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Learning Across Cultures in Business Education: Peer-Assisted Learning as a Tool for Developing Intercultural Competence among Business Students in Thailand

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ABSTRACT

As ASEAN continues to strengthen regional integration and digital transformation, higher education institutions play a critical role in preparing graduates with the intercultural competence required for increasingly global and technology-enabled workplaces. This study examines the influence of peer-assisted learning (PAL) on the development of intercultural competence among business students in Thailand. Grounded in Participatory Action Research (PAR), the study employed a mixed-methods approach involving structured PAL activities with 87 undergraduate business students. Quantitative data were collected using a 30-item questionnaire based on Byram's Intercultural Communicative Competence framework, while qualitative insights were obtained through semi-structured interviews with five participants. Descriptive statistics, Pearson correlation, and multiple regression analyses were used to examine relationships among intercultural competence dimensions, complemented by thematic analysis of interview data. The findings revealed a high overall level of intercultural competence (M = 4.09), with attitudes toward cultural diversity demonstrating the highest mean score. Regression analyses identified interpreting and relating, together with discovery and interaction, as the strongest predictors of overall intercultural competence. Qualitative findings further indicated that participation in PAL enhanced students' confidence, intercultural communication, cultural awareness, and willingness to engage with individuals from diverse backgrounds. Participants described a developmental progression from initial communication anxiety to greater confidence and meaningful intercultural engagement. The study demonstrates that peer-assisted learning provides an effective pedagogical approach for cultivating intercultural competence and transferable employability skills within domestic higher education. The findings contribute to business education by highlighting structured peer interaction as an inclusive strategy for developing globally competent graduates capable of collaborating in culturally diverse and digitally connected ASEAN workplaces.

Keywords: Peer-Assisted Learning, Intercultural Competence, Business Education, Human Capital Development, ASEAN.

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Introduction

Higher education institutions are increasingly expected to prepare students for effective participation in culturally diverse and globally interconnected business environments (Deardorff, 2006; Jones et al., 2018; Clarke, 2018; Kolm et al., 2024). As businesses expand across international markets, graduates are required to demonstrate the ability to collaborate and communicate effectively in culturally diverse contexts (Jackson, 2015; Matsumoto and Hwang, 2013; Yin and Li, 2026). Consequently, intercultural competence, defined as the ability to understand, interpret, and respond appropriately to cultural differences, has emerged as a key learning outcome in both business and higher education settings (Byram, 1997; Deardorff, 2006; Wang and Teo, 2024). In addition, employers increasingly expect business graduates to possess transferable skills such as communication, teamwork, and adaptability, which are essential for employability in global professional environments (Clarke, 2018; Jones et al., 2018; Tomlinson, 2017; Bartel-Radic and Cucchi, 2025).

However, the presence of cultural diversity in higher education does not automatically lead to meaningful intercultural learning outcomes (Leask, 2009; Kimmel and Volet, 2012; Holmes and O'Neill, 2012). Opportunities for cross-cultural interaction are often limited, as students tend to remain within familiar social and linguistic groups, thereby restricting engagement with diverse perspectives (Kimmel and Volet, 2012; Montgomery, 2010; Glass and Westmont, 2014). This lack of sustained interaction reduces the potential benefits of diverse learning environments and constrains the development of intercultural competence (Copland and Garton, 2011; Volet and Ang, 2012; Spencer-Oatey and Dauber, 2019). Consequently, rather than assuming that exposure alone leads to intercultural development, research emphasizes the need for structured pedagogical approaches that actively help intercultural engagement and interaction (Dasli, 2012; Leask, 2015; Holmes and O'Neill, 2012).

A promising pedagogical approach for addressing this challenge in business education is peer-assisted learning (PAL). PAL enables students to actively engage in the learning process through structured peer interaction involving discussion, collaboration, and mutual support (Topping, 2005; Arendale, 2014; Chan et al., 2016). Through these interactions, learners are exposed to diverse perspectives, engage in meaning negotiation, and develop communication strategies that are relevant to real-world business contexts (Byl et al., 2015; Hammond et al., 2010; Slabbert et al., 2023). From a theoretical perspective, intercultural competence can be understood as a socially constructed capability that develops through interaction, as explained by Sociocultural Theory (Vygotsky, 1978; Lantolf and Thorne, 2006) and Byram's model of intercultural communicative competence (Byram, 1997; Holmes and O'Neill, 2012). In this regard, PAL provides a meaningful pedagogical context for fostering intercultural competence among business students in Thai higher education (Bacon and Torremucha, 2025b; Tibingana-Ahimbisibwe et al., 2022).

Background of the Study

As higher education continues to respond to globalization, universities are increasingly expected to produce graduates who can operate effectively in culturally diverse and globally interconnected business environments (Altbach and Knight, 2007; Leask, 2015; Kolm et al., 2024). In this context, intercultural competence has become a central objective in business education, as organizations seek individuals who are capable of communicating and collaborating across cultural boundaries (Deardorff, 2006; Bartel-Radic and Cucchi, 2025; Spencer-Oatey and Dauber, 2019). In addition to disciplinary knowledge, business graduates are expected to demonstrate transferable skills such as communication, adaptability, and intercultural awareness, which are essential for employability in global professional settings (Clarke, 2018; Jones et al., 2018; Tomlinson, 2017). This growing demand has encouraged higher education institutions to integrate intercultural learning into curricula and teaching practices in order to better prepare students for participation in international and multicultural workplaces (Leask, 2015; Beelen and Jones, 2015; Castellano-Risco, 2024).

Intercultural learning has traditionally been associated with international mobility initiatives such as study abroad, which provide direct exposure to diverse cultural contexts and facilitate experiential learning (Byram, 1997; Falkenberg and Joyce, 2023; He et al., 2017). Despite their recognized value, access to these programs remains limited due to financial, institutional, and structural constraints (Opeto and Onen, 2024; Rajkhowa, 2024; Bartel-Radic and Cucchi, 2025). Consequently, many students, particularly those enrolled in domestic programs, lack opportunities to develop intercultural competence through international experiences (Beelen and Jones, 2015; Leask, 2015; Spencer-Oatey and Dauber, 2019). In response to these limitations, increasing attention has been directed toward alternative approaches that facilitate intercultural learning within local educational contexts, particularly through curriculum design and structured interaction (Castellano-Risco, 2024; Montes Granada et al., 2025; Soule, 2025).

Internationalization at Home (IaH) represents a key strategy that emphasizes the integration of international and intercultural dimensions into everyday teaching and learning practices (Beelen and Jones, 2015; Leask, 2015; Jones and Reiffenrath, 2018). This approach is particularly relevant in business education, as it enables students to develop global perspectives and intercultural competencies that are directly applicable to professional environments (Clarke, 2018; Jones et al., 2018; Bartel-Radic and Cucchi, 2025). Within this framework, structured peer interaction plays a crucial role by facilitating communication, collaboration, and the exchange of diverse perspectives among learners (Topping, 2005; Chan et al., 2016; Slabbert et al., 2023). In this regard, peer-assisted learning (PAL) offers a practical and scalable pedagogical approach for fostering intercultural competence among business students in Thai higher education (Bacon and Torremucha, 2025b; Tibingana-Ahimbisibwe et al., 2022; Ellison et al., 2023).

Peer-Assisted Learning as a Pedagogical Mechanism for Intercultural Learning

Peer-assisted learning (PAL) is a collaborative instructional approach in which students support one another's learning through structured interaction, dialogue, and shared academic tasks (Topping, 2005; Topping and Ehly, 2001; Arendale, 2014). It has been widely recognized for its effectiveness in enhancing student engagement, confidence, and conceptual understanding across a range of higher education contexts (Topping, 2005; Chan et al., 2016; Qiu and Lee, 2020). In business education, PAL reflects the collaborative nature of professional environments, where individuals are required to work in teams, communicate effectively, and solve problems collectively (Clarke, 2018; Jones et al., 2018; Loda et al., 2020).

