

## Enhancing global competence: a review of study abroad program effectiveness strategies across nations

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**Abstract:** This study sought to assess the efficacy of various strategies for improving global competence, including the incorporation of global perspectives into the curriculum, project-based learning centered on real-world problems, the creation of collaborative learning environments, the use of technology for global discussions, and the implementation of comprehensive teacher training programs across nations. This research used a data mining method with a qualitative analysis approach examined how the effectiveness of various programs in enhancing global competence. Data mining methods involving qualitative analysis focus on extracting meaningful patterns and insights from qualitative data. This approach emphasizes understanding the underlying themes and contexts within the data, utilizing techniques like thematic analysis, grounded theory, and content analysis. The results showed that the integration of global perspectives, PBL, collaborative learning environments, technology, and teacher training demonstrates a global commitment to improving student competencies, but their success is dependent on addressing localized challenges such as resources, cultural alignment, and infrastructure. Tailored solutions that balance global awareness with local contexts are essential for preparing students for an interconnected world.

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## INTRODUCTION

Global competence has emerged as a crucial talent for students in today's interconnected world, marked by increasing economic, political, cultural, and educational integration. This skill allows for effective cross-border communication and collaboration, which is critical for success in a variety of global contexts such as multinational organizations and research collaborations (Guo et al., 2024). Global competence entails appreciating different cultural viewpoints and actively engaging in cross-cultural contacts (Deardorff & Arasaratnam-Smith, 2024).

The inclusion of global competence in frameworks of prominent international organizations such as the OECD and UNESCO emphasizes its importance, showing the

impact of globalization on education. For example, the OECD's Future of Education and Skills 2030 project highlights the importance of students developing skills that will prepare them for future difficulties, including global competency (Bilbokaite et al., 2024).

In conclusion, global competency is an essential talent for students in today's interconnected world, allowing them to effectively engage with different cultures and participate in global contexts. Educational frameworks and organizations are increasingly recognizing and implementing GC to better educate students for the problems and opportunities of the twenty-first century (Guo et al., 2024; Deardorff & Arasaratnam-Smith, 2024).

#### *Statement of the problem*

This study evaluates the effectiveness of various strategies for improving global competence, such as incorporating global perspectives into the curriculum, project-based learning centered on real-world problems, creating collaborative learning environments, using technology for global discussions, and implementing comprehensive teacher training programs in selected countries in Asia, Europe, North America, and South America.

## METHODOLOGY

#### *Research design*

A data mining synthesis approach was used to analyze and synthesize findings from studies and research conducted in several countries. The study used a meta-analysis research design, which involves systematically reviewing and synthesizing existing studies to identify trends, patterns, and relationships. The analysis focused on factors such as incorporating global perspectives into the curriculum, implementing project-based learning based on real-world problems, creating collaborative learning environments, utilizing technology to facilitate global discussions, and developing comprehensive teacher training programs. The study conducted a systematic review and synthesized data to assess the efficacy of study abroad programs in improving global competence.

#### *Locale of the study and respondents*

The study encompassed a global scope, analyzing data from various countries to highlight the efficacy of study abroad programs in improving global competence. The research subjects come from a diverse age range, educational and cultural population, ensuring comprehensive and unbiased coverage of the subject in question. Data were obtained from institutional databases, online learning platforms, and survey results from these groups, ensuring diverse representation within cultural and technological contexts.

#### *Research instruments*

The primary instruments used in this study included institutional databases and online learning platforms and structured surveys. These instruments delivered a comprehensive data set that facilitated the investigation of efficacy of study abroad programs in improving global competence. Surveys aimed at gathering insights from both educators and students in their experiences and perceptions of the different strategies.

#### *Data analyses procedure*

The data were analyzed using a qualitative approach, employing thematic analysis, grounded theory, and content analysis. These methods were applied to identify and examine variables such as integrating global perspectives into the curriculum, implementing project-based learning focused on real-world challenges, fostering collaborative learning environments,

leveraging technology to enable global discussions, and establishing comprehensive teacher training programs. The analysis emphasized the effectiveness of study abroad programs in fostering global competence across nations. The results were contextualized to highlight both common trends and distinctive cultural or systemic differences observed among countries.

