



Article

# Global Citizenship for the Students of Higher Education in the Realization of Sustainable Development Goals

Kübra Akçay <sup>1,\*</sup>, Fahriye Altinay <sup>1</sup>, Zehra Altınay <sup>1</sup>, Gokmen Daglı <sup>2</sup>, Rustam Shadiev <sup>3</sup>, Mehmet Altinay <sup>4</sup>, Olasile Babatunde Adedoyin <sup>5</sup> and Zübeyde Gökel Okur <sup>6</sup>

- <sup>1</sup> Institute of Graduate Studies, Faculty of Education, Near East University, Nicosia 99138, Cyprus; fahriye.altinay@neu.edu.tr (F.A.); zehra.altinaygazi@neu.edu.tr (Z.A.)
- <sup>2</sup> Institute of Graduate Studies, Faculty of Education, Societal Research and Development Center, University of Kyrenia, Kyrenia 99320, Cyprus; gokmen.dagli@kyrenia.edu.tr
- <sup>3</sup> College of Education, Zhejiang University, Hangzhou 310058, China; rustamsh@gmail.com
- <sup>4</sup> Tourism Faculty, University of Kyrenia, Kyrenia 99320, Cyprus; mehmet.altinay@kyrenia.edu.tr
- Omputer Engineering, University of Kyrenia, Kyrenia 99320, Cyprus; olasilebabatunde.adedoyin@kyrenia.edu.tr
- 6 Can Bulat Ozgurluk Junior High School, Famagusta 99450, Cyprus; okurzubeyde@hotmail.com
- \* Correspondence: 20203899@std.neu.edu.tr

Abstract: Today, sustainable development has become one of the most important goals for humanity. Higher education students and especially teacher candidates can play an active role in the realization of sustainable development goals (SDGs) for global citizenship. However, how some important issues such as how much students know about these goals can play a role in achieving these goals are not yet clear. This study aims to determine the awareness of SDGs and global citizenship among higher education students with a focus on teacher candidates and their understanding of the global citizenship concept. In addition, it is also aimed to raise awareness about sustainable development goals and evaluate the applicability of these goals to create a sustainable world for future generations. The study group comprised teacher candidates studying under the sustainable development foundations for future learning in the 2022-2023 academic year at the Faculty of Education, Near East University, Northern part of Cyprus. Five interview questions were prepared in the form of a questionnaire and delivered to participants, and data were analysed with the aid of thematic content analysis. Results indicated that global citizens must have the ability to understand world events and grasp cultural diversity, recognize that everyone has equal rights, stand against gender, racial, and social discrimination, and strive for social justice by understanding different cultures and global conflicts and evaluating different perspectives. Factors such as social justice and equality, selflessness, globalization and social values, sustainable future and responsibility, global citizenship education, and awareness and respect have been established in this study as essential elements that can contribute to the development of global citizenship. In conclusion, global citizenship has the potential to contribute directly to the SDGs, and these potentials can be better explored through global citizenship education programs that can integrate all the SGDs without prioritizing one over others for teacher candidates.

Keywords: higher education; sustainable development; globalization; global citizenship

Citation: Akçay, K.; Altinay, F.; Altınay, Z.; Daglı, G.; Shadiev, R.; Altinay, M.; Adedoyin, O.B.; Okur, Z.G. Global Citizenship for the Students of Higher Education in the Realization of Sustainable Development Goals. *Sustainability* 2024, 16, 1604. https://doi.org/ 10.3390/su16041604

Academic Editor: Cristina Raluca Gh. Popescu

Received: 9 January 2024 Accepted: 5 February 2024 Published: 14 February 2024



Copyright: © 2024 by the authors. Licensee MDPI, Basel, Switzerland. This article is an open access article distributed under the terms and conditions of the Creative Commons Attribution (CC BY) license (https://creativecommons.org/licenses/by/4.0/).

# 1. Introduction

Today, sustainable development has become one of the most important goals for humanity. Sustainable development is a development model that aims to balance economic, social, and environmental factors by using natural resources in a sustainable way to meet the needs of future generations [1]. Since the world's resources are finite, the resources must be used correctly and consciously. The environment must be protected for future

Sustainability **2024**, 16, 1604 2 of 14

generations. The unconscious use of resources due to population growth has brought along concerns about the future [2]. Sustainable Development Goals were adopted by 193 member states of the United Nations (UN) in September 2015 in order to achieve sustainable development before 2030. This action plan and its priority, which was designed under 17 different titles, brought responsibilities to individuals and institutions, including information centres, as well as countries. The base 17 goals defined by the UN are End poverty, End hunger, Healthy individuals, Quality education, Gender equality, Clean water, hygiene and public health, Accessible and clean energy, Decent work and economic growth, Industry, innovation, and infrastructure, Reducing inequalities, Sustainable city and life areas, Responsible consumption and production, Climate action, Life in the water, Life on land, Peace, justice and strong institutions, and Partnerships for the Goals [3].

Democratic processes have the difficult tasks on the policy implementation and local action, beyond the difficulty of reporting and monitoring the SDGs. Based on this, higher education institutions are accepted as drivers of sustainable development and agents of change [4,5]. In line with the SDGs, UNESCO's "Education for a Sustainable Future" program aims to have students of all ages with knowledge, attitudes, skills, and values against global problems including environmental degradation, climate change, loss of biodiversity, inequality, and poverty [6].

Education, aside from being part of the SDGs, is a social transformation apparatus required for the accomplishment of other SDGs via skills acquisition, behaviours, and attitudes that can aid the actualization of a sustainable future [7]. The education system will make a great contribution to understanding the SDGs fully and accurately, enabling individuals to take responsibility for their environment and realizing behavioural change [8]. The essential and multidimensional role of higher education in the novel global development agenda that attempts to end poverty while focusing on other social needs like health, education, climate change, environmental protection, social protection, food security, and job opportunities has been established by Zhou et al. [9]. Several studies have explored SDGs awareness from cross-sectional domains and industry-specific domains; however, limited studies have infused global citizenship awareness due to the interconnection between the distinct concepts, since Education for Sustainable Development (ESD) encompasses global citizenship for sustainable advancement [4].

