

Reimagining Sustainable Interdisciplinary Learning: Developing Global Citizenship through Community-Engaged Mobility in Islamic Higher Education

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ABSTRACT

International mobility programs represent underutilized platforms for advancing Education for Sustainable Development (ESD) and Global Citizenship Education (GCED), particularly for students from peripheral higher education institutions with limited international exposure. This study investigates how the International Student Exchange Program (ISEP) 2026 at Universiti Utara Malaysia facilitated transformative learning aligned with UNESCO's Education for Sustainable Development: Towards Achieving the SDGs (ESD for 2030) framework and the OECD Global Competence Framework among students from a small Islamic higher education institution in Indonesia. Using Interpretative Phenomenological Analysis (IPA), the study explored the lived experiences of 15 undergraduate students from STITNU Sakinah Dharmasraya who participated in multicultural academic collaboration, community-based learning in Kampung Telok Kandis, and intercultural homestay immersion. The findings reveal a progressive transformative process characterized by four interrelated themes: navigating uncertainty through intercultural encounters, community engagement as experiential sustainability learning, collaborative learning as a catalyst for intercultural competence and professional confidence, and transformative learning toward global citizenship. Based on these findings, the study proposes the Transformative Education for Sustainable Mobility (TESM) Model, an integrative framework that explains transformative international mobility and provides practical guidance for designing sustainability-oriented mobility programs within Islamic higher education and comparable institutional contexts, while informing future internationalization initiatives.

Keywords: education for sustainable development, global citizenship, international student mobility, Islamic higher education, transformative education for sustainable mobility (TESM), transformative learning

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INTRODUCTION

The adoption of the 2030 Agenda for Sustainable Development has fundamentally reshaped the role of higher education, transforming it from a knowledge-producing institution into a transformative agent capable of preparing graduates to address increasingly complex global challenges. Through Sustainable Development Goal (SDG) 4.7, the United Nations emphasizes that education should equip learners with the knowledge, skills, values, and attitudes necessary to promote sustainable development, global citizenship, cultural diversity, and social responsibility (United Nations, 2015; UNESCO, 2021). Consequently, universities are expected not only to produce academically competent graduates but also to cultivate individuals capable of collaborating across cultural boundaries and contributing meaningfully to sustainable societies.

Within this global agenda, the internationalization of higher education has gained increasing strategic importance. International mobility programs are increasingly understood not merely as mechanisms of internationalization but as learning environments in which students develop intercultural awareness, global competence, adaptability, and broader perspectives through direct engagement with unfamiliar cultural and academic contexts (de Wit & Altbach, 2021; Chieffo et al., 2026). Compared with classroom-based internationalization, mobility experiences immerse students in authentic situations that require them to negotiate unfamiliar cultural norms, communicate across linguistic differences, and participate in collaborative problem-solving with individuals from diverse backgrounds.

Recent scholarship has further suggested that international mobility possesses considerable potential as a platform for Education for Sustainable Development (ESD). UNESCO (2021) identifies experiential learning, community engagement, interdisciplinary collaboration, and critical reflection as essential pedagogical approaches for developing sustainability competencies. These characteristics closely correspond with the educational design of many contemporary mobility programs, particularly those integrating academic learning with community-based activities. Rather than learning about sustainability solely through classroom instruction, students are given opportunities to experience sustainability challenges directly within local communities while simultaneously developing intercultural understanding and collaborative capacities.

From a theoretical perspective, such experiences align closely with Transformative Learning Theory (Mezirow, 1991, 2000), which argues that meaningful learning occurs when individuals encounter situations that challenge previously held assumptions and stimulate critical reflection. International mobility frequently creates such "disorienting dilemmas" through exposure to unfamiliar languages, academic cultures, and social practices. As students interpret these experiences, they may reconstruct their perspectives regarding themselves, others, and their responsibilities as members of an increasingly interconnected world. Consequently, mobility programs can facilitate not only cognitive development but also deeper transformations in identity, values, and future aspirations.

Another important dimension concerns the development of Intercultural Communicative Competence (ICC). According to Byram (1997) and Deardorff (2006), effective participation in multicultural environments requires more than linguistic proficiency; it also demands openness, empathy, critical cultural awareness, and the ability to negotiate meaning across cultural boundaries. These competencies are increasingly regarded as fundamental prerequisites for global citizenship because sustainable development challenges require cooperation among individuals possessing diverse cultural perspectives and disciplinary expertise. Accordingly, intercultural competence and sustainability competence should not be viewed as separate educational outcomes but as mutually reinforcing dimensions of contemporary higher education.

Despite growing scholarly interest in international mobility, several important gaps remain. First, existing studies have predominantly focused on students from large research-intensive universities or institutions located in the Global North, while comparatively little attention has been given to students from smaller Islamic higher education institutions situated in peripheral regions of developing countries (Simek

& Stewart, 2024). Second, previous research frequently examines transformative learning, intercultural competence, and sustainability education independently, providing a limited explanation of how these dimensions interact throughout a single mobility experience (Pang, Cox, & Acheson, 2023). Third, community-based learning is often treated as a complementary cultural activity rather than a central pedagogical mechanism capable of fostering sustainability-oriented identity transformation (Aramburuzabala & Cerrillo, 2023). Consequently, limited empirical evidence explains how short-term international mobility can intentionally function as an integrated educational intervention for developing sustainability competencies alongside intercultural communicative competence and global citizenship (Goldstein, 2022; Gibson, Spira-Cohen, Sherman, & Namaste, 2023).

These limitations are particularly relevant within the Indonesian Islamic higher education context. Although internationalization has become an important institutional agenda (Sibawaihi, Ratnasari, Purnami, & Brooks, 2025), empirical investigations have primarily concentrated on policy implementation, curriculum reform, institutional autonomy, and government-funded mobility schemes such as the Indonesian International Student Mobility Awards program (Akyuni, Engkizar, Alhadi, Syamer, Witri, Khairiyah, & Mulyawati, 2025). Comparatively little is known about how students from smaller Islamic higher education institutions personally experience international mobility, interpret intercultural encounters, and reconstruct their understanding of sustainability through community-engaged learning. Understanding these lived experiences is essential because meaningful internationalization ultimately depends not only on institutional policies but also on the transformative learning experienced by participating students.

This study addresses these gaps by investigating the lived experiences of students from STITNU Sakinah Dharmasraya who participated in the International Student Exchange Program (ISEP) 2026 at Universiti Utara Malaysia. Employing Interpretative Phenomenological Analysis (IPA), the study explores how participants interpret intercultural encounters, community engagement, and collaborative academic activities as processes contributing to sustainability awareness and global citizenship development. Rather than measuring predetermined outcomes, the study seeks to understand how participants construct meaning from their experiences and how these meanings evolve throughout the mobility program.

