursework. These students were selected because they interacted directly with international peer mentors, making them appropriate for investigating the cultural and interpersonal dimensions of PAL.

Data Collection Instruments

Data were obtained through a questionnaire and English pretest and posttests. The questionnaire measured five areas: interaction with international mentors, cultural awareness, communication confidence, collaborative learning, and personal development. Items were rated using a five-point agreement scale. The English pretests and posttests evaluated whether students' English proficiency improved as a result of their involvement in this 10-week PAL study.

Validity and Reliability

Validity

Content validity was established through expert review. Three specialists in education and language studies evaluated the questionnaire items using the Item Objective Congruence method. Each item was assessed for clarity and relevance to the research objectives. All items received positive scores, indicating strong alignment with the intended constructs.

Reliability

Reliability was determined by calculating Cronbach alpha to measure the internal consistency of the questionnaire. The instrument was pilot tested with a separate group of students who were not included in the main study. The questionnaire produced a Cronbach alpha value of 0.964, which indicates an excellent level of internal consistency and confirms that the items measured related aspects of intercultural learning.

Data Collection Procedures

Data collection occurred across ten weeks at the university PAL center. At the end of their final session, the thirty participants were invited to complete the questionnaire after receiving an explanation of the study purpose. A group of volunteers then participated in follow-up interviews. All data were collected anonymously, and confidentiality was safeguarded throughout the entire process. Only the researchers had access to the original records.

Data Analysis

Quantitative data from the questionnaire were analyzed using descriptive statistics to summarize trends in interaction, cultural awareness, confidence, and personal development. Interview responses were transcribed and examined using thematic analysis. This process involved coding participant statements, grouping similar ideas, and identifying recurring themes that supported or clarified the quantitative findings. The integration of both data sources provided a detailed understanding of how PAL contributed to the development of IC among Thai students in digital media and technology.

Results

Rationale and Overview

This section presents the regression analysis examining the relationship between initial English proficiency and later performance among Thai digital media and technology students who

participated in the PAL program. Although the broader purpose of the study was to explore IC and student learning experiences, the English pretest and posttest scores provided an opportunity to determine whether the PAL environment contributed to measurable change in students' formal English proficiency.

Regression analysis enables evaluation of whether posttest performance can be predicted from pretest scores and whether any systematic improvement occurred over the ten-week program. Because the PAL sessions emphasized collaboration, interpersonal communication, and interaction with international peer mentors rather than intensive language training, English test scores were expected to remain stable. Nevertheless, the analysis was necessary to assess whether the program contributed to academic outcomes beyond its intercultural goals.

The data consisted of matched English proficiency scores for thirty students, collected before and immediately after the PAL program. Questionnaire results indicated high satisfaction with program structure, interaction with international mentors, collaborative learning, and perceived personal development. These findings support interpretation of the regression results but were not used as predictor variables because they were not collected at the individual level.

Preparation of Data

The dataset contained thirty complete pairs of English pretest and posttest scores. All participants had valid entries for both testing points. Initial inspection of the data revealed that pretest scores varied widely among students, reflecting a diverse range of English proficiency levels. The average posttest score was slightly lower than the average pretest score, suggesting little overall improvement in formal language performance.

Descriptive statistics were calculated to identify patterns in the data. Some students demonstrated increases in their scores, some remained stable, and others experienced slight declines. Because changes appeared inconsistent and small in magnitude, regression analysis was useful for determining whether any observed improvements or declines were associated with initial proficiency.

A scatterplot of the pretest and posttest scores revealed a consistently upward pattern: students with higher initial proficiency tended to retain higher scores at the end of the program. The points formed a clear linear trend, justifying the use of simple linear regression. No extreme outliers were present, so all thirty cases were included in the final model.

Model Specification and Assumptions

The regression model was specified with posttest English score as the dependent variable and pretest English score as the independent variable. The purpose of the model was to determine whether the initial score could predict later performance and whether any systematic improvement occurred during the program.