Concentrating on extant literature on sustainable development and education, the question of what environmental education and sustainable development cover is confusing. The most important issue of this challenge is the assurance of the protection of the Earth for future generations [10]. While environmental education raises individuals' environmental awareness, sustainable development targets social, economic, and environmental balance. The education system is expected to raise awareness for a sustainable future by making students adopt these concepts.

Since the adoption of SDGs, the world has experienced several global crises at their peaks, inspiring a novel generation of protesters agitating for accountability [11]. These global crises include, but are not limited to, global warming [12], the loss of biodiversity and animal habitat associated with increased openness to pandemics like MERS and SARS [13], racial inequality [14], etc. Youths have been recognized as vanguards of global reckoning, understanding that they must stand up to oppose centuries of environmental and social injustices [11]. The SDGs have placed fundamental responsibilities on educators to deliver education that will promote environmental and social equality by ensuring that learners become global citizens through global citizenship education. The concept of global citizenship education has been described as the education that enables learners, irrespective of age, to take local and global active roles in building more secure, all-encompassing, nonviolent, and tolerant societies [11].

This study aims to determine the awareness of SDGs and global citizenship among higher education students with a focus on teacher candidates and their understanding of the global citizenship concept. In addition, it also aims to raise awareness about the Sustainable Development Goals and evaluate the applicability of these goals to create a

Sustainability **2024**, 16, 1604 3 of 14

sustainable world for future generations. Within this scope, this study also evaluates the suggestions of higher education students studying under the Sustainable Development Foundations for future learning on the strategies that need to be adopted for the development of global citizenship.

To achieve the above aim, the following research questions were raised:

- 1. Which of the SDGs are teacher candidates conversant with?
- 2. What is the perception of teacher candidates on global citizens?
- 3. What are the factors that contribute to the development of global citizenship?
- 4. What are the skills required for the development of global citizenship?

### 2. Literature Review

Sustainable development is a thought model that aims to meet the needs of today's generations and at the same time take care of the needs of future generations. SDGs aim to use resources effectively by covering a broad perspective such as social, economic, and growth rates. The concept of sustainability, broadly defined as meeting today's needs without compromising the ability of future generations to meet their needs, has become a widely used concept in many disciplines in the following years [15]. Sustainable development is both a normative and analytical theory and an ethical framework, as a perspective focusing on the relationship between environmental, economic, and social change [16]. Sustainable development goals have emerged as universal goals that aim to combat inclusive inequalities, recognize the importance of cooperation and support societies [17]. An important development regarding the scope of the concepts of Sustainable Development and Sustainability was the determination of SDGs at the United Nations General Assembly in 2015 with the participation of world leaders. It has become a necessity for universities to be pioneers in sustainability, to teach students the principles of sustainable development, and to integrate and teach sustainability into their routine actions and organizational management [18].

Global citizenship refers to a perspective that bears responsibility not only to one's own national identity but also to other parts of the world. Global citizenship has a history in Western ideology dating back to Rome and the Ancient Greeks [19]. A pacifist federation, in which free and independent states are formed, is based on this thought process, in line with the cosmopolitan ideals of Kant, one of the Enlightenment philosophers. The world citizen idealized by Kant is someone who "can feel the injustice committed anywhere else" [20] (p. 27). Kant's [20] thoughts and ideas can also be felt in the American and French revolutionary human rights declarations. The United Nations and other global organizations established in the 20th century were founded with the cosmopolitan ideas that reached our modern world with Kant. The view of world citizenship, which has been influential in every period of the history of Western thought, has existed strongly and made itself felt. Today, as in every field, especially in education, it is undeniable knowledge [21]. In education, it has been observed that the USA, Canada, China, South Korea, and many European countries have started to add curricula that aim to develop a global orientation in students [22]. These educational efforts, which aim to equip individuals with the skills, knowledge, attitudes, and competence to deal with global problems, are defined under the general umbrella of global citizenship education [23].

In the UK, several changes have been made in teaching global citizenship and sustainable development education to promote sustainable development, especially in financial reporting, which impacts growth, development, and transformation [24,25]. In German teacher education, individuals and groups working in the field of educational sciences have begun to take the necessary steps to systematically integrate global perspectives and sustainability perspectives into teacher education in other departments, using the content, methods, and systematics of sustainable development [26]. In this context, these studies on global citizenship and sustainable development in teacher education in

Sustainability **2024**, 16, 1604 4 of 14

these countries aim to support the training of more responsible and conscious teachers in the future.

According to Bowen [27], higher education outcomes for individuals are often part of adult life. The life expectancy of individuals graduating from college varies between fifty and sixty years, and the effects on society during this time can continue long-term. Within the scope of sustainable development education, teacher candidates should be given the necessary training to achieve the expected goals in teaching, and they can convey this training to students by combining it with the necessary experiences related to teaching [28]. In this context, university education is expected to focus not only on students' careers but also on raising sensitive and solution-oriented students who are aware of global problems. University education should not only be structured as a means for the personal development of an individual but also as an opportunity to create positive effects on a global and social level.

Existing literature has concluded that teachers' knowledge about the philosophy, pedagogy, classroom materials, and potential resources of education to realize sustainable development education is limited, but their attitudes towards implementing and realizing this are generally positive [29]. In this context, the aim of teachers to effectively integrate sustainable development in education is pedagogical, and measures such as being more comprehensive in this regard in teacher training programs and increasing awareness about sustainable development education have been implemented.

