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Article

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

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Abstract: Nowadays, higher education students play an active role in the realization of sustainable development goals (SDGs) for global citizenship. However, some important issues such as how much students know about these goals can play a role in achieving these goals are not yet clear. The aim of this study is to establish a fundamental study for determining the level of knowledge on the higher education students about SDGs. An open-ended questionnaire was conducted with the qualitative research methods on 54 higher education students after pandemic of COVID-19. As a result of the research, the goals of quality education, gender equality, health and quality of life, reduction of inequalities and peace, justice and strong institutions are the most frequently mentioned by the students. In addition, the opinions of the students on the subject of "sustainable cities and communities" are sequentially; the themes include ensuring socio-economic development, preserving cultural heritage identity, safe environment and durable buildings, as well as modern irrigation and waste methods, and reducing air pollution. On the other hand, they agreed on the need for global citizenship to have universal qualifications. In conclusion, global citizenship contributes directly to the SDGs and human-oriented production should be given more importance.

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

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. It has set 17 different goals under the name of sustainable development goals (SDGs) by the United Nations (UN) in September 2015 [1]. These goals include; eradicating poverty, fighting hunger, increasing health and welfare, expanding education, gender equality, ensuring water and sanitation, use of clean energy, economic growth, industrial innovation, decreasing inequalities, sustainable cities, sustainable consumption and production, climate action, underwater life, terrestrial ecosystems, and peace and justice. In addition, higher education institutions play a critical role in the realization of these goals since students are trained as leaders of the future; it is of great importance to educate and raise awareness in line with sustainable development goals.

Since the world's resources are finite, the resources must be used correctly and consciously. The environment must be protected for the future 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, with the aim of achieving sustainable development until 2030. In this concept, 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 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, 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. According to 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]

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 [7]. Related to the education and sustainable development, the issue of which sustainable development and environmental education includes the other is argued in the literature review. What is important in this confusion is the certainty of the importance of protecting the Earth for future generations [8].

The aim of this study is to determine the awareness of sustainable development goals among higher education students and the importance of global citizenship by evaluating them. In addition, it is also aimed to raise awareness about sustainable development goals, to evaluate the applicability of these goals and to create a sustainable world for future generations. Within this scope, the following sub-objectives are also investigated:

- The suggestions of higher education students who studying under the Sustainable
- Development Foundations for future learning.
- The strategies that need to be done for global citizenship.

2. Methodology

This study, which aims to evaluate the sustainable development goals of the students who were studying at the faculty of higher education, was carried out according to qualitative research methods. In this research, open-ended survey questions were used to examine the perceptions of higher education students on sustainable development goals (SDGs) and global citizenship (GC) issues. By analysing the results of the survey, information was obtained about the knowledge levels, skills, values and attitudes of the students.

2.1. Subject group

The group of this study was selected as the universe of 54 students who were studying at the faculty of higher education in the 2022-2023 academic year. Random sampling method was used for the sample selection. A semi-structured questionnaire was used for data collecting and the data were analysed by frequency and content analyses. The distribution of the sample according to demographic information is shown in Table 1.

In Table 1, a total of 54 Faculty of Education students 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).

Table 1. Distribution of students by gender.

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

2.2. Data Collection

In the research, a questionnaire consisting of 8 questions was used in order to understand the knowledge, values/thoughts and suggestions of the higher education students. The survey data were analysed by using frequency and content analyses. The questionnaires were delivered to students and after one week later the responses were collected by the researchers.

One of the data collection tools used in the research is the interview form to understand that students knows SDGs or not or which of them they know or not. There are four open-ended questions under main heading in the form as shown in below. In this interview form, it was carried out to determine the opinions of candidate teachers studying at the faculty of education about sustainable development goals.

Q_SDG-1: Which of the sustainable development goals do you know?

Q_SDG-2: As a teacher candidate, which of the objectives do you think should be taught and implemented within the scope of the teaching profession?

Q_SDG-3: What are your suggestions for quality education?

Q_SDG-4: What do you think sustainable cities and communities should look like?

Another data collection tools used in the research is “how do you define global citizenship developed” by the researcher and the interview form about the development of global citizenship. There are four open-ended questions under main heading in the form. In this interview form, similar with the previous form, it was carried out to determine the views of candidate teachers studying at the faculty of education on how you define global citizenship (GC) and the development of global citizenship.

Q_GC-1: How would you define global citizenship?

Q_GC-2: What are the concepts and information that should be known for the development of global citizenship?

Q_GC-3: What are the skills to have for the development of global citizenship?

Q_GC-4: What are values and attitudes for the development of global citizenship?

2.3. Analysis of Data

In the study, in which the students of the education faculty were used as a sample, the data were obtained from two separate forms as mentioned by above, the SDGs form and the global citizenship form.

The qualitative data obtained from the interview forms were used by the researcher in the same way. In the analysis of the data, firstly descriptive analysis and then content analysis were performed. The data were summarized by descriptive analysis and then analysed in detail.

Appropriate coding was done and themes were created in line with the answers given. Data were analysed in four stages with content analysis. In order to analyse the first stage, the codes were given to each participant/student. The purpose of giving individual codes to each participant is to protect the privacy of the participant and to provide convenience to the researcher. During the interview analysis, the participants were given abbreviation codes as S1, S2, S3,...S54. For example, the participant with the code S2 represents the second student interviewed. In the second stage of the content analysis, the answers were classified among themselves and the common aspects of the data obtained from the participants were determined and classifications were made. The themes created by the researcher were presented to the expert opinion. After creating the theme, the codes and themes were formatted and presented using numbers in a way that the reader could understand,

accompanied by Tables in the third stage. Finally, in the fourth stage, the findings were explained to the reader in detail and the results were assessed.