The study makes four contributions to the literature. First, it provides an empirical account of international mobility from the perspective of students enrolled in a small Islamic higher education institution, a context that remains underrepresented in international scholarship. Second, it demonstrates how academic collaboration and community immersion operate together as complementary mechanisms of transformative learning for sustainable development. Third, it integrates Transformative Learning Theory, Intercultural Communicative Competence, UNESCO's Education for Sustainable Development competencies, and the OECD Global Competence Framework into a coherent analytical perspective. Finally, based on the empirical findings, the study proposes the Transformative Education for Sustainable Mobility (TESM) Model, a conceptual framework explaining the sequential process through which international mobility facilitates intercultural competence, sustainability consciousness, identity transformation, and global citizenship aspirations.

Accordingly, this study is guided by the following research questions:

1. How do students from a small Islamic higher education institution experience and interpret international mobility as a context for Education for Sustainable Development?
2. How do community-engaged learning and collaborative academic activities contribute to the development of sustainability competencies and intercultural communicative competence?
3. How does participation in an international mobility program facilitate transformative learning toward global citizenship identity and long-term sustainability aspirations?

LITERATURE REVIEW

Literature Review and Theoretical Framework

International mobility has been examined through diverse theoretical perspectives, including internationalization, intercultural communication, experiential learning, and global citizenship education. Although these perspectives have generated valuable insights, they often explain mobility outcomes independently rather than as interconnected educational processes. Consequently, the mechanisms through which mobility experiences transform learners into globally responsible citizens remain insufficiently conceptualized. Addressing this limitation requires a framework that explains not only what students learn during mobility but also how these learning processes emerge through authentic intercultural engagement.

This study adopts an integrative theoretical perspective by combining Education for Sustainable Development (ESD), Global Citizenship Education (GCED), Transformative Learning Theory, and Intercultural Communicative Competence (ICC). These perspectives are not positioned as competing explanations; instead, they complement one another in explaining the developmental pathway through which international mobility contributes to sustainable personal and professional transformation. The following sections discuss each perspective before introducing the proposed Transformative Education for Sustainable Mobility (TESM) Model.

Education for Sustainable Development

Education for Sustainable Development has progressively shifted educational discourse from transmitting knowledge toward developing competencies that enable individuals to respond to increasingly complex societal challenges. Rather than focusing exclusively on environmental protection, contemporary interpretations of ESD emphasize the interdependence of ecological integrity, social equity, cultural diversity, and economic resilience. This broader perspective positions education as a catalyst for empowering learners to participate actively in shaping sustainable futures rather than merely understanding sustainability as an abstract concept.

The UNESCO Education for Sustainable Development: Towards Achieving the SDGs (ESD for 2030) framework identifies sustainability competence as a multidimensional construct that integrates systems thinking, anticipatory thinking, normative reasoning, strategic action, collaboration, critical thinking, self-awareness, and integrated problem-solving (UNESCO, 2021). These competencies encourage learners to analyze complex issues from multiple perspectives, evaluate the consequences of present decisions for future generations, and develop practical responses through collaborative engagement.

An important implication of this perspective is that sustainability competencies cannot be developed solely through classroom instruction. Instead, they require authentic learning environments where students encounter real social problems, negotiate diverse viewpoints, and reflect critically on their own assumptions. Experiential learning therefore occupies a central position within ESD because meaningful competence develops through direct participation rather than passive knowledge acquisition. Recent research likewise indicates that sustainability-oriented learning is strengthened when educational experiences are connected to authentic social contexts and supported by intentional pedagogical design rather than treated as an additional component of the curriculum (Simek & Adhisti, 2026).

International mobility represents one educational context in which these conditions naturally occur. Students participating in overseas programs interact with unfamiliar academic systems, multicultural communities, and different approaches to addressing sustainability challenges. Such experiences provide opportunities to connect theoretical knowledge with practical engagement while simultaneously cultivating empathy, adaptability, and collaborative problem-solving skills. Consequently, mobility should be understood not simply as geographical movement but as an educational process capable of fostering sustainability-oriented learning.

Recent research provides further support for this perspective. Simek and Adhisti (2026), examining short-term ASEAN mobility, demonstrate that sustainability learning is influenced by the alignment between institutional strategy, program management, and pedagogical practices. Their findings suggest that mobility programs are more likely to generate meaningful sustainability learning when students are given structured opportunities to connect mobility experiences with broader social and sustainability issues. This perspective is particularly relevant to short-term mobility because limited program duration requires deliberate pedagogical design to transform cultural and community encounters into meaningful learning experience.

Community engagement further strengthens this educational process by creating opportunities for students to encounter sustainability issues within their actual social and cultural contexts. Rather than positioning community activities merely as cultural excursions, mobility programs can use community engagement as a space for dialogue, observation, collaborative problem-solving, and critical reflection. Recent scholarship on sustainable cross-border partnerships emphasizes the importance of immersive mobility, locally grounded perspectives, knowledge co-production, and sustained relationships across institutional and geographical boundaries (Anne & Clausen, 2026). These dimensions indicate that meaningful sustainability learning can emerge when students move beyond institutional settings and engage directly with communities and local knowledge systems.

Consequently, international mobility can provide a distinctive experiential environment for developing sustainability competencies because students are simultaneously exposed to cultural difference, unfamiliar social conditions, and alternative perspectives on sustainability. Such experiences can encourage learners to reconsider previously held assumptions and connect global sustainability concerns with local realities. This process is consistent with the broader orientation of ESD, which emphasizes participatory, experiential, and transformative forms of learning (UNESCO, 2021; Simek & Adhisti, 2026).

Recent systematic reviews reinforce this claim: service-learning approaches that embed students in community settings have been shown to strengthen sustainability competencies more effectively than classroom-only instruction (Aramburuzabala & Cerrillo, 2023), while comparative studies of higher education institutions in the Global South indicate that experiential, community-oriented models of ESD remain underdeveloped relative to policy-level commitments (Hinduja et al., 2023). Taken together, these findings suggest that the educational value of mobility lies not merely in exposure to another country but in the pedagogical transformation of mobility experiences into opportunities for reflection, community engagement, sustainability learning, and competence development.

Within the present study, this perspective provides an important conceptual foundation for the TESM Model. The model positions sustainability learning as an outcome of the interaction between intercultural encounters, experiential community engagement, critical reflection, and transformative learning. Accordingly, international mobility is conceptualized as a structured educational process through which students can develop the knowledge, attitudes, competencies, and dispositions required to participate meaningfully in shaping more sustainable and culturally responsive futures.

Global Citizenship Education

Closely connected to ESD is the concept of Global Citizenship Education, which seeks to prepare learners to participate constructively in an increasingly interconnected world. Rather than encouraging a universal identity detached from local cultures, GCED promotes the ability to appreciate cultural diversity while maintaining responsibility toward both local and global communities. This perspective recognizes that contemporary social, environmental, and economic challenges transcend national boundaries and therefore require collaborative responses informed by intercultural understanding.