## 3. Methodology

This study, which aims to evaluate the sustainable development goals of the students who were studying under the sustainable development foundations for future learning at the faculty of education, Near East University, Northern part of Cyprus, was carried out using qualitative research methods. In this research, open-ended interview questions were used to examine teacher candidates' perceptions of sustainable development goals (SDGs) and global citizenship (GC) issues. Thematic content analysis was applied for analysing the participants' responses to provide information on the knowledge levels, skills, values, and attitudes of the students. Since the predominant goal of qualitative research is to acquire a comprehensive understanding of specific social issues [30], the application of thematic content analysis becomes a suitable data analysis method for this study because it encompasses a process structured to summarize data into themes or categories based on substantial deduction and interpretation [31].

# 3.1. Subject Group

The study group comprised teacher candidates studying under the sustainable development foundations for future learning in the 2022–2023 academic year at the Faculty of Education, Near East University, Northern part of Cyprus. A purposive sampling technique was used for the sample selection. The suitability of the purposive sampling technique for this study is tied to the fact that the study is only interested in the opinions of teacher candidates studying under the sustainable development foundations for future learning. Purposive sampling is suitable for qualitative studies involving interviewees [32,33], and the entire population can serve as the sample size [34]. The distribution of the sample according to demographic information is shown in Table 1.

**Table 1.** Distribution of students by gender.

| Gender | Frequency | %   |
|--------|-----------|-----|
| Female | 22        | 41  |
| Male   | 32        | 59  |
| Total  | 54        | 100 |

Sustainability **2024**, 16, 1604 5 of 14

In Table 1, a total of 54 students studying under the sustainable development foundations for future learning in the Faculty of Education at Near East University took part in the research. When the distribution of these students by gender is examined, it is understood that 59% are male (n = 32) and 41% are female (n = 22).

### 3.2. Data Collection

In the research, five interview questions were prepared in the form of a questionnaire and delivered to participants; one week later the responses were collected by the researchers for analysis to understand the knowledge, values, thoughts, and suggestions of teacher candidates on SDGs and global citizenship. To protect the privacy of the participants, codes were assigned to each participant. For example, the participant with the code S2 represents the second student interviewed.

### 3.3. Analysis of Data

With the aid of thematic content analysis as prescribed by Anderson [31], responses were coded appropriately, and the recurring codes were grouped by creating frequency tables to provide the rate of occurrence for each code. Interrelated codes were merged to establish themes. The themes created by the researcher were presented for expert opinion. Excerpts from participants' responses were presented to support each theme established.

The results obtained from the analyses reflect and are structurally compatible with global citizenship and sustainable development goals. One of the procedures that must be carried out for qualitative studies to establish the reliability and validity of these studies is to obtain expert opinions [35]. In this context, three field expert opinions were received to increase the reliability and validity.

### 4. Findings

The study findings are presented in the following sub-sections.

### 4.1. Teacher Candidates' Awareness of SDGs

To establish teacher candidates' awareness of SDGs concerning teacher education, two interview questions were raised by asking the participants about their awareness of SDGs and the goals that should be embedded into the teaching profession: which of the SDGs are they familiar with and which of the goals should be taught and implemented within the scope of the teaching profession. As shown in Table 2, the responses of teacher candidates on the SDGs they are familiar with were clustered under the 17 SDGs listed.

|  | Table 2. SDGs that | teacher | candidates a | re familiar with. |
|--|--------------------|---------|--------------|-------------------|
|--|--------------------|---------|--------------|-------------------|

| Themes                                  | Frequency | %    |
|---|-----------|------|
| End poverty                             | 23        | 8.5  |
| End hunger                              | 23        | 8.6  |
| Health and quality of life              | 29        | 10.7 |
| Quality education                       | 33        | 12.2 |
| Social gender equality                  | 27        | 10   |
| Clean water and sanitation              | 11        | 4.1  |
| Accessible and clean energy             | 14        | 5.2  |
| Decent work and economic growth         | 3         | 1.1  |
| Industry, innovation and infrastructure | 6         | 2.2  |
| Reducing inequalities                   | 16        | 5.9  |
| Sustainable cities and communities      | 11        | 4.1  |
| Responsible production and consumption  | 13        | 4.8  |
| Climate action                          | 15        | 5.6  |
| Life in the water                       | 13        | 4.8  |

Sustainability **2024**, 16, 1604 6 of 14

| Terrestrial life                       | 13 | 4.8 |
|--|----|-----|
| Peace, justice and strong institutions | 17 | 6.3 |
| Partnerships for purposes              | 3  | 1.1 |

The 54 teacher candidates who participated in the research were asked which of the SDGs are they familiar with; 33 participants mentioned "quality education", which constitutes 12.2%, appearing as the leading SGD that the participants are familiar with, followed by "good health and wellbeing" with 29 participants, ranked at 10.7%. A total of 27 participants, with 10%, listed "gender equality" as part of the SDGs they are familiar with, while 33 participants claimed both "no poverty" and "zero hunger", with 8.5% apiece. A total of 17 or 6.3% of respondents claimed to be familiar with "peace, justice, and strong institutions". Both "decent work and economic growth" and "partnerships for the goals" recorded the least number of SDGs that the respondents are familiar with. Other SDGs that participants reported to be familiar with are "reducing inequalities", "climate action", "accessible and clean energy", "responsible production and consumption", "life below water", "life on land", "sustainable cities and communities", "clean water and sanitation", and "industry, innovation and infrastructure".

