

An investigation of integrating global citizenship education (GCED) elements into geography pedagogy



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Abstract This study investigates the integration of Global Citizenship Education (GCED) elements into the geography pedagogy of preservice teachers. With the increasing emphasis on cultivating global perspectives, the research examines how preservice teachers incorporate GCED elements, including sustainability, social justice, and global interdependence, into their geography lessons during teaching simulations. The study involves the analysis of 39 lesson plans and teaching simulations, focusing on the presence and application methods of GCED elements. Findings indicate that most groups included 2-3 GCED elements, predominantly using indirect methods to integrate these themes. However, some groups struggled to align their lesson plans with their teaching simulations, with GCED elements often superficially mentioned or not fully connected to the content. Key challenges identified were a lack of training, insufficient resources, and difficulty in applying global themes to specific geography topics. Despite these challenges, improvements were noted over time, as teachers developed better strategies for integrating GCED through feedback and practice. The study underscores the need for comprehensive teacher training, the development of GCED-supportive curriculum materials, and the promotion of collaborative and experiential learning approaches. These efforts are essential to equipping future educators with the skills and confidence to integrate global citizenship themes effectively, preparing students to engage with global issues critically and responsibly.

Keywords: interdisciplinary education, curriculum integration, teaching simulations, preservice teachers

1. Introduction

Geography, as a discipline, plays a crucial role in shaping students' understanding of the world around them, spanning from local environments to global interconnections (Türk & Atasoy, 2020; Wang et al., 2020). Over the years, geography pedagogy has evolved significantly, moving beyond rote memorization of place names and physical features to adopt a more holistic approach that emphasizes spatial thinking, critical analysis, and the interconnectedness of human and natural systems (Roberts, 2023; Xuan et al., 2019). Recently, there has been growing recognition of the need to align geography education with broader educational goals that prepare students for an increasingly globalized world (Roberts, 2023).

In this context, the incorporation of GCED into geography curricula has been a major development. GCED is a strategy used by the United Nations Educational, Scientific, and Cultural Organization (UNESCO) to address barriers that impede global peace and sustainability. Its objective is to cultivate in students values, attitudes, and behaviors that promote responsible global citizenship, including innovation, creativity, and dedication to sustainable development, human rights, and peace. The approach aims to empower learners of all ages to understand global issues and actively advocate for safer, more inclusive, tolerant and sustainable societies" as described by UNESCO and cited by APCEIU (2020). Global Citizenship Education (GCED) equips students with essential competencies—integrating knowledge, practical skills, core values, and mindsets—to contribute to a world that embraces inclusivity, promotes justice, and fosters peace (Leite, 2022). According to UNESCO (2015), there are three core conceptual dimensions of GCED:

Cognitive: Gaining knowledge, understanding, and critical thinking skills regarding global, regional, national, and local issues, as well as understanding the interconnectedness and interdependency of different countries and populations.

Socioemotional: Developing a sense of belonging to humanity, shared values and responsibilities, empathy, solidarity, and respect for diversity and differences.

Behavioral: Acting effectively and responsibly at local, national, and global levels to create a more peaceful and sustainable world.



GCED emphasizes cultivating a sense of inclusion in the broader global community and fosters respect for sustainable development, human rights, and diversity (Torres & Bosio, 2020). Its seven widely recognized components include sustainable development, human rights, peace and conflict, globalization and interconnectedness, social justice and equity, power and governance, and identity and diversity (Oxfam, 2015).

Integrating GCED into geography pedagogy involves several essential elements. First, it expands the scope of geographical inquiry to encompass global issues such as climate change, migration, cultural diversity, and economic inequality. Second, it promotes skill development in critical thinking, problem-solving, and intercultural communication. Third, it encourages participatory and experiential learning methods, enabling students to engage directly with global issues and diverse perspectives.

However, integrating GCED into geography education presents challenges. Educators must navigate complex and sometimes controversial topics, balance local and global perspectives, and adapt teaching methods to incorporate new technologies and sources of information. Additionally, there is a need for professional development and resources to support teachers in implementing this integrated approach effectively (Bercasio, 2023).

