



Supporting Pre-service Post-Primary Teachers' Knowledge of Global Citizenship Education (GCE) in the Classroom



Executive Summary

Global Citizenship Education (GCE) and Education for Sustainable Development (ESD) have become increasingly prominent within national and international educational policy, reflecting growing recognition of the role of education in addressing complex global challenges such as sustainability, inequality, and social justice (Nygren et al., 2020). Within the Irish context, the Teaching Council of Ireland (2020) identifies GCE as one of the seven core elements underpinning all post-primary Initial Teacher Education (ITE) programmes. Despite this policy emphasis, research consistently highlights a gap between policy aspirations and classroom practice, with many pre-service teachers reporting limited conceptual understanding and pedagogical confidence in embedding GCE within their teaching.

In response to this policy–practice divergence, this research project sought to design, implement, and evaluate a novel Global Citizenship Education intervention for pre-service post-primary teachers. The intervention was developed through a collaborative community–agency partnership model involving two Initial Teacher Education institutions in the West of Ireland and external educational partners. The project engaged pre-service teachers from diverse disciplinary backgrounds, including Mathematics and Visual Arts.

A mixed-methods research design was employed to evaluate the impact of the intervention. Data collection included student surveys, workshop evaluations, and pre-service teacher focus groups. Importantly, data were gathered at different stages in order to examine the sustainability of the intervention’s impact over time.

The findings indicate that the intervention positively influenced pre-service teachers’ GCE-related knowledge, attitudes, values, and practical understanding. Pre-service teachers demonstrated increased awareness of global issues, enhanced understanding of

GCE, and greater appreciation of the role of education in promoting active global citizenship. A particularly significant finding was the value of interdisciplinary collaboration, with participants reporting that engagement across subject areas supported the co-construction of conceptual and pedagogical understanding of GCE.

The findings also identified several challenges associated with integrating GCE into subject-specific teaching. These included the conceptual complexity of GCE, concerns regarding topic sensitivity, instructional time pressures, and difficulties aligning GCE with existing curricular structures. While participants expressed strong support for the principles of GCE, many reported lower levels of confidence regarding their ability to implement GCE meaningfully within classroom practice.

Nevertheless, the project demonstrates the significant potential of collaborative, interdisciplinary, and practice-oriented approaches to supporting Global Citizenship Education within Initial Teacher Education. The findings provide important insights for ITE providers, policymakers, and educational stakeholders regarding how teacher education programmes can better support the development of both conceptual and pedagogical competence in GCE. Overall, the study contributes to the growing body of research on Global Citizenship Education in teacher education and highlights the importance of sustained institutional support, interdisciplinary collaboration, and practical pedagogical guidance in preparing future teachers to engage critically with global issues.

Introduction

Global Citizenship Education (GCE) and Education for Sustainable Development (ESD) have emerged as significant national and international priorities within international education systems. These agendas reflect a growing recognition of the role of education in addressing complex global challenges such as climate change, social inequality, and economic injustice. Research indicates that concepts related to global citizenship and sustainability are embedded within the educational frameworks of approximately 89% of UNESCO member states (Nygren et al., 2020), highlighting the global momentum behind these initiatives.

Within the Irish context, this policy commitment of Global Citizenship Education is one of the seven core elements underpinning Initial Teacher Education (ITE) programmes at post-primary level (Teaching Council, 2020). This requirement set out by the Teaching Council of Ireland signals a strong expectation that all newly qualified teachers will be equipped with the knowledge, skills, and dispositions necessary to support students in engaging critically with global issues and acting as informed, responsible citizens.

However, despite this requirement in ITE policy prioritisation, research indicates a persistent gap between policy aspirations and classroom practice. While pre-service teachers often demonstrate positive attitudes towards GCE and recognise its importance, they frequently report limited conceptual understanding and a lack of pedagogical confidence in embedding GCE within the subject they are teaching (Andres & Aydin, 2020; DaCosta, Hanley & Sant, 2024). This disconnect highlights a critical challenge for Initial Teacher Education: how to move beyond awareness and goodwill towards meaningful, sustained, authentic pedagogical integration.