UNESCO conceptualizes global citizenship through three complementary dimensions: cognitive, socio-emotional, and behavioral learning. The cognitive dimension concerns understanding global issues and their interconnectedness. The socio-emotional dimension involves developing empathy, respect, and a

sense of shared humanity. The behavioral dimension emphasizes responsible action toward creating more peaceful, just, and sustainable societies. Together, these dimensions encourage learners to move beyond awareness toward meaningful engagement with global challenges. Recent research further indicates that these dimensions can be strengthened through transformative learning processes, particularly when learners engage in critical reflection, experiential learning, dialogue, and perspective transformation. Dalisay et al. (2026) demonstrate that the integration of Global Citizenship Education and Transformative Learning can support the development of global awareness, cultural competence, civic engagement, and ethical responsibility. Their findings therefore reinforce the view that global citizenship is not simply acquired through exposure to global issues but can emerge through educational experiences that challenge learners to critically examine their assumptions and reconsider their perspectives.

Similarly, the OECD Global Competence Framework expands this perspective by highlighting learners' ability to investigate issues from multiple viewpoints, communicate effectively across cultures, appreciate cultural diversity, and act responsibly for collective well-being (OECD, 2018). Importantly, global competence is viewed not as an accumulation of international experiences but as the capacity to translate intercultural understanding into constructive action. In this regard, the transformative dimension highlighted by Dalisay et al. (2026) provides an important complement to the global competence perspective by emphasizing the reflective processes through which learners may convert experience into changes in understanding, attitudes, and action.

Within international mobility programs, these competencies are cultivated through continuous interaction with individuals whose cultural values, communication styles, and educational expectations differ from those of the participants. Collaborative projects, community engagement, and shared problem-solving activities require students to negotiate meaning, reconsider assumptions, and develop mutual understanding. Consequently, mobility provides a practical context in which global citizenship can be experienced rather than merely discussed. Such experiences are particularly significant when they are accompanied by structured reflection, because intercultural encounters alone do not necessarily produce transformative learning or responsible global engagement (Dalisay et al., 2026).

For students from Islamic higher education institutions, GCED also resonates with educational principles emphasizing justice (al-'adl), compassion (rahmah), stewardship (khalifah), and collective responsibility (maslahah). Rather than conflicting with religious identity, global citizenship may strengthen students' understanding that Islamic values support constructive engagement with culturally diverse societies and shared commitments to sustainable development. This resonates with recent findings that a shared religious identity does not automatically guarantee an easy adaptation process abroad, indicating that intercultural competence and religious identity are continuously negotiated rather than fixed (Pratama, Ramadhani, Laksono, & Saputro, 2026). A systematic review of global citizenship research in higher education further shows that student mobility and community-based initiatives remain among the most consistently reported mechanisms for developing global citizenship, alongside coursework and structured reflection (Massaro, 2022).

Transformative Learning Theory

While ESD and GCED explain the competencies expected from contemporary education, they do not fully describe the psychological processes through which these competencies develop. Transformative Learning Theory provides this explanatory dimension by focusing on how individuals revise previously held assumptions after encountering experiences that challenge their existing perspectives.

Mezirow (1991, 2000) proposes that transformative learning begins with a disorienting dilemma, an event or experience that disrupts established frames of reference and encourages critical reflection. Rather than immediately accepting new information, learners engage in self-examination, evaluate alternative viewpoints, participate in dialogue with others, and gradually reconstruct more inclusive

perspectives. Learning therefore becomes a process of personal transformation rather than simple knowledge acquisition.

International mobility frequently creates conditions conducive to such transformation. Living within unfamiliar cultural environments exposes students to different communication practices, academic expectations, and social norms that cannot always be interpreted using previous assumptions. Everyday interactions consequently become opportunities for reflection as students continuously compare, reinterpret, and negotiate meanings across cultural contexts.

Recent developments in transformative learning scholarship further emphasize the importance of intentionally designed educational experiences that combine reflection, dialogue, and authentic practice. Systematic reviews of transformative learning in international education note that outcomes are frequently reported but inconsistently assessed, and call for research that more precisely documents the mechanisms through which disorientation becomes durable change (Pang, Cox, & Acheson, 2023). Recent empirical evidence also strengthens the conceptual connection between transformative learning and global citizenship education. Dalisay et al. (2026) demonstrate that critical reflection, experiential learning, rational discourse, and perspective transformation can contribute to the development of global awareness, cultural competence, civic engagement, and ethical responsibility. Their findings suggest that transformative learning provides an important mechanism through which educational experiences can move learners from exposure to global issues toward changes in perspective and more responsible forms of global engagement. Empirical studies of short-term study abroad programs similarly show that deliberately structured “guided disorientation,” rather than disorientation alone, is what drives measurable gains in intercultural learning (Gibson, Spira-Cohen, Sherman, & Namaste, 2023), while service-learning-based mobility programs have been found to activate all four classic tenets of Mezirow's theory even within short program durations (Garbers, Pracht, & Roberts, 2024). From this perspective, mobility programs become most effective when intercultural encounters are accompanied by structured opportunities for reflection, dialogue, and community engagement. This understanding provides the theoretical basis for viewing international mobility as a transformative educational intervention rather than merely an exchange of academic experiences.

Intercultural Communicative Competence

The educational value of international mobility extends beyond exposure to different cultures; it depends largely on students' ability to interpret cultural differences, engage in meaningful dialogue, and build relationships across diverse social contexts. This capacity is conceptualized as Intercultural Communicative Competence (ICC), a framework that has become increasingly influential in international education because it explains how individuals communicate effectively while respecting cultural diversity.

Byram (1997) argues that intercultural competence involves more than linguistic accuracy. Effective intercultural communication requires a combination of attitudes, knowledge, interpretative skills, interactional abilities, and critical cultural awareness. Learners are expected to demonstrate curiosity toward unfamiliar cultures, understand the historical and social contexts shaping cultural practices, interpret differences without prejudice, and evaluate both their own and others' cultural assumptions critically. These dimensions collectively enable individuals to establish constructive relationships despite differences in language, values, and social norms.

Subsequent scholarship has expanded this perspective by emphasizing the developmental nature of intercultural competence. Deardorff (2006) proposes that intercultural competence emerges through a continuous cycle of attitudes, knowledge acquisition, reflective practice, and interpersonal interaction rather than through isolated intercultural encounters. From this perspective, competence is not measured by the frequency of international experiences but by the learner's ability to transform those experiences into deeper intercultural understanding and more effective communication.

Within international mobility programs, intercultural competence develops through repeated engagement with unfamiliar situations. Students negotiate differences in classroom expectations,

communication styles, problem-solving approaches, and community values while simultaneously adapting to new academic and social environments. Such experiences encourage learners to reconsider assumptions that previously appeared self-evident, thereby strengthening empathy, flexibility, and collaborative capacity.