The opinions of teacher candidates on which of the goals should be taught and implemented within the scope of the teaching profession are shown in Table 3.

| <b>Table 3.</b> The SDGs to be taught and implemented within the scope of the teache | r education program. |
|--|----------------------|
|--|----------------------|

| Theme                                   | Frequency | %    |
|---|-----------|------|
| End poverty                             | 5         | 3.8  |
| End hunger                              | 3         | 2.3  |
| Health and quality of life              | 12        | 9.2  |
| Quality education                       | 28        | 21.4 |
| Social gender equality                  | 17        | 13   |
| Clean water and sanitation              | 5         | 3.8  |
| Accessible and clean energy             | 3         | 2.3  |
| Decent work and economic growth         | 3         | 2.3  |
| Industry, innovation and infrastructure | 2         | 1.5  |
| Reducing inequalities                   | 21        | 16   |
| Sustainable cities and communities      | 6         | 4.6  |
| Responsible production and consumption  | 5         | 3.8  |
| Climate action                          | 3         | 2.3  |
| Life in the water                       | 3         | 2.3  |
| Terrestrial life                        | 3         | 2.3  |
| Peace, justice and strong institutions  | 10        | 7.6  |
| Partnerships for purposes               | 2         | 1.5  |

Teacher candidates' opinions were gathered under 15 different themes as shown in Table 3. Among the research participants, "quality education" was mentioned most frequently, more than any other SDG, and the percentage was 21.4%.

The following are some of the excerpts from participants' responses:

"Food is part of the first step in Maslow's hierarchy of needs. If there is a problem of nutrition and hunger for the people in the society, those people stay away from showing their potential. We should know that almost none of the above-mentioned goals are achievable. Food is one of the most basic human needs. Without this basic need, human beings cannot fulfil their responsibility and sense of duty. This can be compared to the standing of a building without a foundation". (S39)

"One of the indispensable conditions for a society to develop and live a prosperous life is the quality of the education provided in that society. Because if quality education is Sustainability **2024**, 16, 1604 7 of 14

provided in that society, the people in that society will have social welfare by respectfully complying with every rule and order. At the same time, these people increase their business potential in line with the education they receive in their professional life". (S39)

"Gender equality aims to achieve gender equality and empower all women and girls, and to eliminate all harmful practices such as child marriage and forced early marriage. It aims at empowering women and girls for economic growth and development in all areas. This global goal aims to eliminate discrimination against women and girls everywhere. In some regions there are still large inequalities in education or the labour market, women still do not have equal access to education or work. Sexual violence and abuse, unequal distribution of household chores, and discrimination in public office remain obvious". (S27)

"The most important problem is unequal access to education. As the mass increases, inequality grows more. For this, I care about equal opportunity in education. For this, both parents and the environment have a great responsibility. Therefore, certain projects should be developed for this goal". (S34)

"To achieve economic growth and sustainable development, changing the way we produce and consume, efficient management of our common natural resources, and prevention of toxic waste and pollutants are important goals in achieving this goal. The good or bad behaviours we exhibit against nature throughout our lives come back to us as a response by nature, in short, this goal aims to provide sustainable production and consumption patterns". (S27)

# 4.2. Teacher Candidates' Perceptions of GC

The teacher candidates' perceptions of global citizens were evaluated by asking the research participants to describe who a global citizen should be. The themes that emerged from their responses are presented in Table 4.

Table 4. Features of global citizens.

| Gender  | Frequency | %  |
|---|-----------|----|
| Equal and just person   | 28        | 32 |
| Playing active and collaborative roles in solving societal problems       | 25        | 28 |
| The person who can see and understand the world from diverse perspectives | 35        | 40 |

Teacher candidates' opinions covered the above three themes established in Table 4; 35 of the participants, constituting 40%, mentioned "a person who can see and understand the world from diverse perspectives", 28 of them, making up 32%, mentioned, "a person who is equal and just", and 25 of them mentioned "playing active and collaborative roles in solving societal problems".

The following are some of the excerpts from participants' responses:

"A global citizen is someone who can see and understand the world. By taking an active role in their societies, problems, and solutions, global citizens work collaboratively with others to make the world more equal, just, and sustainable". (S5).

"A global citizen is a person with a worldview who works in harmony and takes an active role to maintain a more equal and fairer situation in society and in the world". (S11)

"A global citizen is someone who can see and understand the world. Global citizens work collaboratively with others to make their society sustainable by taking an active role in dealing with problems and their solutions". (S19)

"Global citizenship means a person who can see and understand the world". (S2)

"Global citizenship is not just a citizen who is interested in the society he lives in, he/she is a universal citizen who adapts to the necessary people to turn negative situations into positive in societies where all inequality and injustice in the world arise. In other words,

Sustainability **2024**, 16, 1604 8 of 14

a global citizen is a citizen who can see the whole world and has the potential to understand the problems of the whole world". (S23)

# 4.3. Factors That Contribute to the Development of Global Citizenship

To determine significant factors, concepts, and information that can contribute to the development of the concept of global citizenship, teacher candidates were asked about the factors that can contribute to the development of global citizenship, and the themes that emerged from their responses are presented in Table 5.

| <b>Table 5.</b> Factors that contribute to | o the dev | velopment | of global | l citizenship. |
|--|-----------|-----------|-----------|----------------|
|--|-----------|-----------|-----------|----------------|

| Themes  | Frequency | %    |
|---|-----------|------|
| Social justice and equality                               | 22        | 24.1 |
| Selflessness  | 10        | 11   |
| Globalization and social values                           | 14        | 15.3 |
| Sustainable future and responsibility                     | 14        | 15.3 |
| Peace   | 4         | 4.9  |
| Global issues and communication                           | 7         | 7.7  |
| Global citizenship as an opportunity to respect diversity | 2         | 2.2  |
| Global citizenship education                              | 9         | 9.9  |
| Awareness and respect                                     | 9         | 9.9  |

Teacher candidates' opinions on the factors that can contribute to the development of global citizenship covered nine themes based on their responses. A total of 22 participants, with 24.1%, supported "Social justice and equality", 10 participants, with 11%, supported "selflessness", while 14 participants, with 15.3% apiece, supported "globalization and social values" and "sustainable future and responsibility". Nine participants, constituting 9.9% apiece, mentioned "global citizenship education", and "awareness and respect".