This study explores the dynamic intersection of GCED and geography pedagogy, focusing on preservice teachers' integration of the seven elements of GCED (Oxfam, 2015) during their teaching simulations. With the growing emphasis on fostering global perspectives, this research investigates strategies employed by preservice teachers to incorporate GCED elements into geography instruction. Key areas of exploration include identifying the specific GCED elements integrated into geography pedagogy, challenges preservice teachers encounter, and their perceived impact on students' global awareness. By examining these aspects, this research aims to contribute valuable insights to the field of education, informing curriculum development, teacher training programs, and educational policies that promote global citizenship.

2. Literature Review

GCED and geography share a close relationship, as both aim to cultivate a deeper understanding of global interconnections, promote awareness of global challenges, and encourage responsible action. Geography provides the foundation for GCED by offering students the tools and knowledge to explore the physical and human characteristics of different regions, whereas GCED broadens this understanding by focusing on global responsibility, ethical issues, and cross-cultural awareness (Kim, 2023). Together, they foster critical thinking about global issues and empower students to act as informed and engaged global citizens.

GCED aims to equip learners with the knowledge, skills, and values needed to promote sustainable development, peace, and respect for human rights in a globally interconnected world (Hesslewood, 2018). In Malaysia's geography curriculum, several elements of GCED are integrated, either explicitly or implicitly, to foster students' understanding of global issues and their role as responsible global citizens.

2.1. Analysis of the aspects of GCED in the geography education syllabus in Malaysia

On the basis of content analysis of the syllabus of geography in Malaysia, several key elements of GCED are found in the syllabus, as shown in Table 1.

Table 1 Key elements of GCED in geography education syllabus in Malaysia.

Key elements of GCED	Example of the related topics in Malaysian Geography curriculum
	1. Sustainability and Environmental Awareness
One of the cores focuses on the Geography curriculum is the study of environmental issues such as deforestation, pollution, climate change, and natural resource management (Mohammad Zohir, 2016; Adilla & Kadaruddin, 2021). These topics align with the sustainability goals of GCED, encouraging students to think critically about human-environment interactions and the importance of sustainable development on a global scale (Chang & Kidman, 2024).	<ul style="list-style-type: none"> - Students learn about the impact of urbanization, industrialization (Curriculum Development Division (2018), and resource exploitation on the environment, both locally and globally. - Topics like global warming and its impact on Malaysia and the world (Curriculum Development Division, 2016) cultivate an awareness of the interconnectedness of ecosystems and global responsibilities in mitigating environmental degradation.
	2. Cultural Awareness and Global Interdependence
Geography promotes understanding of different regions, cultures, and peoples (Edwards, 2002). Through studying population distribution, migration patterns, and global trade, students learn how diverse societies are interconnected and how these	<ul style="list-style-type: none"> - Migration studies in the curriculum (Curriculum Development Division, 2018) help students understand the reasons behind population movements, including economic migration, refugee crises, and the impact of these movements on both source and host countries. - Lessons on global trade and the global economy (Curriculum Development Division, 2017) highlight how nations depend on each other for goods,



connections influence social, economic, and cultural dynamics worldwide (Singha, 2019).

services, and economic stability, emphasizing the need for cooperation and solidarity among countries (APCEIU, 2020).

3. Human Rights and Social Justice

The Geography curriculum also touches upon social inequalities and human rights issues, especially in relation to the distribution of resources and access to essential services like water, food, and housing. This helps students understand inequities that exist globally and encourages discussions on the need for fairer distribution of resources (Hesslewood, 2018).

- Studies on development geography examine the disparities between developed and developing countries, focusing on issues such as poverty, health care access, and education (Curriculum Development Division, 2016, 2018).
- Human geography topics related to urban planning and housing expose students to the challenges of ensuring equitable living conditions and upholding the right to adequate shelter (Curriculum Development Division, 2018).

4. Peace and Conflict Resolution

While Geography primarily deals with physical and human environments, it also covers topics like border disputes, resource conflicts, and territorial conflicts, all of which align with the GCED focus on peace and conflict resolution. Understanding these conflicts from a geographical perspective helps students see the importance of peaceful coexistence and dialog (Macaspac & Moore, 2022).

- Discussions on international borders and resource conflicts (Curriculum Development Division, 2015), such as disputes over water resources or fishing rights, help students grasp how global conflicts can arise and the importance of diplomacy in resolving them.
- Lessons on the geographical aspects of war and conflict expose students to the devastating impact of conflict on human populations and infrastructure, thereby emphasizing the importance of global peace initiatives (Curriculum Development Division, 2017).