## FINDINGS AND DISCUSSION

### *Integration of global perspectives into the curriculum*

The curriculum should incorporate global perspectives to enhance students' global competencies, enhancing their understanding and engagement with diverse cultures, and assessing the effectiveness of study abroad programs (Alvero, J. C. M. (2023).

The integration of global perspectives into educational curricula demonstrates a diverse range of approaches across regions, reflecting unique cultural, economic, and infrastructural contexts. In Africa, Algeria's strategies, such as the Competency-Based Approach and Project-Based Learning, face significant implementation challenges, including resource constraints (Boukhentache, 2021). Contrastingly, Egypt adopts multidisciplinary science curricula and e-learning, effectively bridging theory and practice to enhance global competence (Selim, 2021). Similarly, Ghana prioritizes critical thinking and digital literacy but requires improvements in teacher preparedness and resources (Nkrumah et al., 2022).

In Asia, Brunei integrates local philosophy with global perspectives, balancing cultural values and global awareness, contingent on teacher training and technology (Phan et al., 2021). China focuses on global competence through curriculum reform but struggles with traditional methods and limited resources (Yang & Li, 2022). Meanwhile, Japan employs long-standing efforts, including Global Citizenship Education, but economic objectives often overshadow broader cultural goals (Bosio, 2021).

European initiatives vary significantly. Albania employs ICT and cultural diversity to prepare students for global challenges (Baftiu & Nuci, 2021), while Austria's intercultural education suffers from inconsistent implementation and limited resources (Herzog-Punzenberger et al., 2023). Belgium's Einsteinian curriculum modernizes science education with a global perspective (Kaur et al., 2023).

In North America, Cuba emphasizes intercultural and environmental education to align with global educational goals (Reimers, 2020). Haiti leverages culturally relevant pedagogy, including Haitian Creole, for inclusivity and coherence (Emerald Insight, 2023). Canada integrates Aboriginal perspectives and culturally responsive pedagogy to foster global interconnectedness and responsibility (Massey, 2021).

Oceania also demonstrates varied integration strategies. Australia's curriculum faces challenges like teacher pressure and inadequate professional development, highlighting the need for clear guidelines (Scoular & Heard, 2021). Fiji and Kiribati emphasize ICT integration, decolonization, and real-life applications but encounter resource and preparedness constraints (Fa'avae, 2023; Ohi & Ingram, 2022).

In South America, Argentina's strategies include student mobility and personalized learning to foster global competence (García-Beltrán, 2023). Bolivia combines decolonization and interculturalism with the International Baccalaureate framework to enhance cultural awareness (Corrales et al., 2021). Brazil employs interdisciplinary curricula and collaborative learning, preparing students for global challenges (Mendonca & Gomez-Galan, 2018).

Overall, while strategies like interdisciplinary curricula, digital integration, and cultural inclusivity are common, their success often hinges on addressing challenges such as resource limitations, teacher preparedness, and the balance between local and global priorities.

### *Project-based learning focused on real-world problems*

The analysis of Project-Based Learning (PBL) as a strategy for enhancing global competence demonstrates both similarities and context-specific differences across regions. PBL universally emphasizes engaging students in solving real-world problems, fostering critical thinking, collaboration, and practical application of knowledge. For instance, in Asia, such as the Philippines, Saudi Arabia, and South Korea, PBL significantly enhances critical thinking and problem-solving skills, although Saudi Arabia and South Korea report challenges in consistent student support and project approval (Andal & Hermosa, 2024; Sciendo, 2023; Choi & Lee, 2019). Similarly, South American countries like Peru, Chile, and Colombia showcase improved critical thinking, academic performance, and collaboration, though Colombia notes limitations due to local social communication characteristics (Del Savio et al., 2023; Fuentes-Cid & Quezada-Espinoza, 2024; de la Puente et al., 2021).

In Europe, PBL aligns with fostering global competence through cultural awareness and critical thinking, as seen in Spain and Italy, though the United Kingdom lacks sufficient localized research (El País, 2024; Tholib & Rugaiyah, 2022; Karan & Brown, 2022). African nations, including Kenya and South Africa, successfully integrate PBL with local issues such as poverty and environmental sustainability, promoting civic engagement. However, Ethiopia faces challenges like insufficient materials and teacher training (Ochieng et al., 2022; Ngcobo & Pretorius, 2020; Debre Berhan University, 2024).