By bringing together students from diverse linguistic and cultural backgrounds, peer-assisted learning (PAL) creates meaningful opportunities for intercultural learning within higher education (Kimmel and Volet, 2012; Montgomery, 2010; Spencer-Oatey and Dauber, 2019). Through interaction, learners are able to engage with different perspectives, adapt their communication strategies, and develop greater cultural awareness (Kimmel and Volet, 2012; Holmes and O'Neill, 2012; Arthur et al., 2022). The non-hierarchical and supportive structure of PAL encourages active participation and reduces communication barriers, thereby fostering inclusive learning environments that support intercultural competence development (Topping, 2005; Chan et al., 2016; Ellison et al., 2023).

From a theoretical perspective, the effectiveness of peer-assisted learning (PAL) can be explained through Byram's model of intercultural communicative competence and Vygotsky's Sociocultural Theory, both of which emphasize the role of interaction in learning and development (Byram, 1997; Vygotsky, 1978; Lantolf and Thorne, 2006). Byram's framework conceptualizes intercultural competence as a multidimensional construct involving attitudes, knowledge, skills, and critical cultural awareness that develop through engagement and reflection (Byram, 1997; Deardorff, 2006; Holmes and O'Neill, 2012). Similarly, Sociocultural Theory highlights that learning is socially mediated and occurs through dialogue, collaboration, and interaction within meaningful contexts (Vygotsky, 1978; Lantolf and Thorne, 2006; Eun, 2019). Together, these perspectives underscore the importance of communication,

collaboration, and social engagement in fostering intercultural competence, positioning PAL as an effective pedagogical approach for supporting intercultural learning in business education (Chan et al., 2016; Tibingana-Ahimbisibwe et al., 2022; Bacon and Torremucha, 2025).

Research Problem

Despite the growing recognition of intercultural competence as a key outcome in business education, relatively few studies have examined how such competence develops within domestic higher education contexts (Deardorff, 2006; Spencer-Oatey and Dauber, 2019; Bartel-Radic and Cucchi, 2025). Much of the existing literature continues to focus on international mobility initiatives such as study abroad programs, leaving classroom-based and locally embedded approaches comparatively underexplored (Falkenberg and Joyce, 2023; He et al., 2017; Beelen and Jones, 2015). Furthermore, although peer-assisted learning has been widely implemented to support academic achievement and student engagement, its potential to foster intercultural competence and business-relevant skills remains insufficiently examined (Topping, 2005; Tibingana-Ahimbisibwe et al., 2022; Bacon and Torremucha, 2025).

Furthermore, students in higher education often experience limited intercultural engagement, as they tend to remain within familiar social and linguistic groups, thereby restricting opportunities for meaningful cross-cultural interaction (Kimmel and Volet, 2012; Montgomery, 2010; Glass and Westmont, 2014). This lack of sustained interaction reduces the potential for everyday academic experiences to contribute to the development of intercultural competence (Copland and Garton, 2011; Spencer-Oatey and Dauber, 2019; Holmes and O'Neill, 2012). In the context of Thai higher education, where opportunities for international exposure may be limited, there is a need to examine how structured pedagogical approaches such as peer-assisted learning (PAL) can facilitate intercultural learning among business students (Beelen and Jones, 2015; Tibingana-Ahimbisibwe et al., 2022; Bacon and Torremucha, 2025). Addressing this gap will contribute to a deeper understanding of how intercultural competence can be effectively developed within domestic business education contexts and inform the design of more inclusive and interaction-based learning environments (Leask, 2015; Castellano-Risco, 2024; Montes Granada et al., 2025).

Research Objective

The purpose of this study is to examine the impact of peer-assisted learning (PAL) on the development of intercultural competence among business students in Thai higher education.

Research Questions

1. How does participation in peer-assisted learning (PAL) influence the development of intercultural competence among business students?
2. What intercultural learning experiences do business students gain through participation in PAL activities?
3. How do business students perceive changes in their communication and cultural awareness within business-related contexts?

Significance of the Study

By examining how structured peer interaction within domestic higher education contexts can support the development of intercultural competence, this study contributes to the field of business education (Beelen and Jones, 2015; Spencer-Oatey and Dauber, 2019). It provides insight into how peer-assisted learning facilitates the development of intercultural, communication, and teamwork skills, which are widely recognized as essential for employability in global business environments (Clarke, 2018; Jones et al., 2018; Tomlinson, 2017).

The study also highlights the importance of integrating intercultural learning into everyday classroom practices, particularly in contexts where opportunities for international mobility are limited (Beelen and Jones, 2015; Leask, 2015; Spencer-Oatey and Dauber, 2019). The findings offer practical implications for curriculum design and pedagogical strategies in business education by demonstrating the effectiveness of peer-assisted learning (PAL) as an approach to fostering intercultural and collaborative skills (Topping, 2005; Chan et al., 2016; Tibingana-Ahimbisibwe et al., 2022). Ultimately, this study contributes to a broader understanding of how higher education institutions can better prepare students for participation in an increasingly globalized workforce (Clarke, 2018; Jones et al., 2018; Tomlinson, 2017).

Literature Review

Global Business Context and the Role of Intercultural Competence in Higher Education

Globalization has significantly reshaped the expectations placed on higher education institutions, particularly in preparing graduates for participation in culturally diverse and globally interconnected business environments (Altbach and Knight, 2007; Leask, 2015; Kolm et al., 2024). Within this context, intercultural competence has emerged as a central focus in higher education research, reflecting the ability to communicate and engage effectively across cultural boundaries (Deardorff, 2006; Spencer-Oatey and Dauber, 2019; Clarke, 2018).

In addition, employers increasingly emphasize transferable skills such as communication, teamwork, and adaptability, which are essential for functioning in multicultural professional settings (Jones et al., 2018; Tomlinson, 2017; Bartel-Radic and Cucchi, 2025). Consequently, recent literature has emphasized the need for structured educational approaches that move beyond exposure to diversity and actively facilitate intercultural interaction and learning (Leask, 2015; Holmes and O'Neill, 2012; Beelen and Jones, 2015). Against this background, it is important to examine how intercultural competence is conceptualized and developed within higher education, particularly through interaction-based pedagogical approaches.

Conceptualizing Intercultural Competence in Higher Education Contexts

Intercultural competence is widely recognized as a complex and multidimensional construct encompassing the attitudes, knowledge, and skills required for effective communication across cultural contexts (Byram, 1997; Deardorff, 2006; Spencer-Oatey and Dauber, 2019). Byram's (1997) influential framework conceptualizes intercultural competence as comprising attitudes such as openness and curiosity, knowledge of cultural practices, and skills of interpreting, relating, and interacting.

This perspective is further developed by Deardorff (2006), who conceptualizes intercultural competence as a dynamic and developmental process shaped through interaction, reflection, and experiential learning. More recent studies reinforce this view by emphasizing that intercultural competence develops through active engagement, dialogue, and situated learning rather than passive exposure alone (Feng et al., 2025; Richter and Kjellgren, 2024; Holmes and O'Neill, 2012). This understanding highlights the importance of interactive learning environments and provides a foundation for examining intercultural competence through sociocultural perspectives on learning.

A Sociocultural Perspective on Learning Through Peer Interaction

From a sociocultural perspective, learning is fundamentally a socially mediated process that occurs through communication, interaction, and collaborative activity (Vygotsky, 1978; Lantolf and Thorne, 2006; Eun, 2019). Vygotsky (1978) argues that cognitive development is facilitated through social interaction, particularly within the Zone of Proximal Development, where learners can achieve higher levels of understanding with appropriate support and guidance. This theoretical position is supported by

research demonstrating that collaborative learning environments enhance cognitive engagement and promote deeper meaning-making (Chan et al., 2016; Byl et al., 2015; Goos et al., 2002).

Within higher education, structured peer interaction provides opportunities for learners to engage with diverse perspectives, negotiate meaning, and co-construct knowledge (Volet and Ang, 2012; Hammond et al., 2010; Slabbert et al., 2023). Importantly, these processes extend beyond cognitive development and contribute to the enhancement of communication and intercultural competencies (Holmes and O'Neill, 2012; Spencer-Oatey and Dauber, 2019; Deardorff, 2006). Building on this theoretical foundation, peer-assisted learning can be understood as a pedagogical approach that operationalizes socially mediated learning within higher education contexts (Topping, 2005; Arendale, 2014; Tibingana-Ahimbisibwe et al., 2022).