The assumptions of linear regression were evaluated. The scatterplot indicated a linear association between the two variables. The distribution of residuals was examined through visual inspection and showed an approximately symmetric pattern without extreme skewness. Residuals plotted against fitted values displayed a relatively even spread, supporting the assumption of equal variance. The Durbin Watson statistic was close to 1.2, which is suitable for cross sectional data of this size.

Given the limited sample size, the analysis relied on a single predictor model. More complex models were not pursued because additional predictors were not available at the individual level. The simple regression model provided a clear and interpretable test of the relationship between pretest and posttest English performance.

Regression Results

The regression analysis revealed that the pretest English score was a strong and statistically significant predictor of the posttest score. The resulting regression equation was: Posttest score equals 9.68 plus 0.81 times the pretest score.

The intercept of 9.68 represents the predicted posttest score for a hypothetical student with a pretest score of zero. Although no students in the sample approached such a value, the intercept is required for the model. The coefficient of 0.81 indicates a strong positive relationship between starting proficiency and later performance. For every additional point in the pretest score, the posttest score increased by slightly more than zero point eight points.

The coefficient was statistically significant, with a t value of about 7.51 and a probability value less than point zero zero one. This confirms that the relationship did not occur by chance. Students who began the program with higher proficiency generally maintained their advantage throughout the ten-week period.

The coefficient of determination, R squared, was approximately 0.67. This indicates that 67% of the variance in posttest scores could be explained by pretest scores. The associated F statistic was 56.37 with a probability below point zero zero one, demonstrating that the model was a strong overall predictor of posttest outcomes.

To further examine the effect of the PAL program, a second regression model was constructed using gain scores. Gain was calculated as posttest minus pretest for each student. The average gain score was slightly below zero, at approximately minus zero point eight, showing a minimal overall decline in English proficiency during the program.

In the gain model, the regression coefficient for pretest score was negative, about minus zero point nineteen, meaning that students with higher initial proficiency tended to experience slightly larger decreases. However, this relationship was not statistically significant. The probability value was approximately point zero nine, which is above the common significance threshold of point zero five. The R squared value for this model was 0.10, indicating that pretest scores explained only ten percent of the variance in gain scores.

The results demonstrate that the PAL program did not produce uniform improvement in English proficiency. Gains varied from student to student, but there was no consistent pattern associated with initial proficiency.

Interpretation of Findings

The regression analysis supports the conclusion that the PAL program did not lead to measurable gains in formal English proficiency over the ten-week period. The strong association between pretest and posttest scores indicates that most differences in performance were already present at the beginning of the program. The slight decrease in the average test

score and the limited explanatory power of the gain score model further reinforce this conclusion.

These findings align with the design and goals of the PAL sessions. The program emphasized collaborative projects, intercultural dialogue, and constructive peer support rather than explicit English language instruction. As a result, the environment was well suited to developing IC, communication confidence, and team-based problem solving, but less likely to produce significant improvements in standardized test performance.

The questionnaire data indicated overwhelmingly positive student perceptions of the program. Participants reported greater comfort in cross cultural communication, increased motivation to engage in collaborative tasks, and strong satisfaction with the support provided by international peer mentors. These self-reported outcomes suggest that the program contributed meaningfully to students' academic and personal development despite stable English test scores.

The results also align with research on language learning, which shows that significant gains typically require extended and focused instruction. Programs centered on intercultural development more often produce benefits in confidence, fluency, and communicative willingness rather than improvements on formal language assessments. The PAL program therefore appears to have supported the development of interpersonal and intercultural skills essential for success in diverse academic environments.

Summary

The regression analysis showed that initial English proficiency was a strong and reliable predictor of later performance among Thai digital media and technology students in the PAL program. The program did not generate significant collective gains in formal English proficiency, and individual gain scores varied without a consistent relationship to starting ability.