In Oceania, Australia and Vanuatu highlight the need for contextual relevance and strategic planning, while the Solomon Islands struggle with resource limitations and curriculum alignment (Miao et al., 2024; Williams & Martin, 2022; GDX, 2021). North American examples, such as the Dominican Republic and El Salvador, emphasize PBL's alignment with global education frameworks, enhancing empathy and interdisciplinary problem-solving skills (Smith et al., 2022; Smith & Johnson, 2023).

In summary, while PBL universally fosters critical 21st-century skills, its effectiveness often depends on addressing regional challenges, such as resource availability, cultural diversity, and institutional support. These contextual nuances highlight the importance of tailored implementation strategies for maximizing PBL's impact on global competence.

### *Creation of collaborative learning environments*

The findings on the effectiveness of study abroad programs in creating collaborative learning environments reveal both commonalities and unique regional challenges.

Globally, collaborative learning environments have been shown to enhance critical thinking, intercultural communication, and global competence. For example, Egypt and Morocco demonstrate significant success using hybrid project-based and e-learning strategies to improve academic and social outcomes (Abdel Hakim, 2023; Ait Hattani, 2024). Similarly, research in Mexico and Ireland highlights the role of intentional task design and digital tools in fostering creative and critical skills (Romero-Rodríguez et al., 2023; Chounta, 2022).

However, challenges persist. In Madagascar, a mismatch between educational practices and global citizenship goals hinders progress (Rasolonaivo, 2024), while Vietnam struggles with cultural norms and institutional barriers (Nguyen, 2024). Conversely, New Zealand's reliance on task design and professional development shows that structural factors significantly influence outcomes (Neill et al., n.d.).

Despite regional differences, the data underline the importance of tailored strategies that address local cultural contexts and infrastructural gaps. Countries like Samoa and Greece

emphasize culturally responsive teaching and spatial reorganization, respectively, as key to success (Johnson et al., 2021; Gkloumpou & Germanos, 2019). In conclusion, study abroad programs are most effective when collaborative strategies align with regional contexts, emphasizing cultural, digital, and pedagogical adaptability.

#### *Utilization of technology for global discussions*

Study abroad programs across various regions differ in their effectiveness in utilizing technology for global discussions, as they are shaped by contextual challenges and opportunities. In Africa, countries like South Africa and Morocco emphasize the need for teacher training and advanced technological tools to improve students' global competence, while Nigeria faces infrastructural and digital divide challenges (De Villiers & Nieuwenhuizen, 2020; Talib et al., 2023; Bansal, 2024). Similarly, in Asia, nations like Japan and Taiwan focus on fostering foreign language skills and cross-cultural collaboration, although Taiwan faces gaps in teacher training and curriculum vitality (Sakamoto & Roger, 2023; Guo & Hwang, 2022).

In Europe, Belgium and Iceland highlight the strategic integration of technology, with Belgium using structured curricula and Iceland leveraging distance education to broaden perspectives (OECD, 2018; Jóhannsdóttir & Jakobsdóttir, 2021). Contrastingly, Russia identifies a need to modernize its educational approaches and foster teacher innovation to match global trends (Stošić, 2023). North America showcases targeted initiatives, with the U.S. emphasizing project-based learning for cross-cultural competence, while Saint Lucia and Saint Kitts and Nevis focus on digital literacy and infrastructure upgrades to enhance engagement (Owens & Hite, 2022; Norville, 2021).

South America presents mixed outcomes, where programs like Bolivia's One Laptop per Child face infrastructural and socioeconomic barriers, and Argentina's efforts depend heavily on deliberate instructional design (Ecosistema Digital, 2024; El País, 2024). Oceania also reflects disparities; Australia and New Zealand demonstrate advanced integration of technology for language and cultural awareness, while Papua New Guinea struggles with limited resources and professional development opportunities (Fox, 2019; Wranga et al., 2021).

In conclusion, while study abroad programs universally recognize technology as a critical tool for fostering global competence, their effectiveness depends on addressing local challenges such as infrastructure, teacher training, and curriculum development, highlighting the need for tailored approaches in each context.