This research study was developed in response to this policy–practice divergence. It is strongly aligned with the objectives of the New Foundations Strand 4b: Education for

Global Citizenship and Education for Sustainable Development, funded by the Department of Foreign Affairs (Irish Aid), the Department of Education, and the Department of Children, Equality, Disability, Integration and Youth. Specifically, the project addressed Sustainable Development Goal (SDG) 4.7 through supporting pre-service teachers to develop the knowledge, pedagogical understanding, and critical awareness required to embed Global Citizenship Education (GCE) within post-primary education contexts. A distinctive feature of this intervention was its grounding in a community–agency partnership model, involving collaboration between higher education institutions and external organisations with expertise in global development and social justice education. This approach was intended to ensure that the intervention was both theoretically informed and practically relevant.

Global Citizenship Education and Education for Sustainable Development

Education for Global Citizenship and Sustainable Development is an international and national priority in the field of Education. UNESCO (2023) define a Global Citizen as someone who “understands how the world works, values differences in people, and works with others to find solutions to challenges too big for any one nation”. Governments and policymakers around the world have advocated that Global Citizenship Education (GCE) is essential in supporting and empowering people to become Global Citizens (Akkari and Maleq, 2020; Bentall, 2020; UNESCO 2015). The IDEA network in Ireland have developed a code of Good Practice for Development Education which we plan to use to support our pre-service teachers in developing their knowledge of and capacity for GCE. Many core GCE concepts align very closely with Education for Sustainable Development (ESD).

Internationally, organisations such as UNESCO have been instrumental in promoting GCE and ESD through policy frameworks and advocacy. UNESCO positions GCE as a

transformative approach that integrates cognitive, socio-emotional, and behavioural dimensions of learning, encouraging learners not only to understand global issues but also to act upon them. Similarly, ESD emphasises the development of competencies such as critical thinking, systems thinking, and collaborative problem-solving, which are essential for addressing sustainability challenges.

Within Europe and Ireland, these priorities are reflected in policy initiatives that emphasise the integration of GCE across educational systems. In Ireland, the Teaching Council's identification of GCE as a foundational element of Initial Teacher Education highlights a strong commitment to preparing teachers who can embed global perspectives within their practice (Teaching Council of Ireland, 2020). However, translating these broad policy ambitions into classroom realities remains a complex and ongoing challenge.

Global Citizenship Education in Initial Teacher Education

Initial Teacher Education (ITE) is widely recognised as playing a central role in developing pre-service teachers' knowledge, understanding, and pedagogical capacity in relation to GCE. Pre-service teachers are not only future embedders of GCE curriculum but also key agents in shaping students' understanding of global issues and their capacity for civic engagement. As such, equipping pre-service teachers with the knowledge, skills, and dispositions required for GCE is essential.

Research suggests that while pre-service teachers generally hold positive attitudes towards GCE, their understanding is often underdeveloped and fragmented. Studies indicate that many pre-service teachers conceptualise GCE in broad or abstract terms, focusing on themes such as "awareness" or "fairness," but struggle to translate these concepts into concrete teaching practices. This aligns with findings from Andres and

Aydin (2020), who state that pre-service teachers frequently lack clarity around the pedagogical implications of GCE, particularly in subject-specific contexts.

Furthermore, DaCosta, Hanley, and Sant (2024) highlight that pre-service teachers often experience uncertainty regarding how to integrate GCE into existing curricular structures. This uncertainty is compounded by competing demands within ITE programmes, where limited time and overloaded curricula can constrain opportunities for deep engagement with GCE. As a result, GCE is sometimes treated as an “add-on” rather than an integral component of teaching and learning.