5. Global Health and Food Security

The Geography curriculum includes topics on food security, agriculture, and natural disasters, which often tie into discussions about global health. Understanding how environmental and human factors affect food production and access contributes to discussions on the right to food and the global responsibility to ensure equitable food distribution.

- Students study the impact of climate change on global food production (Curriculum Development Division, 2017), learning how environmental degradation in one region can affect global food security.
- Topics like malnutrition and access to clean water (Curriculum Development Division, 2015) are discussed in relation to global efforts to eradicate hunger and provide basic needs for all, fostering a sense of global responsibility.

6. Citizenship and Global Responsibilities

GCED emphasizes the idea of active citizenship, where individuals contribute to solving global challenges (Kim, 2023). According to Hong (2018), Geography lessons on global environmental issues, urbanization, and population growth create opportunities for students to discuss their role as global citizens in promoting sustainable practices and advocating for the fair treatment of all people.

- Students are encouraged to think about their personal and collective responsibilities in addressing global environmental challenges like reducing carbon footprints or supporting sustainability initiatives (Curriculum Development Division, 2016).
- Lessons emphasize ethical decision-making regarding the environment and resource use, linking back to GCED's goals of fostering a sense of shared responsibility among nations (Curriculum Development Division, 2015)

7. Technological and Economic Development

Geography covers the impact of technological advancements and global economic trends on the environment and societies (Bengel & Peter, 2021). Students explore the role of technology in addressing global challenges, such as sustainable energy and transportation, linking directly to the GCED emphasis on using technology for global problem-solving.

- Topics like the global energy crisis, renewable energy, and sustainable development expose students to the technological and economic efforts required to tackle global issues, such as climate change and environmental sustainability (Curriculum Development Division, 2017).
- Globalization topics highlight the opportunities and challenges brought about by the rapid technological and economic integration of countries worldwide, which fosters a deeper understanding of global interdependence (Malaysian Examination Council, 2012).

On the basis of the brief analysis in Table 1, the geography curriculum in Malaysia integrates various elements of GCED, such as sustainability, cultural awareness, social justice, and global interdependence. Through the study of both physical and human geography, students are exposed to critical global issues and encouraged to think of themselves as responsible global citizens who play an active role in addressing global challenges. This approach aligns with the goals of GCE to create a more just, peaceful, and sustainable world.

2.2. Challenges in integrating GCE into teaching and learning processes

Integrating GCED into teaching and learning presents various challenges for educators, despite the growing recognition of its importance in fostering responsible and globally minded citizens. Teachers face difficulties ranging from a lack of training and resources to cultural sensitivities and curriculum constraints, all of which hinder the effective implementation of GCED.

One significant challenge is the lack of professional development and training for teachers (Corney, 2006). Many educators are not adequately trained to incorporate GCED principles into their teaching. They may struggle with understanding the global concepts and pedagogical approaches that emphasize critical thinking, intercultural communication, and global responsibility. Without comprehensive training, teachers may find it difficult to move beyond traditional subject matter and engage students with global issues such as human rights, environmental sustainability, and social justice (O'Meara, et al., 2018). This knowledge gap can result in superficial or ineffective integration of GCED into classroom lessons.

A second challenge is the limited availability of teaching resources that align with GCED (Ghosn-Chelala, 2020). In many countries, especially in developing regions, educational materials such as textbooks, multimedia resources, and lesson plans may not adequately reflect global perspectives. Teachers often rely on localized or outdated content that does not address global citizenship themes such as diversity, global inequality, and environmental challenges. The lack of culturally relevant and globally inclusive resources makes it difficult for teachers to engage students in meaningful discussions about global issues, limiting their ability to foster critical thinking and global awareness (Browes, 2017).

Another obstacle is the pressure of curriculum requirements and time constraints. Teachers often have to meet strict curriculum guidelines and standardized testing goals, leaving little room for the exploration of global citizenship themes (McGregor, 2022). Many educational systems prioritize academic performance in core subjects such as mathematics, science, and language, which may push GCEs to the margins. As a result, teachers might struggle to find time to incorporate discussions of global challenges or activities that promote critical thinking about social and ethical issues (Hamwy, et al., 2023). This focus on exam-driven content leaves limited opportunities for interdisciplinary or project-based learning, which GCED often requires.