Peer-Assisted Learning as a Mechanism for Intercultural Competence Development

Peer-assisted learning (PAL) is a collaborative pedagogical approach that promotes learning through structured peer interaction and shared academic engagement (Topping, 2005; Arendale, 2014; Chan et al., 2016). It is characterized by reciprocal participation, shared responsibility, and reduced hierarchical barriers, which together create an environment that supports open dialogue and active involvement among learners (Chan et al., 2016; Topping and Ehly, 2001; Boud et al., 2014). Through peer interaction, students are encouraged to articulate ideas, challenge assumptions, and engage in meaning negotiation, all of which contribute to deeper understanding and knowledge construction (Goos et al., 2002; Volet and Ang, 2012; Slabbert et al., 2023).

Beyond its cognitive benefits, PAL provides opportunities for exposure to diverse perspectives, thereby supporting the development of intercultural awareness and adaptability (Byl et al., 2015; Hammond et al., 2010; Spencer-Oatey and Dauber, 2019). Research further suggests that sustained peer interaction fosters perspective-taking, empathy, and communication flexibility, which are essential components of intercultural competence (Byl et al., 2015; Holmes and O'Neill, 2012; Deardorff, 2006). Consequently, PAL can be understood as a socially situated learning environment in which interaction facilitates the development of intercultural competence.

The Role of Peer-Assisted Learning in Student Engagement and Integration

In addition to its cognitive benefits, peer-assisted learning (PAL) plays a significant role in supporting students' academic and social integration within higher education (Byl et al., 2015; Tinto, 1997; Hammond et al., 2010). Research indicates that peer interaction fosters a sense of belonging, which is a critical factor influencing student engagement, persistence, and overall academic success (Byl et al., 2015; Tinto, 1997; Thomas, 2012). Similarly, PAL provides a collaborative and supportive learning environment that facilitates students' transition into university life and promotes active participation in academic communities (Hammond et al., 2010; Capstick, 2004; Chan et al., 2016).

Such integration has been shown to enhance motivation, academic performance, and student involvement across diverse learning contexts (Capstick, 2004; Chan et al., 2016; Boud et al., 2014). In culturally diverse educational settings, these interactions also create opportunities for intercultural exchange, thereby supporting the development of intercultural competence (Spencer-Oatey and Dauber, 2019; Holmes and O'Neill, 2012; Volet and Ang, 2012). However, despite these advantages, the effectiveness of peer-assisted learning is not always consistent and may vary depending on contextual and implementation factors.

Evaluating the Effectiveness and Challenges of Peer-Assisted Learning

A substantial body of research highlights the benefits of peer-assisted learning (PAL), including improved academic performance, enhanced communication skills, and increased student confidence (Topping, 2005; Capstick, 2004; Chan et al., 2016). However, the evidence is not always consistent or conclusive.

Capstick (2004) argues that the most significant outcomes of PAL are often qualitative in nature, such as improved learning experiences and interpersonal development, rather than measurable academic gains.

Similarly, Hammond et al. (2010) emphasize that the effectiveness of PAL is influenced by factors such as program design, level of structure, and student engagement. More recent research further suggests that variations in implementation and contextual conditions can lead to inconsistent outcomes, indicating that PAL should be understood as a context-dependent pedagogical approach rather than a universally effective strategy (Tibingana-Ahimbisibwe et al., 2022; Boud et al., 2014; Volet and Ang, 2012). This nuanced understanding is particularly important when examining the application of PAL across different disciplinary and institutional contexts.

Application of Peer-Assisted Learning in Business Education

Peer-assisted learning (PAL) is particularly relevant in business education due to its alignment with the collaborative and communication-oriented nature of professional practice (Clarke, 2018; Jones et al., 2018; Loda et al., 2020). Empirical evidence indicates that PAL enhances student motivation and engagement while achieving comparable academic outcomes across different modes of delivery (So and Chiu, 2023; Chan et al., 2016; Boud et al., 2014).

Similarly, research in business education contexts demonstrates that PAL contributes to improved academic performance, particularly in skill-based and applied learning environments (Soyebi, 2024; Topping, 2005; Tibingana-Ahimbisibwe et al., 2022). Furthermore, collaborative learning environments have been shown to support the development of essential professional competencies, including problem-solving, communication, and teamwork, which are highly valued in contemporary business settings (Chan et al., 2016; Tomlinson, 2017; Jones et al., 2018). Collectively, these findings suggest that PAL provides an authentic learning context in which students can develop transferable skills that are directly applicable to real-world professional environments.

Peer-Assisted Learning in Language Education and the Thai Higher Education Context

In language learning contexts, where engagement and communication are central to skill development, peer-assisted learning (PAL) has been shown to be particularly effective (Felder and Brent, 2009; Ross and Cumming, 2013; Chan et al., 2016). Empirical evidence indicates that PAL can significantly enhance students' confidence and oral communication abilities, particularly in business English contexts among Thai learners (Chomphoukarwin et al., 2025; Slabbert et al., 2023).

This is further supported by research demonstrating that collaborative learning environments, characterized by peer feedback and active participation, facilitate language acquisition and communicative competence (Felder and Brent, 2009; Ross and Cumming, 2013; Lantolf and Thorne, 2006). In addition, PAL provides a supportive and low-anxiety learning environment that enables learners to practice speaking and develop fluency (MacIntyre et al., 1998; Chan et al., 2016; Boud et al., 2014). Such environments are particularly important in intercultural contexts, where confidence and language proficiency are closely linked to effective communication and intercultural competence (Deardorff, 2006; Spencer-Oatey and Dauber, 2019; Holmes and O'Neill, 2012).

Peer-Assisted Learning in Digital and Diverse Educational Settings

The expansion of digital learning environments has introduced both opportunities and challenges for the implementation of peer-assisted learning (PAL) (Anderson, 2004; Zhou, 2021; Tibingana-Ahimbisibwe et al., 2022). While PAL has the potential to enhance student engagement and reduce feelings of isolation in online contexts, evidence regarding its effectiveness remains mixed due to variations in design, facilitation, and implementation (Tibingana-Ahimbisibwe et al., 2022; Boud et al., 2014; Chan et al., 2016).

Research further suggests that without carefully structured collaborative activities, online learning environments may limit the quality and depth of peer interaction (Anderson, 2004; Zhou, 2021;

Hrastinski, 2009). Consequently, the effectiveness of PAL in digital settings is strongly influenced by factors such as interaction design, level of student participation, and the quality of instructional facilitation (Hrastinski, 2009; Garrison and Cleveland-Innes, 2005; Slabbert et al., 2023).

Research Gaps and Directions for Further Investigation

Despite the growing body of research on intercultural competence and peer-assisted learning (PAL), several important gaps remain. Existing studies have predominantly focused on academic outcomes, with comparatively limited attention given to broader competencies such as intercultural awareness, communication, and social development (Arendale, 2014; Boud et al., 2014; Spencer-Oatey and Dauber, 2019). In addition, much of the literature has been conducted in Western contexts, resulting in a lack of empirical evidence from Southeast Asian settings, particularly in countries such as Thailand (Kimmel and Volet, 2012; Volet and Ang, 2012; Leask, 2015).

Furthermore, there is limited research examining how structured peer interaction contributes to the development of intercultural competence within domestic higher education environments, especially in the context of business education (Tibingana-Ahimbisibwe et al., 2022; Chan et al., 2016; Bacon and Torremucha, 2025). Addressing these gaps is essential for advancing understanding of how PAL can be effectively implemented as a pedagogical approach to foster intercultural competence among business students in Thai higher education.