Barriers to GCE Integration in Subject Teaching

Despite strong policy support and growing awareness of its importance, the integration of GCE across different subject disciplines remains challenging. One major challenge is the perceived lack of alignment between GCE and subject curricula. In disciplines such as Mathematics, GCE is often seen as peripheral or difficult to integrate in a meaningful way. This can lead to superficial or tokenistic inclusion, where global issues are referenced but not deeply explored.

Another barrier is the complexity of GCE concepts. Topics such as global inequality, sustainability, and social justice are inherently complex and may involve contested perspectives. Pre-service teachers may not feel equipped to navigate these complexities, particularly when working with diverse student groups. A study of 200 teachers in the United Kingdom by Robbins et al. (2003) found that teachers tended to be selective in the topics they incorporated into classroom practice. Teachers were generally more comfortable teaching topics related to the environment and cultural awareness, while also emphasising self-esteem, interpersonal relationships, and cooperative learning as elements that promote good citizenship,

Additionally, the sensitivity of certain GCE topics can create uncertainty. Issues such as poverty, migration, and climate change may be politically or emotionally charged, and teachers may be concerned about how to address them appropriately in the classroom. These barriers highlight the need for targeted support within ITE programmes, including the provision of practical resources, subject-specific examples, and opportunities for guided practice.

The literature highlights both the importance of Global Citizenship Education and the challenges associated with its implementation within Initial Teacher Education. While there is strong policy support and widespread recognition of the value of GCE, a persistent gap remains between theory and practice. Pre-service teachers often lack the conceptual clarity, pedagogical strategies, and self-efficacy required to embed GCE meaningfully into their teaching.

This research highlights the importance of designing ITE experiences that move beyond theoretical exposure to GCE and instead provide structured opportunities for embedding GCE meaningfully in lessons and reflecting on GCE in practice. Interventions that incorporate active learning, collaboration, and real-world contexts have been identified as particularly effective in supporting meaningful engagement with GCE. This research study builds on exploring the impact of a collaborative, workshop-based intervention designed to support pre-service teachers in developing both conceptual and practical understanding of GCE so they can embed GCE meaningfully in their practices.

Project implementation

The *Supporting Pre-service Post-Primary Teachers' Knowledge of Global Citizenship Education (GCE) in the classroom* project was developed in response to national and international policy priorities emphasising the importance of Global Citizenship Education (GCE) and Education for Sustainable Development (ESD) in Initial Teacher

Education (ITE). The initiative brought together two ITE providers in the west of Ireland alongside key societal partners to design, implement, and evaluate an innovative GCE intervention for pre-service teachers of Mathematics and Art. Thirty six pre-service teachers from two Higher Education Institutions took part in the intervention.

The project adopted a collaborative, interdisciplinary approach, integrating workshop-based learning, research, and dissemination activities.

The overarching aim of the project was to support the preparation of post-primary pre-service teachers in Mathematics and Art to effectively embed GCE in their classrooms. This aim was grounded in the recognition that teachers play a pivotal role in fostering students' understanding of global issues, sustainability, and social justice.

The project was guided by three key objectives:

1. **Enhancing knowledge and pedagogical competence:** To develop pre-service teachers' conceptual understanding of GCE, alongside their pedagogical skills for integrating GCE into subject-specific teaching.
2. **Curricular integration:** To support pre-service teachers in identifying and applying GCE concepts within the Junior Cycle specifications for Mathematics and Art.
3. **Critical engagement with global issues:** To enable pre-service teachers to critically analyse global challenges and design lesson plans that reflect GCE principles.

These objectives were operationalised through four structured workshops and a research-informed evaluation process.

The project was implemented over the year 2025–2026 and organised into four key phases: planning, implementation, evaluation, and dissemination.