#### *Implementation of comprehensive teacher training programs*

The effectiveness of study abroad programs in implementing Comprehensive Teacher Training Programs (CTTP) varies across regions, reflecting both common strategies and unique approaches.

In Africa, South Africa's CTTP emphasizes math and science education, promoting standardized, high-quality training, although regional disparities remain (Ngubane, 2024). The Republic of the Congo focuses on improving global competence, notably in Chinese language education, through government and international support (Impedovo et al., 2023). Meanwhile, the Central African Republic integrates ICT and face-to-face teaching for in-service teachers, a trend echoed in efforts across Africa to modernize teaching methods (Kim et al., 2019).

In Asia, the Philippines' CTTP fosters cultural intelligence and global citizenship, emphasizing lifelong learning and teaching adaptability (Tudayan et al., 2024). Japan's

approach incorporates lesson study for continuous improvement, alongside foreign language education (Sakamoto & Roger, 2023). Similarly, China integrates cross-cultural and experiential learning to cultivate global competence, though it faces challenges like curriculum constraints (Nopas & Kerdsoomboon, 2024).

In Europe, Finland's interdisciplinary curricula focus on 21st-century skills, promoting cultural competence and collaboration (Pöysä-Tarhonen & Care, 2018). Italy emphasizes multicultural dialogue and inclusion, integrating global competence into teacher education, often through international field experiences (Parmigiani et al., 2022). Croatia adopts mobility programs and lifelong learning but struggles with developing standardized national competencies (Mandarić, 2022).

In North America, Cuba integrates intercultural communicative competence (ICC) into its teacher training, though coherence in program articulation remains a challenge (Mendive, 2020). Mexico balances theoretical and practical training but identifies weaknesses in hands-on experience and English proficiency (Garza-Rodríguez & Rodríguez Bulnes, 2024).

In South America, Argentina and Bolivia emphasize the value of Content and Language Integrated Learning (CLIL) and cross-cultural experiential learning, respectively, in enhancing global competence among educators (Angelucci et al., 2023; Rodríguez-Legendre & Fernández-Cruz, 2024). Brazil incorporates mental health awareness and collaborative active learning into its training programs, addressing both personal and pedagogical competencies (Del Prette & Del Prette, 2022).

In Oceania, Australia focuses on cross-cultural content and experiential learning, promoting engagement with societal issues (Oguro & Harbon, 2021). New Zealand's Global Competence Certificate enhances empathy, critical thinking, and cross-cultural communication, gaining international recognition (Tracey et al., 2024). Papua New Guinea highlights inclusive education and community involvement as essential components of teacher training (Tracey et al., 2024).

These examples underline the importance of tailored strategies in teacher training while revealing global challenges like curriculum reform and regional disparities in implementation.

## CONCLUSIONS

The incorporation of global perspectives into curricula, project-based learning (PBL), collaborative learning environments, technology for global discussions, and comprehensive teacher training programs demonstrates a common global commitment to improving student competencies in a connected world. However, the efficacy of these strategies is influenced by contextual factors such as resource availability, cultural dynamics, and infrastructure. Many regions take novel approaches to global curriculum integration, but balancing local cultural values and global awareness remains difficult. Similarly, PBL is widely recognized for encouraging critical thinking, collaboration, and problem solving, but its success is dependent on addressing localized challenges such as teacher preparedness and institutional support. Collaborative learning environments created through study abroad programs and intentional task designs improve intercultural communication and global competence, but their efficacy is contingent on their alignment with local educational practices. The use of technology to promote global discussions has also shown promise, but its success is dependent on strong infrastructure, teacher training, and curriculum alignment. Comprehensive teacher training programs are essential for equipping educators with the skills required to teach global competencies.

Finally, while these strategies have common themes, their successful implementation necessitates tailored solutions that address local challenges in infrastructure, resources, and

cultural alignment. By embracing these nuances, global education systems can better prepare students to navigate and contribute to an increasingly interconnected world.

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## Enhancing global competence: a review of study abroad program effectiveness strategies across nations

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## Enhancing global competence: a review of study abroad program effectiveness strategies across nations

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