The relationship between intercultural competence and sustainability education is particularly significant. Addressing global sustainability challenges requires cooperation among individuals representing different cultures, disciplines, and institutional contexts. Consequently, sustainability competence cannot be fully realized without the ability to communicate across cultural boundaries. Intercultural competence therefore functions not merely as a communication skill but as an essential condition for collaborative action toward sustainable development. A systematic review of short-term study abroad research further indicates that intercultural competence gains are more reliably documented when programs combine structured intercultural contact with explicit reflective components, rather than relying on immersion alone (Goldstein, 2022).

Research Gap

Research on international student mobility has expanded considerably over the past two decades, demonstrating that participation in education-abroad programs can contribute to intercultural awareness, cultural engagement, tolerance of diversity, knowledge of host societies, and other dimensions of global competence. Recent empirical evidence is particularly important in showing that these outcomes are not limited to long-term mobility. Chieffo et al. (2026), for example, found that students participating in three- to four-week education-abroad programs reported improvements across several dimensions of global competence, including cultural engagement, diversity tolerance, ambiguity tolerance, and knowledge of the host context. These findings reinforce the educational potential of short-term mobility while also indicating that the outcomes of such programs need to be examined beyond conventional measures of academic or cultural adjustment.

Despite this growing body of research, several conceptual and empirical limitations remain. First, the literature continues to be characterized by theoretical fragmentation. Transformative learning, intercultural competence, sustainability education, and global citizenship have frequently been examined through separate conceptual lenses. Although each perspective provides important explanations of student development, fewer studies have explicitly examined how these dimensions interact as part of a single mobility experience. Recent research by Dalisay et al. (2026) demonstrates the potential value of connecting Global Citizenship Education (GCED) and Transformative Learning Theory (TLT), particularly through critical reflection, experiential learning, rational discourse, and perspective transformation. However, their study is situated primarily within graduate curricula rather than within an international mobility context. This leaves an important conceptual space for examining how intercultural encounters during mobility can initiate reflective and transformative processes that subsequently contribute to global citizenship and sustainability-oriented competencies.

Second, the contextual representation of mobility research remains uneven. Much of the established literature has concentrated on students from internationally prominent universities and higher education systems in Europe, North America, Australia, and other highly internationalized contexts. More recent scholarship has begun to draw attention to mobility in the Global South and Southeast Asian contexts. For instance, Simek and Adhisti (2026) examined sustainability learning within a short-term ASEAN mobility program involving an Indonesian university and a Singaporean partner and demonstrated that program design, institutional support, and pedagogical alignment influence the learning outcomes of mobility. Nevertheless, the experiences of students from smaller or less internationally established higher education institutions remain comparatively underexplored. This is particularly relevant for Islamic higher education institutions, where international mobility may involve not only intercultural and academic adaptation but

also processes of identity negotiation, ethical reflection, and engagement with diverse social and religious environments.

Third, community engagement remains insufficiently conceptualized as a pedagogical mechanism within mobility programs. Existing research has often emphasized classroom learning, institutional partnerships, cultural exposure, and intercultural adaptation, while community interaction is frequently treated as an additional cultural or social activity. This distinction is important because meaningful engagement with local communities can provide students with direct encounters with social realities that are difficult to obtain through classroom-based internationalization alone. Recent research on sustainable cross-border partnerships by Anne and Clausen (2026) highlights the importance of immersive mobility, contextual presence, knowledge co-production grounded in local perspectives, and continuity across geographical and institutional boundaries. However, their focus is primarily on the sustainability of cross-border academic partnerships rather than on how community engagement within student mobility functions as a transformative learning process for individual participants. Thus, the pedagogical relationship between community engagement, critical reflection, sustainability learning, and student transformation remains insufficiently theorized.

Fourth, the emerging literature on short-term mobility has increasingly recognized sustainability learning, but an integrated explanation of how such learning develops remains limited. Simek and Adhisti (2026) demonstrate that short-term ASEAN mobility can support sustainability-oriented learning when institutional strategy, program management, and pedagogy are appropriately aligned. Chieffo et al. (2026) similarly provide empirical evidence that short-term education abroad can strengthen several dimensions of global competence. Nevertheless, these studies largely examine particular outcomes or program conditions rather than proposing an integrated developmental pathway connecting intercultural encounters, reflective learning, sustainability competencies, and identity transformation. Consequently, an important theoretical question remains: how does a short-term international mobility experience move students from exposure to unfamiliar cultural contexts toward deeper reflection, transformation, and sustained global and sustainability-oriented orientations?

Fifth, although recent scholarship has increasingly emphasized the importance of global citizenship and transformative learning, there remains limited integration between these perspectives and Education for Sustainable Development (ESD) within short-term international mobility. Dalisay et al. (2026) demonstrate that transformative learning processes can contribute to global awareness, cultural competence, civic engagement, and ethical responsibility, while Simek and Adhisti (2026) emphasize the importance of sustainability learning within ASEAN mobility. However, these strands of research have generally developed in parallel. The literature therefore still lacks a comprehensive framework explaining how intercultural experiences, critical reflection, transformative learning, sustainability competencies, and global citizenship can operate as interconnected dimensions of a single educational process.

These gaps become particularly significant when considering the changing role of internationalization in higher education. International mobility should no longer be understood merely as an institutional strategy for increasing international exposure or as an opportunity for students to experience another country. Rather, mobility can function as a deliberately designed educational environment in which students encounter cultural differences, engage with local communities, critically reflect on their assumptions, develop sustainability-oriented competencies, and reconsider aspects of their personal and social identities. The emerging evidence on short-term education abroad, global competence, transformative learning, and sustainable cross-border engagement provides a strong basis for this reconceptualization (Anne & Clausen, 2026; Chieffo et al., 2026; Dalisay et al., 2026).

Therefore, the central gap addressed by this study is not the absence of research on international mobility itself, but the lack of an integrated conceptual explanation of how short-term mobility can function as a transformative, intercultural, community-engaged, and sustainability-oriented educational process, particularly among students from less internationally established Islamic higher education institutions. To address this gap, the present study proposes the Transformative Education for Sustainable Mobility (TESM)

Mod, which conceptualizes mobility as a developmental process connecting intercultural encounters, critical reflection, transformative learning, intercultural-sustainability competence, identity transformation, and global sustainability aspirations. In doing so, the TESM Model seeks to bridge theoretical perspectives that have commonly been examined separately and to reposition short-term international mobility from a conventional internationalization activity toward a structured pedagogical process for developing globally oriented, culturally responsive, and sustainability-conscious learners.

Conceptual Framework

To address the limitations identified above, this study proposes the Transformative Education for Sustainable Mobility (TESM) Model as an integrative conceptual framework for understanding how international mobility contributes to sustainable learning and global citizenship development. Rather than positioning mobility as an isolated educational event, the model conceptualizes it as a sequential transformative process in which intercultural experiences, reflective learning, community engagement, and sustainability competencies interact dynamically throughout the learning journey.