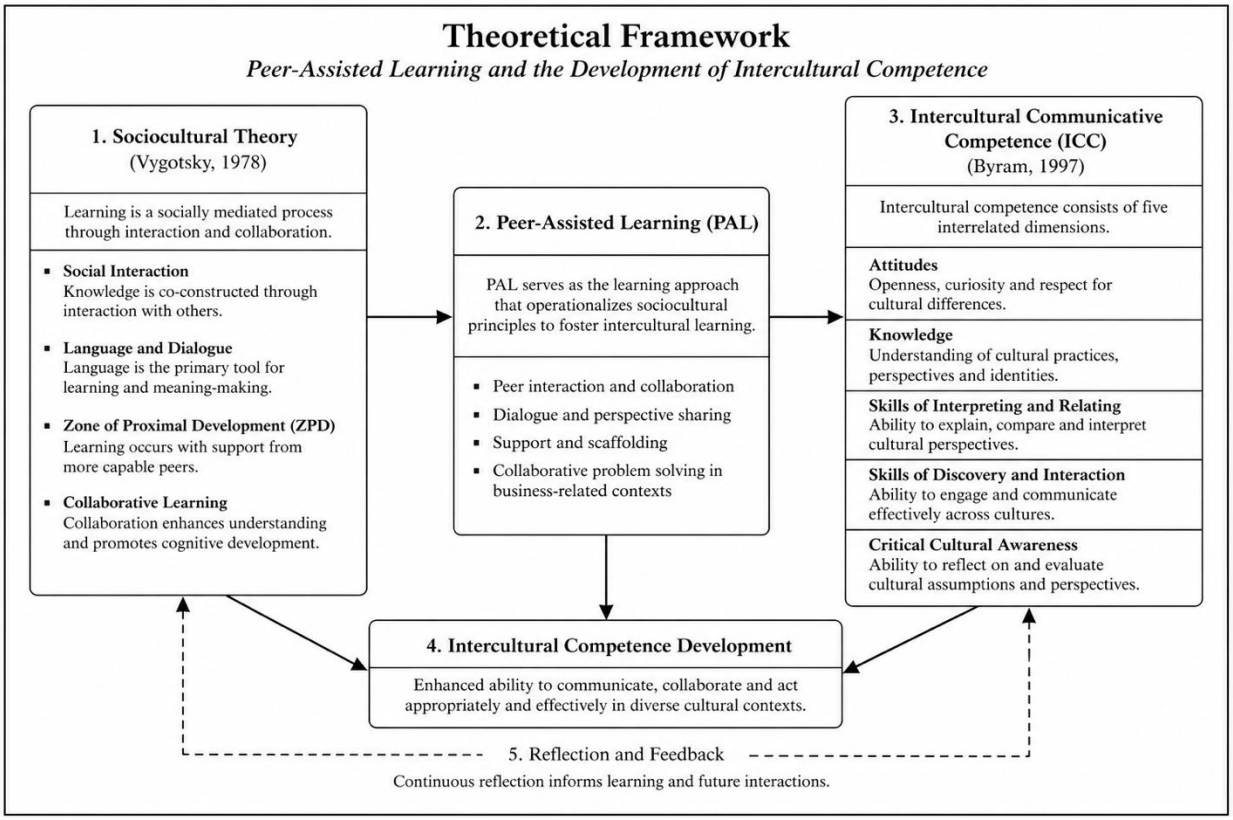


Figure 1. Theoretical Framework

Method

To examine how peer-assisted learning (PAL) supports the development of intercultural competence among business students in Thai higher education, this study adopts a structured and systematic methodological approach. The research employs a Participatory Action Research (PAR) design, complemented by quantitative survey methods, in order to capture both the collaborative learning

processes and measurable learning outcomes (Kemmis and McTaggart, 2005; Creswell and Creswell, 2018).

This integrated approach enables a comprehensive understanding of intercultural competence as both a socially constructed phenomenon shaped through interaction and an empirically assessable outcome (Vygotsky, 1978; Deardorff, 2006). By combining qualitative engagement with quantitative measurement, the study provides a robust framework for analyzing the development of intercultural competence within peer-assisted learning environments.

Research Design: Participatory Action Research (PAR)

This study is grounded in the framework of Participatory Action Research (PAR), which emphasizes collaboration, reflection, and iterative learning within educational contexts (Kemmis and McTaggart, 2005; McIntyre, 2008). PAR is particularly appropriate for examining peer-assisted learning (PAL) environments, where knowledge is co-constructed through interaction, dialogue, and shared experience. This alignment makes PAR a suitable approach for investigating intercultural competence as a socially mediated learning outcome.

In this study, PAR is operationalized through structured peer-assisted learning sessions designed to promote student interaction, collaboration, and intercultural exchange. The research process follows iterative cycles of planning, implementation, observation, and reflection, which enable continuous refinement of learning activities based on participant engagement and feedback (Kemmis et al., 2014). These cycles support the dynamic nature of learning and allow the study to capture both process-oriented and developmental aspects of intercultural competence.

To complement this process-oriented approach, a quantitative survey design is employed to assess intercultural competence across multiple dimensions. This integration of participatory and quantitative methods ensures that both the learning process and its measurable outcomes are systematically examined (Creswell and Creswell, 2018; Deardorff, 2006).

Rationale for a Participatory Approach in Business Education Contexts

The adoption of a participatory research approach is justified by the nature of business education, which increasingly emphasizes experiential learning, collaboration, and communication across cultural contexts (Kolb, 1984; Clarke, 2018; Jones et al., 2018). In professional environments, business graduates are expected to work in diverse teams, negotiate across cultural boundaries, and engage in effective interpersonal communication. Therefore, a research design that reflects these real-world practices is essential.

A participatory approach enables the creation of authentic learning environments in which students actively engage with peers from diverse cultural backgrounds. Through interaction, reflection, and shared experience, learners develop intercultural competence in ways that extend beyond passive knowledge acquisition (Vygotsky, 1978; Byram, 1997; Lantolf and Thorne, 2006). Furthermore, the iterative nature of PAR allows for continuous adaptation of learning activities based on participant feedback, ensuring both relevance and effectiveness within the educational context.

Participant Engagement in the Iterative Learning Process

In this study, participants are positioned as active contributors to both the research process and the learning environment. Through peer-assisted learning (PAL) sessions, students engage in structured group discussions, intercultural interactions, and collaborative problem-solving activities, which facilitate shared knowledge construction and experiential learning (Vygotsky, 1978; Topping, 2005; Lantolf and Thorne, 2006). Their involvement extends beyond participation in learning activities, as they also provide ongoing feedback that informs the refinement of subsequent learning cycles. This iterative engagement reflects the core principles of Participatory Action Research (PAR), in which knowledge is

co-constructed through interaction, reflection, and collaboration (Kemmis and McTaggart, 2005; McIntyre, 2008).

In addition, participants contribute quantitative data through structured questionnaires, enabling a systematic assessment of their learning experiences and intercultural competence development (Creswell and Creswell, 2018; Deardorff, 2006). This dual role as both co-participants in the learning process and respondents in data collection strengthens the alignment between the participatory research framework and the study's empirical objectives, ensuring a comprehensive and integrated analysis of outcomes.

Participants and Context

The study was conducted at a higher education institution in Thailand and involved undergraduate business students who participated in structured peer-assisted learning (PAL) activities. A total of 87 students were included in the study. Participants were selected using purposive sampling to ensure that all individuals had direct experience with PAL sessions, thereby enabling informed reflection on intercultural learning processes (Creswell and Creswell, 2018; Etikan et al., 2016).

The student cohort comprised individuals from diverse linguistic and cultural backgrounds, making it appropriate for examining the development of intercultural competence within a multicultural learning environment (Spencer-Oatey and Dauber, 2019; Deardorff, 2006). The institutional context supports structured peer learning through planned PAL activities, which provide regular opportunities for students to engage in collaborative tasks, intercultural interaction, and shared learning experiences. This setting offers a suitable environment for investigating how peer-assisted learning facilitates intercultural competence development in business education contexts.

Iterative Structure of PAR Cycles and PAL Implementation Timeline

The study follows an iterative framework based on Participatory Action Research (PAR), consisting of cycles of planning, implementation, observation, and reflection (Kemmis and McTaggart, 2005; Kemmis et al., 2014). These cycles are integrated into peer-assisted learning (PAL) activities to support the progressive development of intercultural competence through structured interaction and continuous improvement.