Cultural and political sensitivities also pose a challenge for teachers attempting to integrate GCED. Some topics central to global citizenship, such as human rights, social justice, or gender equality, may conflict with local cultural or political norms (Hamwy et al., 2023). Teachers might be cautious about addressing sensitive or controversial issues for fear of backlash from parents, school administrators, or community members. In certain regions, discussing topics such as democracy and religious diversity might provoke resistance, limiting teachers' ability to foster open dialog and critical thinking around such global issues.

While GCED is essential for fostering global awareness and responsibility among students, teachers face multiple challenges in integrating it effectively. Addressing these challenges requires comprehensive professional development, access to relevant resources, flexibility in curricula, sensitivity to local contexts, and innovative strategies to engage students. Overcoming these barriers is crucial to ensuring that education prepares students not only for local or national responsibilities but also for their roles as global citizens.

3. Methodology

This qualitative study examined how preservice geography teachers integrate the seven elements of global citizenship education (GCED) into their lesson planning and instruction. The research involved 89 preservice geography teachers, organized into 39 groups, who participated in teaching simulations. These respondents were provided with training on GCED, covering its three core conceptual dimensions (APCEIU, 2020) and the seven elements of GCED (OXFAM, 2015). Each group was tasked with creating and executing a lesson plan. Three methods were used for data collection: content analysis of the lesson plans, observation of the teaching simulations, and semistructured interviews with group representatives.

3.1. Content analysis of lesson plan

A content analysis of lesson plans was conducted to identify and evaluate how Global Citizenship Education (GCED) elements were integrated into these plans. This process involved a thorough examination of various components of the lesson plans, including learning objectives, teaching materials, learning activities, and assessments. The goal was to determine the extent to which aspects of GCED such as global understanding, values of diversity, critical thinking skills, and attitudes toward global issues were reflected in lesson plans. Additionally, this analysis aimed to uncover patterns and approaches used by teachers to incorporate global citizenship perspectives into their teaching.

3.2. Observation of the teaching simulation

The observations focused on the implementation of these elements during the teaching simulations, and a structured checklist was used to record the findings. Among the lists that were analyzed in the lesson plan and observed during the teaching simulations are as follows:

- The presence of each GCED element. This includes lesson stages where each element was addressed. Five stages in teaching and learning according to the standard lesson plan were included in the analysis, i.e.,
 - Set induction:

Set induction is the technique of grabbing students' attention and providing an overview of the lecture topic at the beginning of class by intriguing statistics, provocative phrases, or audio–visual stimulation.

- Exploration:
This phase involves determining what the pupils already know about the subject that will be taught.
 - Explanation:
This phase involves instructional exercises that clarify the primary ideas of the topic covered on that particular day.
 - Expansion:
During this phase, the instructor uses learning activities to increase the students' understanding of the topic. It takes the shape of enhancing and fortifying knowledge about the topic being taught.
 - Conclusion:
Students must reflect and synthesize their learning at this point.
- Direct or indirect teaching approaches for each element
 - Alignment between the lesson plan and actual teaching (teaching simulation according to the lesson plan)

3.3. Semistructured interviews

Moreover, the interviews provided insights into respondents' intentions regarding GCED integration, the challenges faced, and the discrepancies between planned and actual implementation. Data analysis utilized a thematic approach involving familiarity with the data, initial coding, and theme development.

The process of data analysis included multiple readings of lesson plans, observation checklists, and interview transcripts from the 39 groups; identifying relevant features; searching for themes related to GCED implementation; reviewing and refining themes; and producing the final analysis. This comprehensive approach allowed for a thorough examination of both the planned and actual integration of GCED elements into preservice geography teachers' instructional practices, providing insights into their understanding and application of global citizenship education concepts within a geography education context.

4. Results

All 39 simulation groups have prepared lesson plans and have conducted teaching simulations every week for 10 weeks (2 groups per week) on the basis of specific topics in the geography syllabus for Forms 1 and 2 according to the Curriculum and Assessment Standard Document (Dokumen Standard Kandungan dan Pentaksiran - DSKP) provided by the Malaysian Ministry of Education (Curriculum Development Division, 2015, 2016).

4.1. Content analysis of GCED elements in lesson plans

On the basis of the content analysis of the lesson plan, various methods of integration were used by the respondents. A summary of the content analysis of the lesson plans of the 39 simulation groups is displayed in Table 2.