The TESM Model synthesizes four complementary theoretical traditions. Transformative Learning Theory explains the cognitive and reflective processes through which students reconstruct their perspectives after encountering unfamiliar experiences. Intercultural Communicative Competence provides the communicative and relational dimensions necessary for engaging effectively within culturally diverse environments. Education for Sustainable Development contributes the sustainability competencies required for addressing complex global challenges, while the OECD Global Competence Framework offers an international perspective on responsible participation in multicultural societies.

Instead of viewing these theoretical perspectives independently, the TESM Model assumes that they represent interconnected dimensions of a single developmental process. Intercultural encounters generate opportunities for reflection; reflective learning reshapes students' perspectives; transformed perspectives strengthen intercultural and sustainability competencies; and these competencies ultimately contribute to the emergence of global citizenship identity. This sequential relationship constitutes the central theoretical proposition of the present study.

The Transformative Education for Sustainable Mobility Model

The TESM Model describes international mobility as a progression through eight interconnected stages that collectively explain students' transformative educational experiences. The process begins with Initial Limitations, representing students' limited international exposure, communication confidence, and understanding of sustainability-related issues prior to participating in the mobility program.

The second stage, Intercultural Encounters, involves direct engagement with unfamiliar academic, cultural, and social environments. These encounters challenge existing assumptions and expose students to alternative perspectives through classroom interaction, collaborative learning, and everyday communication.

During the Community Sustainability Praxis stage, students participate in community-based activities that connect academic knowledge with real-world sustainability challenges. Rather than observing local communities from a distance, participants become active collaborators who learn through dialogue, shared problem-solving, and collective action. These authentic experiences encourage learners to appreciate the social dimensions of sustainability while recognizing the importance of cultural sensitivity in community engagement.

Exposure to unfamiliar experiences subsequently stimulates Critical Reflection, during which students examine their assumptions, compare different perspectives, and reinterpret the meaning of their experiences. Reflection functions as the central mechanism connecting intercultural interaction with

personal transformation because it enables learners to construct new understandings rather than merely accumulating new information.

The fifth stage, Transformative Learning, represents the reconstruction of participants' frames of reference. Students begin to reinterpret cultural diversity, sustainability, and their own educational roles through broader and more inclusive perspectives. This transformation extends beyond cognitive understanding and influences personal values, professional aspirations, and social responsibility.

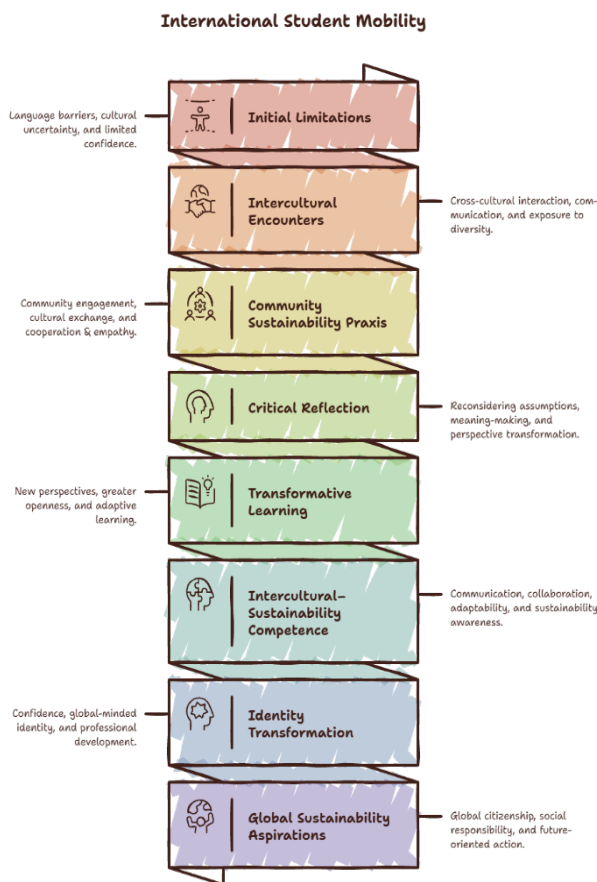
As transformation progresses, participants develop Intercultural–Sustainability Competence, integrating communication skills, collaborative abilities, critical thinking, and sustainability-oriented problem-solving into a coherent set of competencies applicable across diverse contexts.

These competencies support the emergence of Identity Transformation, characterized by increased confidence, intercultural sensitivity, ethical awareness, and a stronger sense of responsibility toward both local and global communities. Students increasingly perceive themselves as active contributors to sustainable development rather than passive recipients of international educational experiences.

The final stage, Global Sustainability Aspirations, reflects participants' long-term commitment to applying their newly developed competencies within future academic, professional, and community settings. Rather than representing the conclusion of learning, this stage signifies the continuation of transformative education beyond the mobility program itself, reinforcing lifelong engagement with sustainable development and global

Figure 1

The Transformative Education for Sustainable Mobility (TESM) Model



Note. Authors' elaboration based on the empirical findings of the present study (2026).

Figure 1 illustrates that transformative learning during international mobility should be understood as a continuous and interconnected developmental process rather than a collection of isolated educational outcomes. Each stage reinforces the subsequent stage through iterative reflection and authentic engagement, enabling learners to integrate intercultural understanding with sustainability-oriented thinking. Accordingly, the TESM Model offers a theoretical explanation of how community-engaged mobility can function as a pedagogical strategy for cultivating globally competent graduates capable of contributing to sustainable development within both local and international contexts.

RESEARCH METHOD

Research Design

This study employed a qualitative research design using Interpretative Phenomenological Analysis (IPA) to explore how students interpreted their international mobility experiences as a process of transformative learning for sustainable development and global citizenship. IPA was selected because it enables researchers to examine how individuals make sense of significant lived experiences and construct personal meanings through reflection and interpretation (Smith, Flowers, & Larkin, 2022). Rather than seeking to measure predetermined variables, the approach prioritizes participants' subjective perspectives and the meanings they attribute to educational experiences. Although IPA originated in health-related research, recent methodological scholarship has demonstrated its suitability for educationally situated inquiry, particularly where the aim is to understand how learners construct meaning from significant, identity-relevant experiences rather than to generalize across a population (Robinson & Williams, 2024). The study was situated within an interpretivist paradigm, which assumes that reality is socially and culturally constructed through individual experience. This perspective was considered appropriate because the research aimed to understand how students interpreted intercultural encounters, community engagement, and academic collaboration during their participation in an international mobility program. Through this lens, learning is understood not merely as the acquisition of knowledge but as an evolving process of meaning-making that shapes students' perspectives, identities, and future aspirations.