Phase 1: Pre-project Planning (January 2025)

The initial phase focused on establishing strong foundations for the project. The project team engaged in collaborative planning with partner organisations and an Advisory Committee comprising experts in Sustainability Education and Initial Teacher Education. The research team worked with all stakeholders (ITE Representatives, Worldwise Global Schools and Financial Justice Ireland) to develop workshop content that was relevant to pre-service teachers and also aligned with best practice in GCE. Analysis of pre-service teachers’ prior exposure to GCE concepts during their first year of study.

The research team worked together to review existing teaching resources that helped identify opportunities for embedding GCE across Mathematics and Art curricula.

This phase ensured that the intervention was contextually grounded, pedagogically sound, and ethically robust.

Phase 2: Implementation of Workshops (January – April 2025)

The core aim of the project involved the delivery of four interactive workshops supporting second year undergraduate pre-service teachers from both institutions.

Table 1: Details of GCE Workshops

Workshop	Focus and Activities
Workshop 1: Introduction to GCE	<ul style="list-style-type: none"> • Introduced participants to the theoretical foundations of Global Citizenship Education (GCE) and Education for Sustainable Development (ESD). • Explored key concepts, international and national policy frameworks, and the role of education in addressing global challenges.
Workshop 2: Pedagogical Approaches to GCE	<ul style="list-style-type: none"> • Focused on pedagogical approaches and practical strategies for embedding GCE within Mathematics and Art education. • Explored active learning methodologies, critical discussion approaches, and interdisciplinary teaching strategies.
Workshop 3: Collaborative Lesson Planning	<ul style="list-style-type: none"> • Engaged pre-service teachers in collaborative lesson planning activities. • Enabled pre-service teachers to apply their understanding of GCE within subject-specific contexts. • Facilitated interdisciplinary collaboration across subject areas.
Workshop 4: Reflection, Sharing and Dissemination	<ul style="list-style-type: none"> • Provided opportunities for reflection, peer sharing, and dissemination of learning. • Encouraged discussion of challenges and opportunities associated with implementing GCE in practice.

	<ul style="list-style-type: none"> • Fostered the development of a community of practice among participants.
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The workshops were delivered across both campuses, requiring coordinated travel and logistical planning. A blended approach incorporating face-to-face interaction, sharing learning on posters developed by pre-service teachers and digital resource sharing such as padlet enhanced accessibility and engagement. Figure 1 shows some pictures of the workshops that took place and also showcases the collaborative nature of the project.



Figure 1: Pictures of workshops

Phase 3: Evaluation of the Intervention (May 2025 and January 2026)

A mixed-methods evaluation was conducted to assess the effectiveness of the GCE intervention. Data collection methods included pre- and post-intervention surveys designed to measure changes in participants’ knowledge and attitudes, workshop exit cards to capture immediate feedback, and focus group discussions that explored pre-service teachers’ experiences and perceptions in greater depth. This phase of the study provided valuable insights into the impact of the workshops on pre-service teachers’ understanding of GCE and their confidence in delivering GCE-related content within secondary school classrooms.

Some challenges arose in relation to the timing and recruitment of participants for the focus group phase. In particular, recruiting student teachers proved difficult due to competing academic demands, including examinations and assignment deadlines. Additionally, the project team wished to ensure that participants had sufficient opportunity to engage with, and where possible attempt to embed, GCE within their classroom practice during school placement. These considerations influenced the timing of the data collection process. Consequently, the focus group interviews were conducted in January 2026, allowing participants time to progress further in their teacher education programmes and to reflect more meaningfully on their experiences of GCE in both university and school settings.

Phase 4: Dissemination (April 2025 – May 2026)

The final phase of the project focused on disseminating the findings and sharing project outputs with a wider audience. This included presentations of the project resources and findings to peers, lecturers across both higher education institutions, staff from World Wise Global Schools and Financial Justice Ireland, as well as members of the Advisory Committee. Findings were also presented at the ESAI national conference and at Ubuntu network meetings. Dissemination was a central component of the project, ensuring that its impact extended beyond the immediate participants. Key outputs included the development of a digital repository of GCE resources for Mathematics and Art pre-service teachers, providing practical tools to support classroom implementation, alongside conference presentations that facilitated the sharing of findings with the broader educational research community in Ireland. The project team intends to further disseminate the findings through peer-reviewed journal publications and future conference presentations focusing on Global Citizenship Education in Initial Teacher Education.