The following are some of the excerpts from participants' responses:

"It should respect and value differences". (S14).

"Global citizenship should be developed by equipping learners with the knowledge, skills, and behaviours necessary for a sustainable future". (S54).

"We should see the diversity between countries as an opportunity and try to seize this opportunity by increasing communication. With an environment of effective discussion, international strategic thinking and a developing sense of empathy, we can aim for reconciliation in the international arena". (S2)

"While developing global citizenship, concepts such as human rights, democracy, and children's rights education should be included. To develop global citizenship, the individual must receive a global citizenship education. Global citizenship education is given gradually, starting from the pre-school period, both implicitly and through educational programs. However, global citizenship and related concepts are focused on practice rather than teaching theoretically; that is, children need to experience the knowledge and skills required as global citizens by living them in the classroom and school environment. In this context, it is important to raise children who can internalize the characteristics of global citizens in all education levels and courses". (S48)

"The concept that needs to be known is active or effective citizenship. Understanding the essential features and terminology of values, being aware of civil rights and duties, being aware of gender-related issues, and understanding diversity are essential information". (S54)

This is a pointer to the need to develop global citizens to respect different cultures, beliefs, and lifestyles, understand the importance of cultural diversity, support social

Sustainability **2024**, 16, 1604 9 of 14

justice, equality, sustainable future and responsibility, and globalization and social values, which can be achieved through global citizenship education.

### 4.4. Skills Required for the Development of Global Citizenship

To determine the skills required for the development of global citizenship, teacher candidates were asked about the skills that should be possessed in developing global citizens, and the themes that emerged from their responses are presented in Table 6.

| Table 6. Skills re | quired for the | development of | global citizenship. |
|--------------------|----------------|----------------|---------------------|
|--------------------|----------------|----------------|---------------------|

| Themes                                     | Frequency | %    |
|--|-----------|------|
| Tolerance/respect                          | 23        | 20.5 |
| Empathy                                    | 7         | 6.3  |
| Social justice and equality                | 21        | 18.7 |
| Awareness                                  | 6         | 5.4  |
| Communication skills/collaboration         | 22        | 19.6 |
| Teaching skills that support globalization | 15        | 13.4 |
| Thinker-investigator-questioning           | 7         | 6.3  |
| Solution-oriented thinking                 | 11        | 9.8  |

According to responses of teacher candidates on the skills that should be possessed in developing global citizens, 23 of them supported "tolerance/respect", 22 of them mentioned "communication and collaboration skills", and 21 of them highlighted "social justice and equality", while 15 of them highlighted "teaching skills that support globalization" as the leading skills that should be possessed to develop global citizens. Other themes include "solution-oriented thinking", "empathy", "Thinker-investigator-questioning", and "awareness".

The following are some of the excerpts from participants' responses:

"The fact that honest and accurate information is solid and people are treated with respect and tolerance should ensure the development of stress management". (S5)

"Teachers as global citizens must be committed to social justice and equality, valuing and respecting diversity, concern for the environment, and a commitment to action". (S37)

"Educators as developers of global citizens must possess critical thinking and effective discussion skills to tackle injustice and inequality, respect for people and the environment, cooperation, and conflict resolution among other skills". (S6)

"Developers of global citizens (i.e., teachers) should be people who have received global citizenship education. They should be individuals that are open to economic, political, and social data, to develop other individuals, to communication and can criticize constructively". (S15)

"Those saddled with the responsibility of developing global citizens must first be aware of the fact that they live in a global world and part of the requirement is to active and participatory as well as an inquiring and questioning consciousness, that is, they should think, research and question". (S34)

### 5. Discussion

Teacher candidates' awareness of SDGs evaluation indicated that quality education is the leading SDG among teacher candidates based on the findings of this study. This is not a surprise considering the study participants who are teacher candidates. Thus, quality education as the goal with the highest frequency in this study cannot be exempted from the fact that study participants are teacher candidates with a predisposed preference for sustainable development foundations for future learning to advance the quality of

Sustainability **2024**, 16, 1604 10 of 14

education. Other SDGs that raked in significant numbers include health and quality of life, social gender quality, end hunger, peace, justice, and strong institutions, reducing inequalities, and climate action. Decent work and economic growth and partnerships for purposes are the SDGs with the least popularity among teacher candidates examined in this study. This can serve as a wakeup call for educators to intensify the need to promote these SDGs among teacher candidates through strategic integration of these goals into teacher education programs because partnerships among teachers can support teachers' professional development and teaching practices through shared reflection, adapted lessons, coaching, mentoring, etc., as noted by Lofthouse and Thomas [36].

Narrowing teacher candidates' awareness of SDGs to their professional responsibilities, teacher candidates highlighted quality education as the leading SDG that should be taught and implemented within the scope of the teacher education program, followed by a reduction in inequalities, social gender equality, health and quality of life, etc. Teacher candidates under investigation gave less attention to industry, innovation, and infrastructure, ending hunger, accessible and clean energy, climate action, life in the water, terrestrial life, and partnerships for purposes as part of the SDGs that should be taught and implemented in teacher education programs. There is no doubt that the prosperity of every nation and the world at large is dependent on the quality of the teachers saddled with the responsibility of building global citizens, and if SDGs are to be achieved by 2023 as envisioned by the UN, teacher education programs should be developed and structured to accommodate all the goals without preference for any.