The process begins with an orientation phase, during which students are introduced to the principles of PAL and the expectations for intercultural engagement within a collaborative learning environment. This stage establishes a foundation for participation by clarifying objectives, roles, and the importance of cross-cultural communication (Topping, 2005; Deardorff, 2006). Subsequent cycles involve increasingly complex collaborative activities, including group discussions, intercultural dialogue, and problem-solving tasks situated within business-related contexts. These activities are designed to promote interaction, perspective-taking, and the application of communication strategies across cultural boundaries (Chan et al., 2016; Byl et al., 2015; Lantolf and Thorne, 2006).

As the cycles progress, students engage in deeper levels of interaction and reflection, enabling the gradual development of intercultural awareness, communication skills, and adaptability. Reflection plays a central role in consolidating learning, as students evaluate their experiences and integrate new perspectives into their understanding (Vygotsky, 1978; Byram, 1997). Feedback collected throughout each cycle informs the design and refinement of subsequent learning activities, ensuring that the process remains responsive to participants' needs and supports continuous development. This iterative structure aligns with the principles of PAR and provides a dynamic framework for fostering intercultural competence in business education contexts.

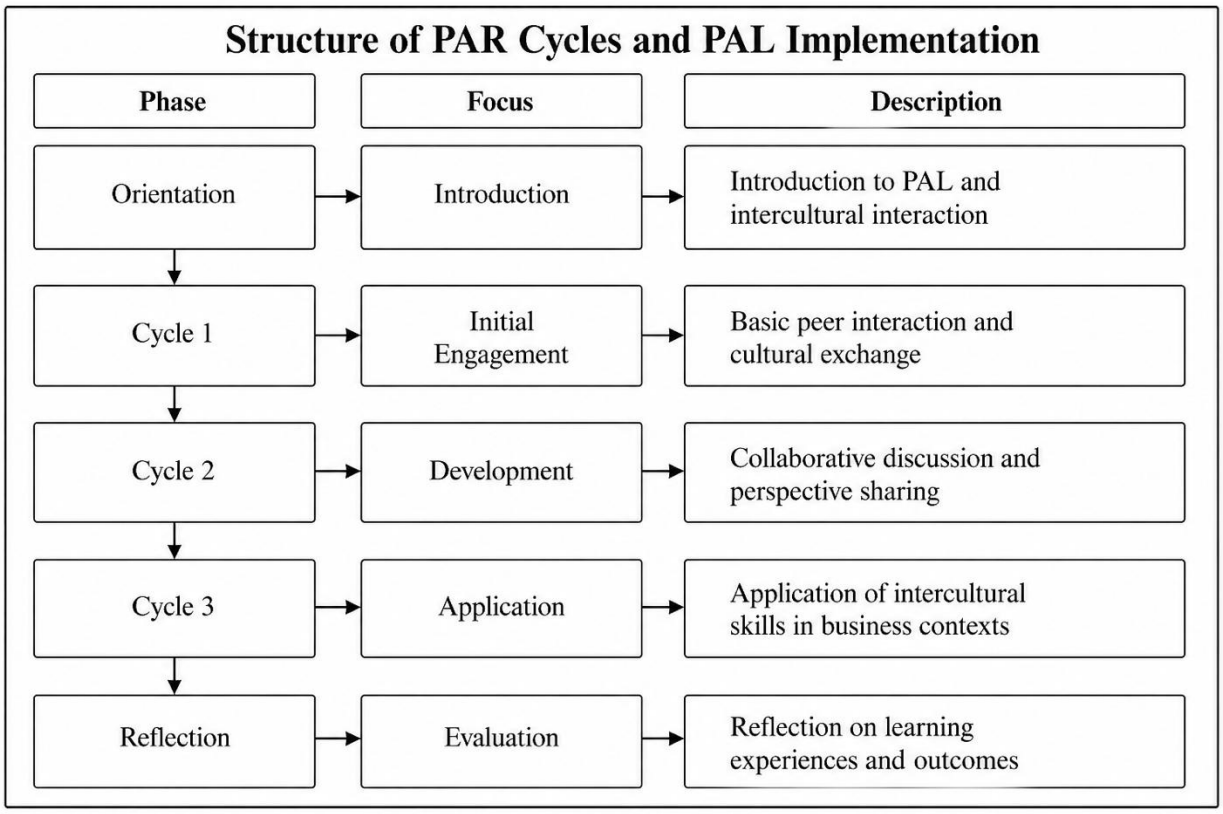


Figure 2. Structure of PAR Cycles and PAL Implementation

Data Collection Methods

Intercultural competence was measured using a structured questionnaire grounded in Byram's (1997) model of intercultural communicative competence, which conceptualizes intercultural competence as comprising five interrelated dimensions: attitudes, knowledge, skills of interpreting and relating, skills of discovery and interaction, and critical cultural awareness. This framework is widely recognized for capturing both cognitive and affective components of intercultural learning (Byram, 1997; Deardorff, 2006).

The instrument consisted of a total of 30 items distributed across these five dimensions. The attitudes dimension included four items designed to assess openness, curiosity, and respect toward cultural differences. The knowledge dimension comprised five items focusing on participants' understanding of cultural practices, perspectives, and identities. The skills of interpreting and relating dimension contained nine items that evaluated the ability to interpret, compare, and explain cultural phenomena across contexts.

Furthermore, the skills of discovery and interaction dimension included eight items aimed at measuring participants' ability to engage in intercultural communication and adapt to culturally diverse situations. The final dimension, critical cultural awareness, consisted of four items that assessed the capacity to critically reflect on cultural assumptions and evaluate perspectives in a thoughtful and informed manner. The distribution of items across these dimensions ensured balanced coverage of key components of intercultural competence, allowing for a comprehensive and systematic assessment of participants' development within peer-assisted learning contexts.

Data Analysis

Data were analyzed using both descriptive and inferential statistical techniques to examine the development of intercultural competence among participants. Descriptive statistics, including mean

scores and standard deviations, were used to summarize overall levels of intercultural competence across the five dimensions (Creswell and Creswell, 2018). These measures provided an overview of participants' responses and general trends within the dataset.

To examine the relationships among the dimensions of intercultural competence, Pearson correlation analysis was conducted. This analysis enabled the identification of the strength and direction of associations between variables, allowing for a better understanding of how different components of intercultural competence are interrelated (Field, 2018).

In addition, multiple regression analysis was employed to determine the extent to which each dimension contributed to overall intercultural competence. This approach allowed for the examination of the predictive relationships between variables and the relative contribution of each component within the model (Hair et al., 2019). Together, these analytical procedures provided a comprehensive framework for examining both the structure and interrelationships of intercultural competence within the context of peer-assisted learning.

Ethical Considerations

Ethical considerations were carefully addressed throughout all stages of the study. Prior to data collection, informed consent was obtained from all participants, and participation was entirely voluntary. Participants were fully informed about the purpose of the study, the nature of their involvement, and their right to withdraw at any time without penalty (Creswell and Creswell, 2018; Israel and Hay, 2006).

To ensure confidentiality and anonymity, all data were collected and reported without identifying information. Participants' responses were securely stored and used solely for research purposes. The study adhered to established ethical standards for research involving human participants, including principles of voluntary participation, confidentiality, and data protection (British Educational Research Association, 2018; American Educational Research Association, 2011). In addition, the research procedures were conducted in accordance with institutional ethical guidelines, ensuring that all aspects of the study complied with accepted protocols for ethical research practice.

Results

Intercultural Competence Questionnaire

This section reports the descriptive statistics of Intercultural Competence (IC) for the Business students, derived from a 30-item Likert scale questionnaire constructed in accordance with Byram's model of Intercultural Communicative Competence (ICC). The statistical analysis encompasses mean scores, standard deviations, and satisfaction levels for Overall IC and its subscales: attitudes, knowledge, interpreting and relating, discovery and interaction, and critical cultural awareness.