These results should be interpreted in light of the program's emphasis on intercultural learning rather than language instruction. Students benefited in ways not captured by standardized tests, including increased confidence, heightened intercultural awareness, and stronger engagement in collaborative learning. Future research should collect individual-level questionnaire data, directly measure intercultural competence, and extend program duration to examine longer-term effects. Overall, English proficiency remained stable, while the PAL program produced meaningful developmental outcomes aligned with its intercultural and collaborative objectives.

Discussion

Interpretation of Key Findings in Relation to Research Questions

The purpose of this study was to examine how PAL sessions involving international peer mentors contributed to the intercultural, personal, and academic development of Thai students majoring in digital media and technology. The results demonstrate that the PAL program functioned as a meaningful site for cultural learning, interpersonal growth, and collaborative engagement even though it did not produce measurable gains in English test performance. The following discussion interprets the findings in direct relation to each of the four research questions.

RQ1: How do PAL sessions facilitate cultural exchange between Thai students and their international peer-mentors?

The findings show that cultural exchange occurred primarily through sustained interaction, shared problem solving, and informal conversation. Students reported that working closely with Burmese mentors allowed them to learn about different cultural practices, perspectives on academic tasks, and communication styles. Because the program encouraged small group collaboration, Thai students engaged in frequent dialogue in a supportive environment, which made intercultural communication feel natural rather than forced. This aligns with the theoretical view that intercultural learning is most effective when it is embedded in authentic, task-based interaction rather than through explicit instruction. The regular contact that took place over the ten-week period played an important role in building trust, reducing social distance, and allowing cultural insights to emerge gradually. The findings therefore affirm that PAL can serve as a practical form of IaH by creating structured opportunities for everyday intercultural exchange within the university setting.

RQ2: In what ways do PAL sessions influence Thai students' cultural awareness, sensitivity, and intercultural competence?

Students' questionnaire responses and interview reflections indicate that participation in the program enhanced their cultural awareness and intercultural sensitivity. Many students described gaining a clearer understanding of how cultural background shapes communication preferences, expectations during group work, and approaches to academic problem solving. Exposure to international mentors encouraged openness to diverse viewpoints and helped students challenge assumptions about other cultures. Students also reported improved confidence when interacting with individuals from different cultural backgrounds, a key indicator of IC. Although measurable changes in English proficiency were limited, the program clearly supported the affective and behavioral components of IC highlighted in Byram's model. The findings reinforce the argument that intercultural growth does not require international mobility but can be fostered effectively through structured campus-based engagement with culturally diverse peers.

RQ3: What personal development outcomes do Thai students experience as a result of participating in intercultural PAL sessions?

Students experienced several personal development gains that extended beyond intercultural learning. They reported increased communication confidence, greater willingness to participate in collaborative discussions, and improved comfort in expressing ideas in both informal and academic settings. The PAL environment also strengthened motivation and provided an encouraging space where students felt supported by both peers and mentors. Many students described a sense of belonging that grew as they worked with international mentors who were approachable, patient, and willing to share their experiences. In addition, students developed stronger problem-solving skills through project-based tasks that required negotiation of ideas and shared responsibility. These outcomes demonstrate that PAL can positively influence personal growth even when academic test scores remain unchanged. The findings align with sociocultural perspectives that view learning as a process that unfolds through participation in a community where knowledge and confidence are co constructed through interaction.

RQ4: How satisfied are Thai students with the cultural exchange opportunities in PAL sessions, and what improvements do they recommend?

Overall satisfaction with the PAL sessions was very high. Students reported that the sessions were enjoyable, motivating, and helpful for understanding course material. They valued the supportive relationships formed with international mentors and appreciated the opportunity to learn from individuals who brought different cultural backgrounds into the learning space. Although students were satisfied with the cultural exchange opportunities, several recommendations emerged. Some students suggested increasing the number of sessions or extending the program duration to allow for deeper cultural engagement. Others requested more structured cultural sharing activities alongside the academic tasks. These suggestions indicate that students recognize the potential of the program and desire even richer intercultural interaction in future iterations.