Table 2 Content analysis of GCED elements in lesson plans.

GROUP	TOPIC AND SUBTOPIC	PART OF TEACHING					APPLICATION METHODS	
		SI	E	EXP	EXPS	C	Direct (D)	Indirect (ID)
G1	Scale and distance (Types of scale and distance)	E5 (ID)		E4 (ID) E5 (ID)	E1 (ID)	E5 (ID)		/
G2	Types and characteristics of climate in Malaysia (Weather and climate in Malaysia)		E5 (ID) E2 (D)	E4 (ID) E7 (D)	E1 (ID)		/	/
G3	The effect of earth movement on weather and climate	E5 (ID)	E4 (ID)			E5 (ID)		/
G4	Telecommunication in Malaysia	E5 (ID)	E4 (D)	E4 E5 (D)	E1 (ID)	E5 (ID)	/	/
G5	Topography map	E5 (ID)	E1 (ID)	E7 (D)	E5 (ID)			/
G6	Transportation in Malaysia	-	-	-	-	-	-	-
G7	Telecommunication in Malaysia			E3 (ID)	E1 (ID)			/
G8	Negative effect and ethics in using telecommunication devices	E4 (ID)			E1 (ID) E3 (ID)			/
G9	Weather and climate in Malaysia		E1 (ID) E5 (ID)	E3 (ID) E4 (ID)	E1 (ID) E4 (ID) E5 (ID)	E5 (ID)		/



G10	Topography map	E5 (ID)	-	-	-	-	/	/
G11	Types of climates in Malaysia	-	E1 (ID)	E2 (D)	E2 (D)	-	/	/
G12	The importance of telecommunication in Malaysia	E3 (ID)	E2 (ID)	E1 (ID)	-	E1 (ID)	/	/
G13	Physical and culture characteristics in topography map			E5, E7 (D)	E1 (ID)	E5 (ID)	/	/
G14	The effects of human activities on weather and climate in Malaysia				E5 (ID)		/	/
G15	Scale and distance		E7 (ID)	E7, E3 (ID)	E6 (ID)		/	/
G16	The importance of transportation (land, air and water)	E7 (ID)	E1 (ID)	E2 (ID)	E1 (ID)		/	/
G17	The effect of earth movement on weather and climate			The elements of GCED were wrongly stated				
G18	Grid reference (4 and 6 number)		E4 (ID)				/	/
G19	Transportation network	E1 (ID)	E7 (ID)		E4 (ID)		/	/
G20	Sketch map	E7 (ID)		E1, E6 (ID)			/	/
G21	Cardinal Directions	E5 (ID)	E1 (ID)	E5 (ID)		E1 (ID)	/	/
G22	Location, Physical Landscape, and the Importance of Drainage in Malaysia (Drainage in Malaysia)		E1 (D)		E2 (D)	E5 (ID)	/	/
G23	Diversity, Location, and Importance of Landforms in Malaysia (Landforms)		E1 (ID)	E1, E2 (ID)			/	/
G24	Population Distribution			E1 (ID)		E2 (ID)	/	/
G25	Settlements in Malaysia	E1 (D)		E7 (D)	E6 (D)		/	/
G26	Population Distribution and Functions of Major Urban Settlements in Southeast Asia			E2 (ID)	E5 (ID)		/	/
G27	Landforms and drainage in Southeast Asia	E4 (D)		E1 (D)	E1 (ID)	E2 (ID)	/	/
G28	Water source	E5 (ID)	E1 (ID)				/	/
G29	Household waste	E5 (ID)		E2 (ID)	E1 (ID)		/	/
G30	Sketch map		E5 (ID)				/	/
G31	Cardinal Directions			E1 (ID)			/	/
G32	Landforms in Malaysia	E1 (D)	E5 (ID)			E1 (ID)	/	/
G33	Location, Physical Landscape, and the Importance of Drainage in Malaysia (Drainage in Malaysia)		E1 (ID)	E5 (ID)	E4 (ID)		/	/
G34	Population in Malaysia	E1 (D)			E6 (ID)	E1 (ID)	/	/
G35	Settlements in Malaysia			E1 (ID)			/	/
G36	Landforms and Drainage in Southeast Asia		E1 (ID)				/	/
G37	Population and settlement in Southeast Asia			E1 (D)			/	/
G38	Household waste		E3 (ID)				/	/
G39	Water Source	E1 (ID)					/	/

E1: Human rights; E2: Sustainable development; E3: Peace and conflict; E4: globalization and interdependence; E5: Social justice and equity; E6: Power and governance; E7: Identity and diversity. SI: Set induction; E: Exploration; EXPS: Expansion; C: Conclusion

The results of the content analysis demonstrate a number of GCED integration characteristics.