Pre-service Teachers' Experiences

A prominent theme emerging from the data was the value pre-service teachers placed on the interactive and collaborative nature of the workshops. Pre-service teachers consistently described the learning experience as engaging, accessible, and conducive to open discussion. Interactive activities, such as games and group tasks, were identified as particularly effective in facilitating engagement:

“There was a lot of active learning... it really opened everyone’s mind.”

These activities helped to create what pre-service teachers’ described as a “safe space” for exploring unfamiliar or complex ideas. The informal and participatory structure of the workshops enabled pre-service teachers to share perspectives, challenge assumptions, and build collective understanding of GCE across different subject areas.

Collaboration across institutions and subject areas was also highlighted as a key strength. Participants valued the opportunity to work with peers from different disciplinary backgrounds:

“You got to see everyone’s perspective... a completely different point of view.”

This interdisciplinary engagement supported the co-construction of knowledge, allowing participants to broaden their understanding of GCE beyond their own subject discipline. These findings suggest that collaborative learning environments play a critical role in supporting engagement with GCE, particularly for pre-service teachers who may initially have limited exposure to the concept.

Pre-service teachers demonstrated a relatively strong conceptual understanding of GCE, particularly in relation to themes of global awareness, interconnectedness, and personal responsibility. GCE was frequently described as recognising one’s role within a wider

global context:

“You are an active member of society... not just locally, but on a bigger scale.”

Another pre-service teacher articulated an understanding that individual actions have broader global consequences:

“Our little things that we do every day impact everything that’s going on... on the other side of the world.”

A particularly noteworthy finding from this study relates to the distinction between awareness and action. While pre-service teachers reported increased awareness of global issues and demonstrated shifts in attitudes and personal behaviours, many expressed uncertainty regarding how to translate this awareness into meaningful action, either personally or professionally. Pre-service teachers described becoming more conscious of issues such as ethical consumption, sustainability, and global inequality. However, they also reported feeling unsure about how to “make a difference” or enact change through teaching practice.

Despite strong conceptual understanding and positive attitudes towards GCE, pre-service teachers consistently highlighted challenges in embedding GCE into subject-specific teaching practice. This tension was particularly evident among pre-service teachers training to become mathematics teachers:

“It’s not necessarily intuitive... particularly from a maths perspective.”

However, they identified statistics as one of the few areas where GCE could be naturally integrated:

“It mostly just comes down to statistics... outside of that, I wouldn’t see it in a lot of places.”

One pre-service teacher had a concern that attempts to integrate GCE might feel artificial or superficial:

“You could do it... but it might feel a bit tacked on.”

This reflects a broader issue identified in the literature, where GCE is often perceived as more compatible with subjects such as humanities or arts, and less so with STEM disciplines. However, some participants recognised that GCE could be embedded more subtly:

“Maybe subconsciously we already incorporate certain elements... without making it a feature.”

This suggests that while explicit integration may be challenging, there is potential for implicit or embedded approaches to GCE within subject teaching. Overall, this theme highlights a critical gap between knowing and doing, reinforcing the importance of providing pre-service teachers with concrete, subject-specific pedagogical strategies for implementation.

Discussion and Implications

This study sought to examine the impact of a collaborative, interdisciplinary Global Citizenship Education (GCE) intervention within Initial Teacher Education (ITE). The findings demonstrate that the intervention positively influenced participants' conceptual understanding of GCE, awareness of global issues, and attitudes towards global citizenship. Pre-service teachers who participated in this research project reported an increased awareness and improved understanding of GCE. However, the findings also reveal important tensions between understanding GCE conceptually and implementing it meaningfully within classroom practice.