Teacher candidates' opinions of who a global citizen should be indicated that global citizens must have the ability to understand world events and grasp cultural diversity, recognize that everyone has equal rights, stand against gender, racial, and social discrimination, and strive for social justice by understanding different cultures and global conflicts and evaluating different perspectives. These teacher candidates' descriptions of global citizens are in tandem with the essential features of global citizenship established in extant studies by Oxfam [37], Stewart [38], Zahabioun, Yousefy, Yarmohammadian, and Keshtiaray [39], etc. Based on the positions of teacher candidates in this study, students need to be trained as global citizens to possess the skills, abilities, and knowledge to view other perspectives of how their personal lives relate to others on the global stage. Among these qualities are cultural understanding and diversity, freedom, and justice. These results emphasize the importance of higher education institutions' duty to develop awareness of global citizenship and encourage them to adopt these values. It boosts people's capacity to improve knowledge, add value to society, and enhance their skills [40].

Teacher candidates' opinions on the factors that can contribute to the development of global citizenship projected social justice and equality, selflessness, globalization and social values, sustainable future and responsibility, global citizenship education, and awareness and respect. Social justice and equality, as factors that can contribute to the development of global citizenship as established in this study, corroborated the findings of Andrews and Aydin [41], which stated that students as global citizens ought to possess the resources and tools to advocate for equity, unity, and social justice. Selflessness has been acknowledged as one of the skills and values well-matched with global citizenship that people are to internalize [42]. These results emphasize that educational institutions should continue to give more importance to global citizenship education though, but empirical dissection of the concept has a dominant trend framing it as a liberating educational answer to global issues [43]. To develop global citizens and global leaders, experiential learning and experiential education have been recognized as the most appropriate teaching approaches [44].

Examining the values and attitudes regarding the development of global citizenship, participants listed empathy, justice and equality, taking responsibility, identity and self-respect, preparing individuals for globalization through education, protecting their own culture and respecting other cultures, awareness, and critical thinking reflecting students'

Sustainability **2024**, 16, 1604 11 of 14

views on global citizenship. These findings show that teacher candidates support the adoption and integration of these values into educational programs as part of steps towards developing individuals who will be sensitive to global problems.

These results show that teacher candidates demonstrate acceptance of tolerance and respect as an essential element of coexistence and cultural interaction in a global society, an understanding of global citizenship that cares about ensuring justice in society and reducing inequalities, and active and critical thinking skills and an inquiring mindset are important for global citizenship. Thus, the planning and implementation of global citizenship education programs require faculty and staff to be well-equipped on the concept, related constructs, and its advocates. This primarily requires individuals to reflect on their practices and understanding of global citizenship [45]. Therefore, if global citizenship continues to be a concept emphasized by higher education institutions, then it is necessary to start developing faculty and staff professionalism on the concept, since overcoming the sustainability problems we face today is the most professional mission of humanity. Such problems are extremely complex and will require comprehensive and interdisciplinary educational methods to find solutions [46].

The UNESCO report on education for global citizenship [47] outlines the organization's values for global citizenship education which cover some of the findings of this current study. The third part of the report focused on knowledge and understanding and contained more of a "consciousness" in and around understanding multiple perspectives. The report also focused on social skills, behavioural skills, and cognitive skills were identified as essential skills within global citizenship education. The global citizenship education programs should be prepared to "rethink existing concepts of citizenship and nationality" to support its concepts and practices as noted by Savelyeva and Rickards [7].

### 6. Conclusions and Recommendations

Sustainable development has become one of the most important goals for humanity. Since the adoption of the SDGs, the world has experienced several global crises at their peaks, inspiring a novel generation of protesters agitating for accountability. The SDGs have placed fundamental responsibilities on educators to deliver education that will promote environmental and social equality by ensuring that learners become global citizens through global citizenship education. This study aims to determine the awareness of SDGs and global citizenship among higher education students, with a focus on teacher candidates and their understanding of the global citizenship concept. In addition, it also aims to raise awareness about sustainable development goals and evaluate the applicability of these goals to create a sustainable world for future generations. Global citizens must have the ability to understand world events and grasp cultural diversity, recognize that everyone has equal rights, stand against gender, racial, and social discrimination, and strive for social justice by understanding different cultures and global conflicts and evaluating different perspectives. Factors such as social justice and equality, selflessness, globalization and social values, sustainable future and responsibility, global citizenship education, and awareness and respect have been established in this study as essential elements that can contribute to the development of global citizenship. Empathy, justice and equality, taking responsibility, identity and self-respect, preparing individuals for globalization through education, protecting their own culture and respecting other cultures, awareness, and critical thinking are the skills highlighted by teacher candidates as skills that should be possessed in developing global citizens. In conclusion, global citizenship has the potential to contribute directly to the SDGs, and these potentials can be better explored through global citizenship education programs that can integrate all the SDGs without prioritizing one over others for teacher candidates.

Future Study Recommendations/Applicability: It should also be noted that global citizenship directly contributes to sustainability goals and that broader social, economic, and political efforts are needed to achieve these goals. In this way, global citizenship can have a broader impact in the field of sustainable development and play an important role in

Sustainability **2024**, 16, 1604 12 of 14

creating a liveable world for future generations. In this context, conducting a similar study with a larger sample, expanding and implementing similar studies in different regions, different education levels, and geographical locations, adding additional variables, or comparative analysis can ensure that future studies are more comprehensive. Additionally, more in-depth analysis and research of the impact of global citizenship on sustainability goals and greater participation in studies on this subject may help future research reach more comprehensive results.

Limited: In line with the limitations of the research, some issues need to be taken into account regarding the generalization of the findings. For example, the fact that the sample group is a group selected from a certain faculty of education may not provide a complete description of the general population. There are also factors such as the sensitivity of measurement tools to certain issues or limitations of data collection methods.

**Author Contributions:** Conceptualization, K.A., F.A., Z.A., and G.D.; methodology, G.D.; software, M.A., validation, K.A., R.S., and F.A.; formal analysis, K.A.; investigation, Z.A., R.S. and O.B.A.; resources, M.A.; data curation, K.A. and Z.G.O.; writing—original draft preparation, F.A., Z.A. and G.D., Z.G.O., and O.B.A., writing—review and editing, K.A. and O.B.A.; visualization, K.A.; supervision, R.S.; project administration, F.A. All authors have read and agreed to the published version of the manuscript.