Research Context

The research was conducted within the International Student Exchange Program (ISEP) 2026, a collaborative initiative between STITNU Sakinah Dharmasraya, Indonesia, and Universiti Utara Malaysia (UUM). The program combined academic activities with community-engaged learning to promote intercultural understanding and sustainability awareness among participants. Throughout the program, students attended lectures, participated in collaborative learning activities, and engaged directly with local communities through educational and social initiatives. These experiences required participants to communicate across cultural boundaries, adapt to unfamiliar learning environments, and collaborate with individuals from different national and cultural backgrounds. Such conditions provided a rich setting for examining how international mobility contributes to transformative learning and the development of global citizenship.

Participants

Participants were selected using purposive sampling, consistent with the principles of Interpretative Phenomenological Analysis, which emphasizes the selection of information-rich cases capable of providing detailed accounts of lived experiences (Smith, Flowers, & Larkin, 2022). Eligible participants were undergraduate students who had completed all academic and community engagement activities during the

International Student Exchange Program and who were willing to share their experiences voluntarily. The study involved 15 undergraduate students from STITNU Sakinah Dharmasraya, representing several academic programs, who participated in the 2026 mobility program at Universiti Utara Malaysia. The relatively homogeneous sample is consistent with IPA methodology, which prioritizes depth of understanding over statistical representation. To maintain confidentiality, participants were assigned pseudonyms throughout the research process, and all identifying information was removed from interview transcripts and research records.

Data Collection

Data were collected through multiple qualitative methods to obtain a comprehensive understanding of participants' experiences. The primary source of data consisted of semi-structured interviews, which allowed participants to describe their experiences in their own words while enabling the researcher to explore emerging issues through follow-up questions. A total of 15 semi-structured interviews, one with each participant, were conducted after participants completed the international mobility program. Each interview lasted approximately 35 minutes and was conducted in a quiet setting to encourage open and reflective discussion. With participants' permission, all interviews were audio-recorded and subsequently transcribed verbatim to ensure accuracy during analysis. To strengthen the richness and credibility of the findings, interview data were complemented by reflective journals, field observations, and program documentation, including photographs, activity reports, and institutional records. These additional sources provided contextual information that supported the interpretation of participants' narratives and enabled methodological triangulation. The interview protocol explored several key areas, including participants' intercultural experiences, community engagement, perceptions of sustainability, moments of critical reflection, and perceived changes in personal identity, intercultural competence, and future aspirations following the mobility program.

Data Analysis

The data were analyzed using the procedures of Interpretative Phenomenological Analysis (IPA) as described by Smith, Flowers, and Larkin (2022). Analysis began with repeated reading of each transcript to facilitate immersion in participants' narratives and to identify significant experiential statements. Exploratory comments were then recorded to capture descriptive, linguistic, and conceptual observations relevant to each participant's account.

These initial observations were subsequently developed into emergent themes representing the meanings participants associated with their international mobility experiences. After analyzing each case individually, patterns across participants were examined to identify shared experiential themes while preserving the uniqueness of individual narratives. This iterative process involved continuous movement between individual cases and cross-case interpretation to ensure that the analysis remained grounded in participants' lived experiences.

The final stage involved synthesizing the themes into an interpretative explanation of how international mobility facilitated transformative learning, intercultural communicative competence, sustainability awareness, and global citizenship development. The relationships identified among these themes informed the development of the Transformative Education for Sustainable Mobility (TESM) Model, which is presented as the conceptual contribution of this study. Throughout the analysis, the study attended to established markers of high-quality IPA, including sustained idiographic engagement with individual cases prior to cross-case interpretation and transparent, traceable movement from raw data to interpretative claims (Nizza, Farr, & Smith, 2021), and followed current guidance on systematically naming and defining emergent themes (Nigbur & Chatfield, 2025).

Trustworthiness

The rigor of the study was established by applying the criteria of credibility, transferability, dependability, and confirmability proposed by Lincoln and Guba (1985). Credibility was enhanced through methodological triangulation involving interviews, reflective journals, observations, and documentary evidence. Participants were also invited to review interview summaries to ensure that the interpretations accurately reflected their experiences. Transferability was supported by providing detailed descriptions of the research context, participant characteristics, and mobility activities, allowing readers to assess the applicability of the findings to similar educational settings. Dependability was strengthened through systematic documentation of the research process, including interview procedures, coding decisions, and theme development. Confirmability was addressed by maintaining an audit trail and engaging in continuous reflexive practice throughout data collection and analysis to minimize researcher bias.

Ethical Considerations

Ethical principles guided every stage of the research. Prior to data collection, all participants received written and verbal explanations regarding the purpose of the study, the voluntary nature of their participation, the procedures involved, and their right to withdraw from the research at any time without consequence. Written informed consent was obtained from each participant before the interviews were conducted. To protect participants' privacy, all interview transcripts were anonymized through the use of pseudonyms, and identifying information was removed from all research documents. Digital recordings, transcripts, and supporting materials were stored securely and were accessible only to the research team. Throughout the study, the researchers adhered to accepted ethical standards for qualitative research involving human participants, ensuring respect, confidentiality, and responsible management of research data.

RESULTS

Analysis of the interview data revealed four interrelated themes that describe participants' lived experiences throughout the International Student Exchange Program. Rather than representing isolated outcomes, these themes illustrate a progressive process of personal and academic transformation, beginning with initial uncertainty and culminating in broader perspectives toward intercultural collaboration, sustainable learning, and global citizenship. Collectively, the findings demonstrate that international mobility served as a transformative educational experience that extended beyond academic achievement to influence participants' confidence, communication practices, intercultural understanding, and future aspirations.

Theme 1. Navigating Uncertainty through Intercultural Encounters

For nearly all participants, the mobility program represented their first opportunity to study and interact within an international environment. Consequently, their narratives were initially characterized by feelings of uncertainty, particularly concerning English communication, cultural adaptation, public speaking, and interacting with unfamiliar peers. These concerns, however, were not interpreted as barriers but as challenges that gradually stimulated personal growth. Participants commonly described entering the program with expectations of broadening their international exposure, improving communication skills, strengthening English proficiency, and experiencing different educational cultures. Simultaneously, language barriers emerged as the most frequently reported concern before departure. Several participants also expressed apprehension about adapting to a new environment and communicating with people from different cultural backgrounds.

As the program progressed, participants reported becoming increasingly comfortable engaging with international peers. Rather than avoiding unfamiliar situations, they intentionally sought opportunities to communicate, collaborate, and participate in academic activities despite linguistic limitations. One participant reflected that the experience encouraged them to become more open-minded and willing to try every opportunity, while another explained that confidence developed simply by having the courage to try. From an interpretative perspective, these narratives suggest that initial uncertainty functioned as a transformative trigger. Exposure to unfamiliar academic and cultural contexts challenged participants' previous assumptions and encouraged them to reconstruct their understanding of themselves as learners capable of engaging in international environments.