One of the most significant findings of this study was the extent to which the intervention supported pre-service teachers in developing a deeper conceptual understanding of GCE. They demonstrated increased awareness of interconnected global issues and articulated understandings of responsibility, justice, and active citizenship that align closely with conceptualisations of GCE within the literature and furthermore as outlined in New Foundations Strand 4b: Education for Global Citizenship and Education for Sustainable Development document.

Importantly, this learning appeared to be strongly linked to the collaborative and participatory nature of the workshops. Participants consistently identified active learning approaches, discussion-based activities, and interdisciplinary engagement as central to their learning experience.

The interdisciplinary nature of the intervention also emerged as a significant strength. By bringing together pre-service teachers from Mathematics and Art, the project created opportunities for participants to encounter diverse perspectives and engage in collaborative meaning-making. The findings suggest that interdisciplinary collaboration may help pre-service teachers move beyond narrow subject boundaries and recognise broader educational purposes within their practice.

Despite strong conceptual engagement with GCE, participants reported ongoing difficulties in putting these ideas into classroom practice. This tension between valuing GCE and feeling capable of implementing it represents one of the central findings of the study. Pre-service teachers from the mathematics discipline, frequently described uncertainty regarding how GCE could be integrated authentically into their subject teaching. Concerns were expressed about GCE feeling “forced” or “tacked on,” especially in curriculum areas traditionally perceived as technical or content-driven. This finding reflects broader patterns identified in the literature, where teachers often support the

principles of GCE but struggle with practical enactment (Andres & Aydin, 2020; DaCosta, Hanley & Sant, 2024). This study therefore reinforces the argument that awareness alone is insufficient. Pre-service teachers require explicit pedagogical support, subject-specific examples, and opportunities to practice integrating GCE into lesson planning and classroom teaching.

The findings also highlight the need to reconsider how GCE is framed within subject disciplines. While subjects such as Art may lend themselves more readily to discussions of identity, culture, and social justice, pre-service teachers from mathematics backgrounds often perceived fewer opportunities for integration. However, this may reflect limited exposure to interdisciplinary pedagogical approaches rather than an inherent incompatibility between Mathematics and GCE. However, the challenge, is not whether GCE can be integrated into Mathematics, but how ITE programmes can support pre-service teachers in recognising and seeing the opportunity to embed GCE in the mathematics classroom.

Conclusion

The findings of the study indicate that the intervention had a positive impact on pre-service teachers' knowledge, attitudes and awareness of GCE in the classroom. In particular, the collaborative and interdisciplinary nature of the workshops emerged as a significant strength. Pre-service teachers reported that engaging with peers from different subject areas facilitated the co-construction of understanding and enabled them to consider GCE from multiple perspectives. This finding suggests that interdisciplinary approaches may play a valuable role in supporting the integration of GCE within Initial Teacher Education.

However, the study also identified challenges in embedding GCE in the classroom. Notably, pre-service teachers reported comparatively lower levels of confidence in their

ability to take action or to implement GCE meaningfully within their own teaching practice. Several barriers were highlighted, including the perceived conceptual complexity of GCE, the sensitivity of certain global issues, constraints related to instructional time, and difficulties in aligning GCE with subject-specific curricula. These findings have important implications for both policy and practice. While the results affirm the value of targeted interventions in enhancing pre-service teachers' understanding of GCE, they also highlight the need for sustained, structured support within ITE programmes. In particular, there is a need to move beyond standalone workshops towards more integrated and scaffolded approaches that support the development of both conceptual understanding and practical pedagogical strategies for embedding GCE in lessons.

Ultimately, this study contributes to the growing body of research on Global Citizenship Education in Initial Teacher Education and provides evidence-based insights into how ITE programmes can more effectively support pre-service teachers in preparing students to engage with an increasingly complex and interconnected world.

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