- a. Presence of each GCED element. Document analysis was conducted on a total of 39 lesson plans that were prepared by 39 simulation groups. According to the analysis, each group has chosen to incorporate 2--3 GCED elements at a certain stage in their instruction. Interestingly, the majority of groups incorporate GCED elements throughout their teaching process. Some groups use recurring elements, whereas others incorporate distinct elements for each stage of their instruction. This indicates that the respondents in this study possess a greater understanding of the specific elements of GCED that they must be aware of.
- b. Direct or indirect teaching approaches for each element. On the basis of the observations made during the simulation of the respondent groups, practically all the GCED elements included in their lesson plans were presented indirectly. Only a few topics related to certain GCED elements are taught directly. For example, the element 'identity and

diversity' is taught directly during the explanation stage for the titles "Types and characteristics of climate in Malaysia" and "Topography map". This demonstrates that some respondents comprehend the methods utilized to teach GCED elements directly in certain topics.

Observation of the alignment of lesson plans and actual teaching (teaching simulation).

Every group's instructional simulation was observed in addition to the content analysis. This is to assess how well the teaching and learning sessions are carried out in accordance with each group's lesson plan. This study revealed that some groups solely include GCED elements in their lesson plan without explicitly explaining or connecting the elements to the substance of the lessons given, either directly or indirectly. This type of event occurred during the first three groups' teaching simulations. However, over time, their ability to explain the GCED elements they chose improved. This happens because every instructional simulation is followed by a discussion.

4.2. The challenge of applying GCED elements in teaching

The semistructured interviews were conducted with all 39 groups to identify their challenges in integrating GCED into their teaching and learning sessions. Following a teaching simulation session, each group was asked about the challenges that they faced when incorporating GCED elements into their teaching. Among the responses they provided were as follows:

1. Knowledge of GCED: Respondents raised the issues of a lack of training and references that they can refer to when integrating GCED into teaching and learning processes. Among their responses are as follows:

- "We may only receive brief training. We believe it is simple in class, but it is not that easy to put into practice" (Group 1).
- "There is a lack of reference materials in the geography course. This method is difficult to replicate. We just rely on the lecture notes" (Group 6).
- "There is no apparent module to refer to" (Group 21).

2. Skills in applying GCED elements: In addition, some groups explained their skills in applying GCED elements. There are two insights into this matter: negative and positive responses.

Negative response. This insight is related to the lack of skills in integrating GCED into teaching and learning processes. Among the responses are as follows:

- "Inadequate understanding of how to communicate GCED elements in class" (Group 18).
- "We have limited time to learn more about GCED and how to implement it" (Group 29).
- "I focused so much on the content of the lessons that I forgot to discuss the GCED elements" (Group 3).
- "We mentioned, but only casually and briefly. I do not know how to emphasize that element" (Group 10).
- "Our group believes that each member should describe the important points regarding the topic taught. We do not know how to explain the concepts of GCED in our teaching process" (Group 11).

Positive response However, there are groups that take some initiative to learn the skill by themselves. Among the responses they provided are as follows:

- "We watched YouTube. We use trial and error methods. Fortunately, it works" (Group 5).
- "Perhaps the topic our group teaches is easily related to specific elements of GCED. We initially determined which components of the topic were relevant to the GCED elements. Then, we talk about the ways that can be employed and how to communicate either directly or indirectly" (Group 13).
- "It is quite challenging to apply this element to our topic. What we do is set aside time for our group to better grasp GCED and explore techniques for highlighting the GCED element in our teaching" (Group 22).

5. Discussion and Implications

The findings from the study highlight the integration of global citizenship education (GCED) elements into the teaching of geography among preservice teachers. The study revealed that the majority of preservice teachers successfully incorporated 2-3 GCED elements into their lesson plans. This indicates a growing awareness of the significance of GCED in geographic pedagogy, emphasizing key themes such as sustainability, social justice, cultural diversity, and global interdependence (Oxfam, 2015; APCEIU, 2020). Many groups have used indirect methods to incorporate these elements, often subtly weaving them into broader lesson objectives, particularly in topics such as climate change, resource management, and population studies (Anthonj, 2021; Robert, 2023). This approach aligns with the need for educators to balance curriculum content with broader global perspectives, a crucial aspect of GCED (Kim, 2023).