**Funding:** This research received no external funding.

**Institutional Review Board Statement:** The study was approved by the Ethics Committee of Near East University, with approval number EB 925.

**Informed Consent Statement:** Informed consent was obtained from all subjects involved in the study.

Data Availability Statement: Data are contained within the article.

Conflicts of Interest: The authors declare no conflicts of interest.

## References

- 1. Hajer, M.; Nilsson, M.; Raworth, K.; Bakker, P.; Berkhout, F.; De Boer, Y.; Rockström, J.; Ludwig, K.; Kok, M. Beyond Cockpitism: Four Insights to Enhance the Transformative Potential of the Sustainable Development Goals. *Sustainability* **2015**, *7*, 1651–1660. https://doi.org/10.3390/su7021651.
- 2. Arık, S. Trends of theses on sustainable environmental education: A systematic review. In Proceedings of the I. International Symposium on Science, Education, Art and Technology (UBEST-2019), İzmir, Türkiye, 2–4 May 2019.
- 3. United Nations. THE 17 GOALS—Sustainable Development Goals. Available online: https://sdgs.un.org/goals (accessed on 18 September 2022).
- 4. Chung, B.G.; Park, I. A review of the differences between ESD and GCED in SDGs: Focusing on the concepts of global citizenship education. *J. Int. Coop. Educ.* **2016**, *18*, 17–35.
- 5. Sustainable Development Solutions Network (SDSN). Accelerating Education for the SDGs in Universities: A Guide for Universities, Colleges, and Tertiary and Higher Education Institutions. Available online: https://resources.unsdsn.org/accelerating-education-for-the-sdgs-in-universities-a-guide-for-universities-colleges-and-tertiary-and-higher-education-institutions (accessed on 18 September 2022).
- 6. Özerdinç, F.; Kızılay, E.; Hamalosmanoğlu, M. Analysis of Studies on Sustainable Development in Education: A Meta-Synthesis Study. *Aksaray Univ. J. Soc. Sci. Inst.* **2022**, *1*, 33–51. https://doi.org/10.38122/ased.976188.
- 7. Savelyeva, T.; Rickards, S. Education for sustainability in higher education: The Asia-Pacific region. *Int. J. Sustain. High. Educ.* **2017**, *18*, 166–170. https://doi.org/10.1108/IJSHE-10-2016-0193.
- 8. Tanrıverdi, B. Evaluation of primary education programs in terms of sustainable environmental education. *Educ. Sci.* **2009**, *34*, 89–103.
- 9. Zhou, L.; Rudhumbu, N.; Shumba, J.; Olumide, A. Role of higher education institutions in the implementation of sustainable development goals. In *Sustainable Development Goals and Institutions of Higher Education*; Springer: Cham, Switzerland, 2020; pp. 87–96.
- 10. Demirbaş, Ç.Ö. Sustainable development awareness levels of teacher candidates. *Marmara J. Geogr.* **2015**, *31*, 300–316. https://doi.org/10.14781/mcd.09811.
- 11. Leite, S. Using the SDGs for global citizenship education: Definitions, challenges, and opportunities. *Glob. Soc. Educ.* **2022**, 20, 401–413.
- 12. Mengel, M.; Nauels, A.; Rogelj, J.; Schleussner, C.F. Committed sea-level rise under the Paris Agreement and the legacy of delayed mitigation action. *Nat. Commun.* **2018**, *9*, 1–10.

Sustainability **2024**, 16, 1604 13 of 14

13. Rizzo, F.; Edenborough, K.M.; Toffoli, R.; Culasso, P.; Zoppi, S.; Dondo, A.; Robetto, S.; Rosati, S.; Lander, A.; Kurth, A.; et al. Coronavirus and paramyxovirus in bats from Northwest Italy. *BMC Vet. Res.* **2017**, *13*, 1–11.