Descriptive Statistics for Intercultural Competence

Table 1. Descriptive Statistics for Intercultural Competence for Business Students

Variable	N	Mean	SD	Level
Overall IC	87	4.09	0.67	High
Attitudes	87	4.28	0.71	Very High
Knowledge	87	4.08	0.72	High
Interpreting and Relating	87	4.03	0.74	High
Discovery and Interaction	87	4.11	0.71	High
Critical Cultural Awareness	87	4.03	0.75	High

Descriptive statistics were calculated to examine participants' intercultural competence (IC) across the five subscales and the overall composite score. As presented in (Table 1), the Overall IC mean score was

4.09 (SD = 0.67), corresponding to a high level of competence. Among the subscales, Attitudes yielded the highest mean score (M = 4.28, SD = 0.71), classified as very high. This indicates that participants demonstrated strong openness, curiosity, and willingness to engage with cultural diversity.

The remaining dimensions: Knowledge (M = 4.08, SD = 0.72), Interpreting and Relating (M = 4.03, SD = 0.74), Discovery and Interaction (M = 4.11, SD = 0.71), and Critical Cultural Awareness (M = 4.03, SD = 0.75) all fell within the high level range. These results suggest that participants possessed solid intercultural knowledge, skills in interpreting cultural cues, readiness to engage in intercultural encounters, and awareness of cultural values and perspectives.

Overall, the findings reveal a consistent pattern of high intercultural competence across all dimensions, with Attitudes emerging as the strongest domain. Slightly lower scores in Interpreting and Relating and Critical Cultural Awareness suggest that while participants are confident in openness and engagement, the more complex cognitive and reflective aspects of intercultural competence may require further development.

Regression Analysis

This section reports the regression analyses undertaken to examine the predictive relationships among the dimensions of Intercultural Competence (IC). Overall IC was treated as the dependent variable, with attitudes, knowledge, interpreting and relating, discovery and interaction, and critical cultural awareness entered as predictors. Additional regression models were estimated with each subscale serving as the dependent variable to determine the extent to which the remaining dimensions accounted for its variance. Collectively, these analyses highlight the interrelated nature of the IC subscales and their combined contribution to the composite construct.

Prediction of Overall IC

Table 2. Regression Analysis Predicting Overall Intercultural Competence from Subscales

Predictor	β	t	p
Attitudes	0.13	2285803109.00	0.0000
Knowledge	0.17	2019246000.00	0.0000
Interpreting and Relating	0.3	3403904018.00	0.0000
Discovery and Interaction	0.27	2515928011.00	0.0000
Critical Cultural Awareness	0.13	1576618004.00	0.0000

A multiple regression analysis was conducted with Overall Intercultural Competence (IC) as the dependent variable and the five IC subscales as independent variables. The model was statistically significant ($R^2 = 1.00$, $p < .001$), indicating that the predictors collectively explained nearly all variance in overall IC.

As shown in (Table 2), all subscales were significant predictors. Interpreting and Relating ($\beta = 0.30$, $p < .001$) and Discovery and Interaction ($\beta = 0.27$, $p < .001$) emerged as the strongest contributors, followed by Knowledge ($\beta = 0.17$, $p < .001$). Attitudes ($\beta = 0.13$, $p < .001$) and Critical Cultural Awareness ($\beta = 0.13$, $p < .001$) also predicted overall IC, though with comparatively smaller effects. Because Overall IC is mathematically derived from the five subscales, the model produced negligible standard errors and inflated t values, which are not interpretable in the conventional sense.

Prediction of IC Subscales

A series of multiple regression analyses were conducted with each intercultural competence (IC) subscale entered as the dependent variable and the remaining subscales as predictors. All models were statistically significant, with R^2 values ranging from .65 to .89, indicating that substantial proportions of variance in

each subscale were explained by the others. Table 4.3 presents the regression coefficients, test statistics, and significance levels for each model.

Table 3. Regression Analysis Predicting Each IC Subscales from Other Subscales

Dependant Variable (DV)	Predictor (IV)	β	t	p	R^2
Attitudes	Knowledge	0.73	5.42	0.000	0.65
	Interpreting and Relating	-0.39	-2.40	0.019	
	Discovery and Interaction	0.47	2.42	0.018	
	Critical Cultural Awareness	0.01	0.03	0.975	
Knowledge	Attitudes	0.36	5.42	0.000	0.83
	Interpreting and Relating	0.60	6.08	0.000	
	Discovery and Interaction	-0.31	-2.25	0.027	
	Critical Cultural Awareness	0.33	3.09	0.003	
Interpreting and Relating	Attitudes	-0.17	-2.40	0.019	0.86
	Knowledge	0.52	6.08	0.000	
	Discovery and Interaction	0.72	6.77	0.000	
	Critical Cultural Awareness	-0.11	-1.02	0.311	
Discovery and Interaction	Attitudes	0.14	2.42	0.018	0.89
	Knowledge	-0.19	-2.25	0.027	
	Interpreting and Relating	0.50	6.77	0.000	
	Critical Cultural Awareness	0.51	7.55	0.000	
Critical Cultural Awareness	Attitudes	0.00	0.03	0.975	0.85
	Knowledge	0.32	3.09	0.003	
	Interpreting and Relating	-0.12	-1.02	0.311	
	Discovery and Interaction	0.80	7.55	0.000	

As displayed in Table 4.3, different predictors emerged as strongest contributors across models. When Attitudes was the dependent variable, Knowledge (β = 0.73, p < .001) was the most influential predictor, while Interpreting (β = -0.39, p = .019) had a negative effect. For Knowledge, the strongest predictors were Interpreting (β = 0.60, p < .001) and Attitudes (β = 0.36, p < .001), with Discovery (β = -0.31, p = .027) exerting a negative influence.

Interpreting and Relating was most strongly predicted by Discovery (β = 0.72, p < .001) and Knowledge (β = 0.52, p < .001). For Discovery and Interaction, both Interpreting (β = 0.50, p < .001) and Critical Cultural Awareness (β = 0.51, p < .001) were significant positive predictors. Finally, Critical Cultural Awareness was most strongly predicted by Discovery (β = 0.80, p < .001), with Knowledge (β = 0.32, p = .003) also contributing positively. In summary, these findings demonstrate the interdependent nature of the IC subscales, with substantial cross-predictive relationships that reinforce the multidimensional structure of intercultural competence.

Summary of Quantitative Findings

The quantitative analyses revealed that Business students demonstrated consistently high levels of IC across all dimensions of Byram's model. Attitudes emerged as the strongest domain, while Knowledge, Interpreting and Relating, Discovery and Interaction, and Critical Cultural Awareness were also rated at high levels. Regression analyses confirmed that each subscale significantly predicted Overall IC, with Interpreting and Relating and Discovery and Interaction exerting the greatest influence, underscoring the importance of interpretive and interactive skills in shaping overall competence.

Further regression models predicting individual subscales highlighted substantial cross-relationships, with Knowledge functioning as a central predictor and Discovery strongly associated with both interpretive skills and critical cultural awareness. Negative coefficients in certain models

suggest potential tensions between openness, theoretical knowledge, and experiential engagement, reflecting the complex and multidimensional nature of IC development. Collectively, these findings confirm the interconnected structure of intercultural competence and point to critical cultural awareness as an area requiring further pedagogical emphasis.

Semi-Structured Interviews

In addition to the quantitative survey, qualitative data were collected through semi-structured interviews with five Business student participants. Semi-structured interviews represent a flexible qualitative method that combines predetermined guiding questions with opportunities for participants to elaborate on their experiences. This approach ensures consistency across interviews while allowing for the emergence of rich, contextual insights not captured through standardized questionnaires. The interviews provided deeper understanding of how students perceive and enact intercultural competence in practice, thereby complementing the statistical findings with nuanced accounts of attitudes, knowledge, interactional experiences, and critical reflections.

Emergent Themes from PAL Experiences

Thematic analysis of the interview transcripts identified several recurring themes that illustrate participants' experiences of intercultural competence (IC) development within the PAL environment. These themes highlight both opportunities and challenges associated with intercultural interaction and correspond closely with dimensions emphasized in prior research.