Theme 2. Community Engagement as Experiential Sustainability Learning

Participants consistently identified community-based activities as among the most meaningful components of the mobility program. Experiences such as living with local families, cultural exchange, and collaborative community visits enabled students to experience cultural diversity through direct interaction rather than classroom instruction alone. Rather than emphasizing technical knowledge about sustainability, participants described learning values such as mutual respect, cooperation, empathy, tolerance, and collective responsibility. Several respondents explained that living with local communities provided opportunities to understand everyday cultural practices while appreciating different perspectives regarding education, social interaction, and community life.

One participant highlighted the visit to Kampung Telok Kandis as the most memorable experience because it demonstrated the close relationship between local culture, education, and community cooperation. Another participant emphasized the hospitality of local residents, explaining that these interactions significantly influenced their perceptions of intercultural relationships and strengthened their appreciation for cultural diversity. These experiences indicate that community engagement functioned as an authentic learning environment in which sustainability values were practiced through interpersonal interaction. Rather than learning sustainability conceptually, participants experienced its social dimensions directly through collaborative activities within local communities.

Theme 3. Collaborative Learning Promoted Intercultural Competence and Professional Confidence

Collaborative academic activities emerged as another influential aspect of participants' experiences. Programs such as the pitching competition, leadership class, and communication class required students from different universities and cultural backgrounds to work collectively toward shared objectives. These experiences exposed participants to diverse perspectives while encouraging mutual respect and inclusive teamwork. Participants frequently emphasized that collaborative learning reduced feelings of competition and instead promoted appreciation for diverse ideas and contributions. One participant explained that every team member's opinion was respected regardless of institutional background or academic ability, creating an atmosphere of equality and cooperation. Another participant reflected that interacting with students from different institutions broadened their understanding of leadership and collaborative problem-solving.

Language remained the principal challenge throughout these activities. Nevertheless, participants described various adaptive strategies, including using digital translation tools, seeking assistance from peers, and deliberately practicing English in everyday communication. These efforts gradually increased their confidence in expressing ideas, participating in discussions, and delivering presentations. Participants consistently perceived improvements in public speaking, communication, teamwork, adaptability, critical thinking, and leadership. Importantly, these competencies were viewed not as isolated skills but as interconnected capacities developed through repeated intercultural interaction and collaborative learning.

Theme 4. Transformative Learning toward Global Citizenship

Perhaps the most significant outcome reported by participants concerned changes in how they perceived themselves and their future roles. Beyond improvements in communication or academic competence, participants described becoming more confident, open-minded, disciplined, and willing to engage with culturally diverse communities. These changes reflected a broader transformation in personal identity rather than the acquisition of individual skills alone. Several participants explained that the program increased their confidence in interacting with unfamiliar people and motivated them to pursue further international opportunities. Others emphasized that the experience encouraged them to appreciate cultural diversity while maintaining pride in their own cultural identity. Participants also perceived that the competencies developed during the program, including communication, adaptability, and collaborative problem-solving, would support their future teaching practice and professional development.

Across participants' narratives, international mobility was consistently interpreted as an experience that extended beyond academic exchange. It became a catalyst for developing broader perspectives regarding cultural diversity, lifelong learning, and global engagement. Rather than viewing themselves solely as university students, participants increasingly perceived their roles as future educators capable of contributing to local communities while participating confidently within international contexts. Collectively, these findings illustrate a sequential process of transformation beginning with intercultural uncertainty, progressing through authentic community engagement and collaborative learning, and culminating in the development of intercultural competence, sustainability awareness, and global citizenship aspirations. This developmental trajectory provides empirical support for the proposed Transformative Education for Sustainable Mobility (TESM) Model, which conceptualizes international mobility as a transformative educational process rather than merely an international academic experience.

DISCUSSION AND CONCLUSIONS

Discussion

The findings of this study extend current understanding of international mobility by demonstrating that, for students from a small Islamic higher education institution, a short-term exchange program can function as a structured transformative learning intervention rather than a peripheral cultural activity. The four themes identified in this study, initial uncertainty, community-based sustainability learning, collaborative competence development, and identity transformation, correspond closely to the sequential logic proposed in the TESM Model, thereby providing empirical grounding for the model's central proposition that intercultural encounters, reflection, and competence development interact cumulatively rather than in isolation.

Consistent with Mezirow's (1991, 2000) Transformative Learning Theory, the uncertainty participants experienced prior to and during the early stages of the program functioned as a disorienting dilemma that initiated critical reflection. However, this study extends Mezirow's largely cognitive account by showing that, within a community-engaged mobility context, disorientation was resolved not only through individual reflection but through relational processes, including hospitality, dialogue, and collaborative problem-solving with host communities and international peers. This suggests that transformative learning in short-term mobility programs may be more socially mediated than classroom-based transformative learning, a nuance that has received limited attention in prior literature (de Wit & Altbach, 2021; Knight, 2004) but is consistent with recent evidence that structured, guided disorientation, rather than disorientation alone, is what produces measurable intercultural learning in short programs (Gibson, Spira-Cohen, Sherman, & Namaste, 2023).

The prominence of community engagement as a driver of sustainability learning, exemplified by participants' experiences in Kampung Telok Kandis, supports UNESCO's (2021) contention that

sustainability competencies are best cultivated through authentic, experiential engagement rather than classroom instruction alone. Importantly, participants did not describe sustainability in technical or environmental terms; instead, they articulated it through relational values such as empathy, cooperation, and collective responsibility. This finding nuances the ESD for 2030 framework by suggesting that, within Islamic higher education contexts, sustainability competence may be experienced and expressed through socio-religious values such as rahmah (compassion) and maslahah (collective welfare) rather than through the more technocratic vocabulary common in ESD scholarship originating from Global North institutions.

The development of intercultural communicative competence observed among participants, particularly the adaptive strategies used to overcome language barriers, corroborates Byram's (1997) and Deardorff's (2006) assertions that intercultural competence is developmental and cyclical rather than innate. Notably, participants' growing confidence appeared to emerge from repeated, low-stakes collaborative tasks (e.g., the pitching competition and leadership class) rather than from a single transformative event, reinforcing Deardorff's (2006) process-oriented model of intercultural competence over trait-based accounts and aligning with systematic-review evidence that structured, reflection-supported intercultural contact yields more consistent competence gains than immersion alone (Goldstein, 2022).

Taken together, the findings suggest that the relationship between intercultural competence and sustainability competence, theorized as mutually reinforcing in the literature review, was empirically evident in participants' narratives: students who reported growing intercultural confidence also reported a deepened sense of sustainability-oriented responsibility, and vice versa. This reciprocal relationship supports the integrative premise of the TESM Model and addresses the first research gap identified in this study, namely the fragmented treatment of transformative learning, intercultural competence, and sustainability education as independent constructs.