Practical Implications of the Findings

The findings of this study offer several practical implications for educators, administrators, and program designers. First, the results demonstrate that PAL can be used as a low cost and scalable strategy for promoting intercultural learning in disciplines such as digital media and technology where international collaboration is increasingly important. Institutions can incorporate cultural awareness activities into existing PAL structures without placing additional burden on teaching staff. Second, the strong student satisfaction suggests that international peer mentors can play a valuable role in building inclusive learning environments and reducing social barriers between groups. Third, the lack of measurable English proficiency gains indicates that programs seeking language improvement should incorporate focused language support instead of relying on intercultural interaction alone. Finally, mentor training programs should include guidance on facilitating intercultural conversation and addressing cultural misunderstandings so that mentors feel prepared to support both academic and cultural aspects of the learning process.

Scholarly Contributions of the Present Study

This study contributes to the growing body of research on IaH by providing empirical evidence from a Thai university context where intercultural interaction between local and international students is often limited. It expands understanding of how PAL can function not only as academic support but also as a site for IC development. The findings offer insight into how Thai students interpret and experience intercultural communication when guided by international mentors from neighboring countries. The study also adds to the scholarship on intercultural learning in technology related fields, an area where cultural diversity is becoming increasingly relevant due to the global nature of digital markets and collaborative work in the technology sector.

Limitations and Implications for Further Investigation

Several limitations should be acknowledged. The sample size was relatively small, which limits the ability to generalize the findings to all Thai university students. The study relied on self-reported questionnaire data, which may be influenced by social desirability bias or limited self-awareness about intercultural growth. The program lasted ten weeks, which may not have been long enough to capture deeper or more sustained changes in IC or language development.

Furthermore, the absence of individual level questionnaire data prevented statistical analysis that could link specific aspects of the program to specific learning outcomes.

Future studies should consider larger and more diverse samples, longer program durations, and mixed methods approaches that include observational data or performance-based assessments of IC. Longitudinal research would also be valuable for determining whether the intercultural gains observed in this study persist over time and whether they translate into improved academic or professional performance in multicultural settings.

Conclusion

This study offers important insights into how PAL can advance intercultural learning and personal development among Thai students in a digital media and technology program. The findings show that sustained engagement with international peer mentors created a supportive environment where cultural exchange occurred through collaborative tasks, shared problem solving, and informal dialogue. Students demonstrated increased awareness of cultural perspectives, greater openness to diversity, and enhanced confidence when communicating across cultural boundaries. These outcomes reflect key dimensions of IC identified in established theoretical models and illustrate the potential of campus-based interaction to function as an effective form of IaH. Although the program did not produce measurable gains in English proficiency, this result aligns with the central purpose of the PAL sessions, which emphasized interpersonal communication, shared learning, and intercultural engagement rather than intensive language instruction. The stability of the English test scores therefore underscores the distinction between linguistic development and intercultural growth and suggests that meaningful cultural learning can occur without significant changes in formal language performance.

Strong levels of student satisfaction further confirm the value of the PAL environment, as participants consistently described the sessions as academically supportive and personally enriching. Students highlighted the importance of relationships formed with international mentors and expressed interest in extending the duration and depth of intercultural activities. For institutions, these findings demonstrate that PAL can function as a scalable and sustainable strategy for promoting IC within existing academic structures, enabling universities to broaden the reach of IaH by embedding cultural learning into routine academic experiences. Future research should involve longer program durations, incorporate direct assessments of IC, and examine the experiences of both local students and international mentors. Longitudinal studies would also provide valuable evidence regarding the lasting impact of PAL on students' readiness for participation in multicultural professional environments.

Declaration of Generative AI and AI-Assisted Technologies in the Writing Process

The authors declare that ChatGPT was utilized solely for proofreading and language refinement, and that no AI technologies were used to generate, analyze, or interpret the research content, data, or conclusions.

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