Theme 1: Initial Nervousness and Lack of Confidence

A number of participants reported experiencing feelings of nervousness, shyness, and a lack of confidence prior to meeting their international team leader. These emotional responses were frequently associated with concerns regarding their English language proficiency and apprehension about making mistakes in communication.

Theme 2: Desire to Improve English Skills

Improving English communication emerged as the most frequently cited expectation among participants. Students consistently viewed the program as an opportunity to practice their language skills and to build greater confidence in using English within intercultural contexts.

Theme 3: Curiosity and Openness Toward Other Cultures

Participants expressed a strong and genuine interest in learning about other cultures, traditions, and perspectives. They consistently regarded intercultural exchange as a valuable opportunity to broaden their worldview and enhance their understanding of global diversity.

Theme 4: Challenges in Communication and Self-Expression

Participants reported encountering difficulties with grammar, vocabulary, and confidence when speaking English. Despite these challenges, they emphasized the importance of persistence and sustained effort in attempting to communicate effectively.

Theme 5: Personal Growth and Confidence Building

Beyond language related goals, participants articulated aspirations to gain confidence, establish new friendships, and cultivate intercultural awareness. The program was widely perceived as a pathway to broader personal development, extending its impact beyond linguistic competence to encompass social and cultural growth.

Changes in Communication and Cultural Awareness

The qualitative findings reveal a clear developmental progression in students' experiences before, during, and after participation in the program. Before Participation: Students consistently reported feelings of nervousness, shyness, and a lack of confidence, particularly in relation to their English proficiency. They anticipated challenges in communication and expressed anxiety about interacting with individuals from different cultural backgrounds.

During Participation: As the program progressed, participants demonstrated increased engagement, marked by curiosity about cultural differences and openness to learning. They described culture as encompassing traditions, ways of life, and values, and began comparing Thai practices with those of other countries. Although language-related challenges persisted, participants emphasized persistence and effort as central to their communication strategies.

After Participation: By the conclusion of the program, participants reported notable growth in confidence, improved English language skills, and enhanced intercultural awareness. They highlighted personal development outcomes such as increased bravery in speaking, the formation of new friendships, and a clearer understanding of both their own cultural identity and that of others.

Summary of Qualitative Findings

The semi-structured interviews with five Business student participants revealed a developmental progression in intercultural competence across the program. Prior to participation, students consistently described feelings of nervousness, shyness, and limited confidence, particularly in relation to English communication. During the program, they demonstrated growing curiosity and openness toward cultural differences, actively engaging in discussions of traditions, values, and practices while acknowledging ongoing challenges with grammar and vocabulary.

By the conclusion of the program, participants reported notable personal growth, including increased confidence, improved English proficiency, and enhanced intercultural awareness. Thematic analysis identified five recurring themes: initial nervousness and lack of confidence, desire to improve English skills, curiosity and openness toward other cultures, challenges in communication and self-expression, and personal growth and confidence building. Together, these findings illustrate how the PAL environment facilitated progression from anxiety and uncertainty to confidence, skill development, and broader intercultural understanding.

Discussion

RQ1: How does participation in peer-assisted learning (PAL) influence the development of intercultural competence among business students?

The findings indicate that participation in PAL supports the development of intercultural competence by providing business students with structured opportunities to communicate, collaborate, and engage with culturally diverse peers. Participants demonstrated a high overall level of intercultural competence (M = 4.09), with all five dimensions of Byram's model receiving high or very high scores. Attitudes obtained the highest mean score (M = 4.28), suggesting that students demonstrated considerable openness, curiosity, and willingness to engage with cultural differences. This finding is consistent with Byram's (1997) conceptualization of intercultural attitudes as a foundation for effective intercultural communication and with Deardorff's (2006) understanding of intercultural competence as a developmental process involving attitudes, knowledge, skills, and reflection.

The prominence of intercultural attitudes suggests that PAL may help create a supportive environment in which students become more receptive to unfamiliar perspectives. This finding is significant because the presence of cultural diversity in higher education does not necessarily result in meaningful intercultural learning. Without structured interaction, students may continue to communicate primarily within familiar cultural and linguistic groups (Kimmel and Volet, 2012;

Montgomery, 2010; Glass and Westmont, 2014). The PAL activities appear to have transformed cultural diversity into an active learning resource by requiring students to communicate, exchange ideas, and collaborate across cultural boundaries. This supports the argument that intercultural competence develops through purposeful interaction rather than passive exposure to diversity (Holmes and O'Neill, 2012; Leask, 2015; Spencer-Oatey and Dauber, 2019).

Interpreting and Relating and Discovery and Interaction made the strongest contributions to the composite measure of overall intercultural competence. Because the overall score was mathematically derived from the five subscales, these regression coefficients should be interpreted as descriptive evidence of the relative contribution of each dimension rather than as independent causal effects. Nevertheless, the pattern emphasizes that intercultural competence depends substantially on students' ability to interpret cultural meanings, relate unfamiliar practices to familiar experiences, acquire new cultural knowledge, and adapt their behaviour during intercultural encounters. This result is consistent with the multidimensional and interconnected nature of intercultural competence proposed by Byram (1997), Deardorff (2006), and Wang and Teo (2024).

The relationships among the subscales further indicate that the development of intercultural competence does not occur through isolated dimensions. Knowledge was strongly associated with attitudes and interpreting skills, while Discovery and Interaction was closely associated with Interpreting and Relating and Critical Cultural Awareness. These relationships suggest that students develop intercultural competence through the interaction of affective, cognitive, behavioural, and reflective processes. PAL facilitates this process by enabling students to obtain cultural knowledge through dialogue, apply that knowledge during interaction, and reconsider their assumptions through reflection and comparison.

The qualitative findings support this interpretation. Participants described a progression from nervousness and uncertainty to greater confidence, openness, and intercultural awareness. This progression reflects Sociocultural Theory, which explains learning as a socially mediated process occurring through interaction, dialogue, and collaborative activity (Vygotsky, 1978; Lantolf and Thorne, 2006). In the PAL setting, peers provided linguistic, cultural, and interpersonal support that enabled students to participate in intercultural communication and gradually develop greater competence. Therefore, the findings suggest that PAL influences intercultural competence by providing sustained opportunities for socially mediated learning, perspective-taking, meaning negotiation, and reflective engagement.

However, this influence should be interpreted cautiously. The absence of pre-program measurements and a comparison group means that the study cannot establish that PAL independently caused the high levels of intercultural competence. The findings instead demonstrate that students perceived PAL as supporting their development and that their intercultural attitudes, knowledge, interactional skills, and critical awareness were strongly interconnected within the PAL environment.

RQ2: What intercultural learning experiences do business students gain through participation in PAL activities?

The findings indicate that students gained intercultural learning experiences involving cultural exchange, perspective-taking, collaborative communication, comparison of cultural practices, and relationship building. Participants described learning about different traditions, values, lifestyles, and ways of communicating through their interactions with international Team Leaders. These experiences broadened students' understanding of cultural diversity and encouraged them to consider perspectives beyond their familiar Thai cultural context.

Curiosity and openness toward other cultures emerged as a central qualitative theme. Students viewed PAL as an opportunity to ask questions, exchange cultural information, and develop a broader worldview. During the program, they discussed cultural practices and compared Thai traditions and

values with those of other countries. These activities reflect the skills of interpreting and relating identified in Byram's (1997) framework because students were required to interpret unfamiliar cultural information and connect it with their existing cultural knowledge. The experiences also support Deardorff's (2006) argument that intercultural competence develops through interaction, experience, and reflection.

Students additionally gained experience in negotiating meaning across linguistic and cultural differences. Participants reported challenges involving English grammar, vocabulary, pronunciation, and self-expression. Rather than preventing participation, these difficulties required students to persist, clarify their intended meanings, adjust their communication, and seek mutual understanding. Such experiences are important because intercultural communication does not depend solely on linguistic accuracy. It also requires adaptability, patience, and the ability to respond constructively when misunderstandings arise. These findings correspond with previous research showing that collaborative peer interaction encourages meaning negotiation, communication flexibility, and engagement with diverse perspectives (Volet and Ang, 2012; Holmes and O'Neill, 2012; Slabbert et al., 2023).