- 14. Cave, D.; Albeck-Ripka, L.; Magra, I. Huge Crowds Around the Globe March in Solidarity Against Police Brutality. *The New York Times*, 9 June 2020. Available online: https://www.nytimes.com/2020/06/06/world/george-floyd-global-protests.html (accessed on 5 November 2023).
- 15. Thiele, L.P. Sustainability; John Wiley & Sons: Hoboken, NJ, USA, 2016.
- 16. Sachs, J.D. The Age of Sustainable Development; Columbia University Press: Cambridge, UK, 2015.
- 17. Garcia, J.; da Silva, S.A.; Carvalho, A.S.; de Andrade Guerra, J.B.S.O. Education for sustainable development and its role in the promotion of the sustainable development goals. In *Curricula for Sustainability in Higher Education*; Springer: Cham, Switzerland, 2017; pp. 1–18.
- 18. Beringer, A.; Adomßent, M. Sustainable university research and development: Inspecting sustainability in higher education research. *Environ. Educ. Res.* **2008**, *14*, 607–623.
- 19. Carter, A. The Political Theory of Global Citizenship; Routledge: London, UK, 2013.
- 20. Kant, I. Perpetual Peace: A Philosophical Sketch; Cambridge University Press: Cambridge, UK, 1970; pp. 93–130.
- 21. Schattle, H. Global citizenship in theory and practice. In *The Handbook of Practice and Research in Study Abroad*; Routledge: London, UK, 2010; pp. 25–42.
- Davies, I.; Pike, G. Global citizenship education: Challenges and possibilities. In The Handbook of Practice and Research in Study Abroad; Routledge: London, UK, 2010; pp. 83–100.
- 23. Pais, A.; Costa, M. An ideology critique of global citizenship education. Crit. Stud. Educ. 2020, 61, 1–16.
- 24. Bamber, P.; Bullivant, A.; Glover, A.; King, B.; McCann, G. A comparative review of policy and practice for education for sustainable development/education for global citizenship (ESD/GC) in teacher education across the four nations of the UK. *Manag. Educ.* **2016**, *30*, 112–120. https://doi.org/10.1177%2F0892020616653179.
- 25. Hunt, F.; Chung, L.T.; Rogers, M.; Inman, S. Taking Stock: A Report from the UK Teacher Education Network for Sustainable Development (ESD)/Global Citizenship (GC)—Survey on Provision for ESD/GC in Initial Teacher Education in the UK. 2011. Available online: http://se-ed.co.uk/edu/wpcontent/uploads/2014/03/taking\_stock-July-2011.pdf retrieved from (4 December 2023).
- 26. Standing Conference of the Ministers of Education and Cultural Affairs (KMK) and Federal Ministry for Economic Cooperation and Development (BMZ). Curriculum Framework Education for Sustainable Development; Schreiber, J.R., Siege, H., Eds.; 2016. Available online: https://www.globaleslernen.de/sites/default/files/files/linkelements/curriculum\_framework\_education\_for\_sustainable\_development\_barrierefrei.pdf adresinden erişildi (accessed on 4 December 2023).
- 27. Bowen, H. The Individual and Social Value of American Higher Education; Routledge: New York, NY, USA, 2018.
- 28. Santone, S.; Saunders, S.; Seguin, C. Essential elements of sustainability in teacher education. *J. Sustain. Educ.* **2014**, *6*, 1–15. Available online: http://www.jsedimensions.org/wordpress/wp-content/uploads/2014/05/Santone-Et- Al-JSE-May-2014-PDF-Ready.pdf (accessed on 4 December 2023).
- 29. Burmeister, M.; Schmidt-Jacob, S.; Eilks, I. German chemistry teachers' understanding of sustainability and education for sustainable development—An interview case study. *Chem. Educ. Res. Pract.* **2013**, *14*, 169–176.
- 30. Renz, S.M.; Carrington, J.M.; Badger, T.A. Two strategies for qualitative content analysis: An intramethod approach to triangulation. *Qual. Health Res.* **2018**, *28*, 824–831.
- 31. Anderson, R. Thematic content analysis (TCA). Descr. Present. Qual. Data 2007, 3, 1-4.
- 32. Bakkalbasioglu, E. How to access elites when textbook methods fail: Challenges of purposive sampling and advantages of using interviewees as "fixers". Qual. Rep. 2020, 25, 688–699.
- 33. Şimşek, Ü.; Yıldırım, E.; Öntaş, T. First-Year Experiences of Social Studies Teachers Starting their Profession in the Public Sector. *Int. J. Educ. Methodol.* **2021**, *7*, 171–185.
- 34. Buchstaller, I.; Khattab, G. Population samples. Res. Methods Linguist. 2013, 74-95. https://doi.org/10.1017/CBO9781139013734.
- 35. Creswell, J.W. Research Design, Qualitative, Quantitative, and Mixed Methods Approaches, 3rd ed.; SAGE Publications: Newbury Park, CA, USA, 2009. Available online: https://www.ucg.ac.me/skladiste/blog\_609332/objava\_105202/fajlovi/Creswell.pdf (accessed on 4 December 2023).
- 36. Lofthouse, R.; Thomas, U. Concerning collaboration: teachers' perspectives on working in partnerships to develop teaching practices. *Prof. Dev. Educ.* **2017**, 43, 36–56.
- 37. Oxfam, C.H. Education for Global Citizenship: A Guide for Schools; Oxfam GB: Oxford, UK, 2006.
- 38. Stewart, L. Global Citizenship and Wilfrid Laurier University; Laurier Students Public Interest Research Group: Brantford, ON, Canada. 2008.
- 39. Zahabioun, S.; Yousefy, A.; Yarmohammadian, M.H.; Keshtiaray, N. Global citizenship education and its implications for curriculum goals at the age of globalization. *Int. Educ. Stud.* **2013**, *6*, 195–206.
- 40. Association for Experiential Education. Experiential Education Careers. Available online: https://www.aee.org/ (accessed on 20 December 2022).
- 41. Andrews, K.; Aydin, H. *Promoting Social Justice and Equality: Preparing Students to Become Global Citizens*; 2020. The Qualitative Report, Florida. Available online: https://nsuworks.nova.edu/tqrc/eleventh/day3/31/ (accessed on 4 December 2023).
- 42. Smith, M. The Levels of Global Citizenship. *Undergrad. J. Glob. Citizsh.* 2012, 1, 1.

Sustainability **2024**, 16, 1604 14 of 14

43. Estellés, M.; Fischman, G.E. Who needs global citizenship education? A review of the literature on teacher education. *J. Teach. Educ.* **2021**, 72, 223–236.

- 44. Haynes, J. Religion, education and security: The United Nations alliance of civilizations and global citizenship. *Religions* **2019**, 10, 51.
- 45. Tenuto, P.L. Teaching in a global society: Considerations for university-based educational leadership. *J. Glob. Educ. Res.* **2021**, *5*, 96–110.
- 46. United Nations Educational, Scientific and Cultural Organization (UNESCO). Issues and Trends in Education for Sustainable Development. 2018. Available online: https://unesdoc.unesco.org/ark:/48223/pf0000261445 (accessed on 5 November 2023).
- 47. Vaccari, V.; Gardinier, M.P. Toward one world or many? A comparative analysis of OECD and UNESCO global education policy documents. *Int. J. Dev. Educ. Glob. Learn.* **2021**, *11*, 68–86.

**Disclaimer/Publisher's Note:** The statements, opinions and data contained in all publications are solely those of the individual author(s) and contributor(s) and not of MDPI and/or the editor(s). MDPI and/or the editor(s) disclaim responsibility for any injury to people or property resulting from any ideas, methods, instructions or products referred to in the content.