However, challenges were evident, particularly in the areas of knowledge and skills. Several respondents expressed difficulty in understanding how to effectively integrate GCED elements due to limited training and resources. Some groups

mentioned the lack of readily available reference materials or instructional modules that specifically focus on integrating GCED into geography. This highlights the need for more structured guidance and professional development to equip teachers with the tools and knowledge necessary for seamless integration (Corney, 2006; O'Meara, et al., 2018).

Additionally, time constraints and the priority given to delivering core lesson content further limited the preservice teachers' ability to explore Global Citizenship Education (GCED) elements in depth within their instruction. Due to the need to adhere to teaching schedules and achieve fundamental curriculum objectives, preservice teachers had to restrict opportunities for discussions or activities related to GCED, which often require a more comprehensive and critical approach. This suggests that integrating GCED elements may require additional time and flexibility in lesson planning to ensure they are fully appreciated and understood by students (McGregor, 2022).

Despite these challenges, some groups demonstrated positive development, especially those who adopted self-learning strategies by utilizing external resources like YouTube and engaging in group discussions. These proactive initiatives suggest that preservice teachers are motivated to engage with Global Citizenship Education (GCED) beyond their formal training, exhibiting a strong willingness to explore, adapt, and experiment with innovative teaching methods. This eagerness to independently seek knowledge and develop pedagogical skills highlights their commitment to improving their teaching practice and effectively incorporating GCED principles into their lessons (Bercasio, 2023).

This study highlights three implications for enhancing global citizenship education (GCED) in geography teaching. First, the importance of comprehensive teacher training programs that specifically focus on integrating GCED into existing curricula. The lack of understanding and resources reported by preservice teachers suggests that current training does not adequately prepare educators for this task. Professional development workshops, access to GCED-focused modules, and continuous learning opportunities should be incorporated into teacher education programs to ensure that future educators are equipped with both knowledge and practical strategies to effectively deliver GCED in the classroom.

Another critical implication is the need for the development of GCED-supportive curriculum materials. This includes textbooks, lesson plans, and multimedia resources that explicitly integrate GCED elements into geography education. Given the difficulty faced by teachers in finding relevant materials, education policymakers and curriculum developers should collaborate to produce resources that are aligned with both national educational standards and global citizenship goals. Providing these resources would significantly ease the process of integrating global issues, human rights, and sustainability into everyday teaching.

Finally, the study implies that collaborative and experiential learning should be promoted to facilitate deeper engagement with GCED topics. The indirect teaching methods used by many respondents indicate that student-centered approaches, such as project-based learning and group discussions, are effective in exploring global citizenship themes. Schools and teacher training programs should foster environments that encourage collaboration, critical thinking, and problem-solving on global issues, allowing students to actively participate in discussions on sustainability, social justice, and human rights, thus promoting a more comprehensive understanding of their role as global citizens.

6. Final Considerations

On the basis of these findings, it is possible to conclude that GCED elements can be used to teach and learn geography in a direct or indirect way. However, the knowledge and abilities required to use these elements are dependent on the teacher's personal initiative to discover and successfully execute them. Furthermore, the relevant parties should provide more thorough training and reference materials to help teachers increase their knowledge and improve their GCED skills. This is to ensure that the objective of instilling a sense of global citizenship in teachers and future generations is accomplished. Furthermore, the findings of this investigation provide a nuanced understanding of the complexities and opportunities inherent in the intersection of GCED and geography education, ultimately contributing to the broader discourse on fostering global competence in future generations.

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Ethical Considerations

Before data collection, all participants were informed about the study's purpose, methodology, and their rights as research participants. To ensure ethical research practices, participants' confidentiality and privacy were strictly maintained through data anonymization procedures, with all identifying information being removed from the collected data. Participants were explicitly informed of their right to withdraw from the study at any point without any negative consequences. Additionally, they were assured that their participation was voluntary and that any sensitive information shared would be handled with utmost discretion and used solely for research purposes.

Conflict of Interest

The authors declare that they have no conflicts of interest.

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