The PAL environment also provided students with relational intercultural experiences. Participants reported forming friendships and becoming more comfortable interacting with people from other backgrounds. These outcomes demonstrate that intercultural learning involved not only acquiring knowledge about other cultures but also developing the confidence and interpersonal willingness required to sustain intercultural relationships. This finding aligns with research linking peer interaction with belonging, social integration, and active participation in university communities (Tinto, 1997; Byl et al., 2015; Hammond et al., 2010).

These experiences are consistent with Sociocultural Theory because students developed understanding through dialogue and shared activity rather than through the passive reception of cultural information (Vygotsky, 1978; Lantolf and Thorne, 2006). PAL operationalized this socially mediated learning by placing students in situations where they needed to communicate, cooperate, interpret perspectives, and construct meaning with culturally diverse peers. The findings therefore suggest that PAL gives business students experiential opportunities to practise the intercultural capabilities needed for culturally diverse professional environments.

Nevertheless, Critical Cultural Awareness received one of the lowest subscale means, although it remained at a high level. This result suggests that students may have gained substantial experience in cultural exchange and interpersonal communication but fewer opportunities to critically evaluate cultural assumptions, inequalities, and competing value systems. Future PAL activities should consequently incorporate guided reflection, intercultural business cases, ethical dilemmas, and collaborative problem-solving tasks that require students to examine cultural perspectives critically rather than merely describe cultural differences.

RQ3: How do business students perceive changes in their communication and cultural awareness within business-related contexts?

Business students perceived that their communication became more confident, persistent, and adaptable through participation in PAL. Before the program, participants frequently described themselves as nervous, shy, and concerned about making mistakes when speaking English. They anticipated difficulties communicating with international Team Leaders and lacked confidence in their ability to express themselves. During the program, however, students became increasingly willing to participate, ask questions, maintain conversations, and continue communicating despite limitations in grammar and vocabulary. By the end of the program, they reported greater confidence, increased bravery in speaking English, and an improved ability to communicate with people from different cultural backgrounds.

These perceptions are consistent with previous research showing that PAL can provide a supportive and comparatively low-anxiety environment for developing communication skills (Chan et al., 2016; Boud et al., 2014). They also correspond with research conducted among Thai learners showing

that peer-supported activities can strengthen confidence and oral communication in business-English contexts (Chomphoukarwin et al., 2025). The present findings suggest that repeated interaction reduced students' fear of making mistakes and enabled them to regard communication as a process of mutual understanding rather than a demonstration of perfect linguistic accuracy.

Students also perceived an expansion of their cultural awareness. Participants reported developing a clearer understanding of different traditions, values, lifestyles, and communication practices. They became more aware that people may interpret situations and communicate differently according to their cultural backgrounds. Students also indicated that comparing Thai culture with other cultures helped them understand their own cultural identities more clearly. Cultural awareness therefore developed through both learning about others and reflecting on the assumptions embedded within students' own perspectives. This reciprocal process is consistent with Byram's (1997) emphasis on interpreting, relating, and critically reflecting on cultural practices.

Within business-related contexts, these perceived changes are particularly important. Contemporary workplaces require graduates to communicate with culturally diverse colleagues, adapt to unfamiliar perspectives, collaborate in multicultural teams, and resolve misunderstandings constructively (Clarke, 2018; Jones et al., 2018; Tomlinson, 2017). The confidence, adaptability, perspective-taking, and cultural awareness reported by participants therefore represent transferable competencies relevant to international and multicultural business environments. PAL provides an experiential setting in which students can rehearse these capabilities before entering professional workplaces.

The findings also support the use of PAL as a form of Internationalization at Home. International mobility remains inaccessible to many students because of financial, institutional, and structural constraints. PAL can provide locally accessible opportunities for meaningful intercultural engagement within students' ordinary university experience (Beelen and Jones, 2015; Leask, 2015). By integrating structured intercultural interaction into business education, institutions can help students develop global perspectives without requiring participation in study-abroad programs.

However, students' reported improvement in English should be understood as a perception rather than an objectively measured outcome. The study did not employ pre- and post-program language assessments, observational measures, or a comparison group. It can therefore be concluded that participants perceived greater communicative confidence and intercultural awareness, but not that PAL produced measurable gains in English proficiency. Future research should combine self-reported perceptions with pre- and post-program assessments, observed interactional performance, and comparison groups to determine the extent to which PAL produces measurable changes in business communication and intercultural competence.

Conclusion

This study examined the role of peer-assisted learning in developing intercultural competence among business students in Thai higher education. The quantitative findings showed high levels of competence across all five dimensions of Byram's framework. Attitudes toward cultural diversity received the highest mean score, while Interpreting and Relating and Discovery and Interaction made the largest contributions to the composite intercultural competence score. These results demonstrate the interconnected nature of students' intercultural attitudes, knowledge, interactional abilities, interpretive skills, and critical cultural awareness.

The qualitative findings provided further insight into students' experiences within the PAL program. Participants described a progression from nervousness, shyness, and concern about their English proficiency to greater confidence and willingness to communicate with culturally diverse peers. They gained opportunities to exchange cultural knowledge, compare perspectives, negotiate meaning, adapt their communication, and form intercultural relationships. Their accounts indicate that

intercultural learning occurred through sustained participation in socially meaningful interactions rather than through exposure to cultural diversity alone.

The findings also highlight the relevance of PAL to business education. By engaging students in intercultural communication and collaboration, PAL creates an experiential learning environment that reflects the demands of culturally diverse workplaces. The program enabled students to practise capabilities associated with professional participation, including communication, adaptability, teamwork, perspective-taking, and respectful engagement with cultural differences.

The findings must be interpreted in light of the study's methodological limitations. The study was conducted at one institution using purposive sampling and self-reported questionnaire data, while the qualitative component involved only five interview participants. The absence of pre-program measurements and a comparison group also means that causal changes in intercultural competence cannot be established. Nevertheless, the convergence of the quantitative and qualitative findings indicates that structured peer interaction provides a meaningful context for supporting intercultural learning among business students. The study therefore contributes evidence from Thai higher education that PAL can function as an accessible pedagogical mechanism for cultivating intercultural competence within a domestic university setting.

Recommendations

Business programs should incorporate structured PAL activities that require students from different cultural and linguistic backgrounds to communicate and collaborate regularly. These activities could include intercultural business cases, workplace simulations, negotiations, group presentations, collaborative problem-solving tasks, and discussions of culturally influenced business practices.

PAL activities should include clearly defined learning objectives, participant roles, discussion prompts, and opportunities for reflection. Team Leaders should receive preparation in inclusive facilitation, intercultural communication, constructive feedback, and strategies for supporting students who lack confidence in using English. Particular emphasis should be placed on clarification, paraphrasing, active listening, and encouraging participation without penalizing students for minor linguistic errors.

Programs should provide more activities targeting Critical Cultural Awareness and Interpreting and Relating because these dimensions received slightly lower scores than the other areas of intercultural competence. Students should be asked to examine cultural assumptions, interpret situations from multiple perspectives, and consider how cultural values influence communication, ethical judgments, workplace relationships, and business decisions. Guided reflection following each activity would help students connect their intercultural experiences with broader professional contexts.

Higher education institutions should consider PAL as part of their Internationalization at Home strategies. Structured interaction between domestic and international students can provide intercultural learning opportunities for students who cannot participate in study-abroad or other international mobility programs. Institutions should therefore allocate appropriate time, facilities, training, and administrative support to ensure that PAL activities are sustained and integrated into the curriculum rather than offered as isolated events.

Future studies should use pre- and post-program measurements and include comparison groups to determine whether participation in PAL produces measurable changes in intercultural competence. Research should also involve larger samples from multiple universities and academic disciplines. Self-reported questionnaires should be supplemented with observations, performance-based assessments, reflective journals, and interviews with both students and Team Leaders. These approaches would clarify how intercultural competence develops over time and identify which PAL activities are most effective in supporting its development.

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