These findings also carry practical implications for Islamic higher education institutions, particularly smaller institutions in peripheral regions that may have limited resources for large-scale internationalization (Sibawaihi, Ratnasari, Purnami, & Brooks, 2025). The results suggest that the transformative potential of mobility programs does not depend primarily on institutional prestige or program duration, but on the intentional design of community-engaged, collaborative activities that create structured opportunities for disorientation, reflection, and competence-building. This implies that even short-term, resource-constrained mobility programs can generate substantial developmental outcomes when community engagement is treated as a core pedagogical component rather than a supplementary cultural activity, directly addressing the third research gap identified in the literature review, and echoes calls for Indonesian internationalization research to move beyond institutional recruitment strategies toward the lived, student-centered dimensions of mobility (Simek & Stewart, 2024).

Several limitations should be acknowledged when interpreting these findings. First, the study relied on a relatively small, purposively sampled group of participants from a single institution and a single mobility program, which, while appropriate for IPA, limits the transferability of findings to other institutional or cultural contexts. Second, data were collected shortly after the completion of the program, meaning the findings capture participants' immediate retrospective interpretations rather than the long-term durability of the reported transformations. Third, as with all IPA research, the findings represent an interpretative account co-constructed by participants and researchers, and alternative interpretations of the same narratives remain possible. Future research employing longitudinal designs, larger and more institutionally diverse samples, or comparative approaches across different Islamic higher education contexts would help to test the generalizability and durability of the TESM Model.

Conclusion

This study examined how students from a small Islamic higher education institution in Indonesia experienced international mobility as a platform for transformative learning, intercultural competence development, and global citizenship formation. Using Interpretative Phenomenological Analysis, the study

identified a progressive developmental trajectory encompassing four themes: navigating uncertainty through intercultural encounters, community engagement as experiential sustainability learning, collaborative learning as a driver of intercultural competence and professional confidence, and transformative learning toward global citizenship. These findings provided the empirical foundation for the proposed Transformative Education for Sustainable Mobility (TESM) Model, which integrates Transformative Learning Theory, Intercultural Communicative Competence, Education for Sustainable Development, and the OECD Global Competence Framework into a coherent, sequential explanatory framework.

The study contributes to the literature in four principal ways: by providing an empirical account of mobility from an underrepresented institutional context, by demonstrating the complementary role of academic collaboration and community immersion in transformative learning, by integrating four previously fragmented theoretical perspectives, and by proposing the TESM Model as a conceptual tool for designing future mobility programs. Practically, the findings suggest that Islamic higher education institutions, particularly smaller institutions with limited internationalization resources, can maximize the developmental impact of mobility programs by intentionally embedding structured community engagement and collaborative academic activities rather than treating these components as peripheral cultural add-ons.

Future research should test the TESM Model across larger and more diverse samples, employ longitudinal designs to examine the durability of the reported transformations, and explore comparative applications of the model in other South-South and Islamic higher education mobility contexts. Such efforts would strengthen the theoretical generalizability of the model and provide institutions with a stronger evidence base for designing mobility programs as intentional interventions for sustainable development and global citizenship education.

IMPLICATIONS

The findings of this study have implications for the design of international mobility, sustainability-oriented learning, and internationalization practices within Islamic higher education. Rather than treating mobility primarily as an opportunity for academic exposure or cultural tourism, the findings suggest that its educational value can be strengthened when intercultural encounters, community engagement, collaborative learning, and critical reflection are intentionally integrated into the program design. The TESM Model provides a conceptual basis for making these components more systematically connected.

Implications for Educational Practice

At the pedagogical level, international mobility programs should provide students with structured opportunities to move from experience to reflection and from reflection to action. The findings indicate that unfamiliarity and language difficulties initially created uncertainty, but these experiences became productive when participants were encouraged to communicate, collaborate, and engage directly with others. Mobility programs should therefore include guided reflection activities before, during, and after international experiences. Reflection can help students identify changes in their assumptions, interpret intercultural encounters, and connect personal experiences with broader educational and sustainability concerns.

Community engagement should also be positioned as a substantive learning component rather than an additional cultural activity. Participants' experiences in the host community demonstrated that sustainability learning can emerge through cooperation, empathy, mutual respect, and collective responsibility. Accordingly, institutions can design mobility activities around authentic community interaction, collaborative problem-solving, and locally relevant sustainability issues. Such an approach allows students to experience sustainability through practice while simultaneously developing intercultural awareness.

Implications for Islamic Higher Education

For Islamic higher education institutions, the findings provide an opportunity to connect internationalization with broader educational and ethical objectives. International mobility can be designed not only to strengthen students' academic and communication competencies but also to cultivate responsibility toward communities, respect for cultural diversity, empathy, and socially oriented learning.

This is particularly relevant for smaller Islamic higher education institutions that may have fewer internationalization resources than large research-intensive universities. The findings suggest that transformative mobility does not necessarily depend on extensive institutional infrastructure. Carefully structured collaboration, community immersion, intercultural interaction, and reflection can create meaningful learning opportunities even within relatively short mobility programs. The original study specifically identifies the potential relevance of these findings for smaller Islamic higher education institutions operating with limited internationalization resources.

The TESM Model can consequently serve as a planning framework for institutions seeking to develop mobility programs that are more closely connected with their educational mission. Its eight-stage progression—from Initial Limitations through Global Sustainability Aspirations—can help institutions consider not only what activities students will undertake but also how those activities are expected to contribute to students' development.

Implications for Internationalization Policy

At the institutional level, the findings encourage a shift from an activity-oriented approach to internationalization toward a learning-oriented approach. The success of a mobility program should not be evaluated solely through indicators such as the number of participating students, partner institutions, international activities, or destinations. Greater attention should be given to what students learn, how their perspectives develop, and whether they subsequently apply their competencies within academic, professional, and community contexts.

The TESM framework offers a possible basis for developing such an evaluation perspective. Institutions could assess mobility programs through indicators related to intercultural communication, collaborative capacity, sustainability awareness, critical reflection, identity development, and students' intentions to contribute to their communities. This would allow internationalization to be understood as part of institutional educational development rather than as an independent administrative agenda.

Implications for Future Research

The findings also provide several directions for future research. Because this study focused on participants from a single Islamic higher education institution and one international mobility program, the TESM Model requires further examination across different institutional and cultural contexts. Future studies could investigate whether the eight-stage process identified in this research is similarly experienced by students from other universities, disciplines, countries, and socioeconomic backgrounds.

Longitudinal research would also be valuable for determining whether the changes reported by participants are sustained after returning to their home institutions. In particular, future research could examine whether increased intercultural confidence, sustainability awareness, and global citizenship aspirations subsequently influence students' teaching practices, professional decisions, community participation, or further international engagement.

Finally, future studies could empirically test the relationships proposed within the TESM Model using mixed-methods or comparative designs. Such research could help determine whether the model functions similarly across short-term and long-term mobility programs and whether specific components—

particularly community sustainability praxis and critical reflection—play stronger roles than others in producing transformative outcomes.

Overall, the implications of this study suggest that the educational potential of international mobility lies not simply in where students go, but in how the experience is intentionally designed, interpreted, and connected to future action. The TESM Model provides a framework for making that connection more explicit within internationalization and sustainability-oriented educational practice.

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