After this section, questions and harmonized evaluated answers and responses will be given. In addition, some important answers will be shared directly by students by coding with italic font.

3. Results and Findings

The findings gathering from the forms of SDGs and GC are explained in the below sections.

3.1. Higher Education Students’ Perceptions on SDGs

The students’ perceptions on the evaluation of the first question of SDGs are given in Table 2. As shown in Table 2, the responses of higher education students on the SDGs were clustered under 17 different themes. The 54 higher education students who participated in the research were asked “Q_SDG-1: Which one or which of the sustainable development goals you know”, 33 of them replied “quality education”, 29 of them replied “health and quality life”, 27 of them replied “gender equality”, 23 of them replied “end poverty”, 23 of them replied “end hunger”, 17 of them replied “peace, justice and strong institutions”, 16 of them replied “reducing inequalities”, 15 of them replied “climate action”, 14 of them replied “accessible and clean energy”, 13 of them replied “responsible production and consumption”, 13 of them replied “life in water”, 13 of them replied “life on land”, 11 of them replied “sustainable cities and communities”, 11 of them replied “clean water and sanitation”, 6 of them replied “industry, innovation and infrastructure”, 3 of them replied “decent work and economic growth”, and finally 3 of them replied “partnerships for ends”.

Table 2. Q_SGD-1: Which of the Sustainable Development Goals do you know?

Theme	Frequency	%
End poverty	23	8.5
End hunger	23	8.5
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
Terrestrial life	13	4.8
Peace, justice and strong institutions	17	6.3
Partnerships for purposes	3	1.1
Total	270	100

The opinions of the students on which of the objectives as a teacher candidate should be taught and implemented within the scope of the teaching profession are shown in Table 3.

Table 3. Q_SDG-2: As a teacher candidate, which of the objectives do you think should be taught and implemented within the scope of the teaching profession?

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
Total	119	100

Student opinions were gathered under 15 different themes as shown in Table 3. Among the students who participated in the research, “quality education” was mentioned most frequently and the percentage of mention was 21.4%. Quality education was mentioned more frequently than all other themes. The second most frequently mentioned was “reducing inequalities” (16.0%), and the third frequently mentioned is “gender equality (13.0%), other frequently mentioned ones are “health and quality of life” (9.2%), “sustainable cities and communities” (4.6%), “clean water and sanitation” (3.8%), “end poverty” (3%) .8), “responsible production and consumption” (3.8%), “terrestrial life” (2.3%), “climate action” (2.3%), “accessible and clean energy” (2.3%), “end hunger” (2.3%), “life in the water” (2.3%), “decent work and economic growth” (2.3%), and “industry, innovation and infrastructure” (1%).

The most five important and more frequent responses of students are directly given following part on the subject of Q_SDG-2.

“Nutrition is 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. Hunger is one of the most basic human needs. Without this basic need, human beings cannot fulfil their responsibility and sense of duty. This article can be compared to the standing of a building without a foundation.” (S39)

“One of the indispensable conditions for a society to develop and lead a prosperous life is the quality and quality of the education provided in that society. Because if qualified education is provided in that society, the people in that society help social welfare by respectfully complying with every rule and order. At the same time, these people increase their quality business potential in line with the education they receive in their professional life.”(S39) The reason why quality education is mentioned the most shows that pre-service teachers focus on increasing the quality and limits of education. Quality education means that students get a good education, gain skills and develop their potential.

“Gender Inequality: Gender Equality aims to achieve gender equality and empower all women and girls, and to eliminate all harmful practices such as child marriage and early forced marriage. It aims at empowering women and girls, 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 still remain at large.” (S27)

“The most important problem is inequality in 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)

“Responsible Production and Consumption: In order to achieve economic growth and sustainable development, changing the way we produce and consume, efficient management of our common natural resources and preventing 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)

The opinions of higher education students regarding their suggestions for qualified education are gathered under 7 different themes for Q_SDG-3 as shown in Table 4. Regarding their views on the evaluation of the school’s teaching process, 23 of them mentioned “quality education”, 23 of them mentioned “reducing inequalities”, 19 of them mentioned “to create an accessible and effective learning environment”, 16 of them mentioned “gender equality”, 16 of them mentioned “peace, fairness and non-violence”, 7 of them mentioned “making a large proportion of adults literate”, and 3 of them mentioned “sustainable cities and communities”.

Table 4. Q_SDG-3: What are your suggestions for quality education?

Theme	Frequency	%
Quality education	23	20.2
Social gender equality	16	14
Reducing inequalities	23	20.9
Sustainable cities and communities	3	2,7
Peace, justice and non-violence	16	14.5
Creating an accessible and effective learning environment	19	17.3
Making most adults literate	7	6.4
Total	107	100

The most five important and more frequent responses of students are directly given following part on the subject of Q_SDG-3.

First of all, quality education aims to ensure that everyone has access to quality and inclusive education. In this context, it is aimed for all children to participate in free and quality education, including pre-school education. To put this more concretely, it aims to ensure that all women and men have access to qualified, accessible technical, vocational and education, including university education in the context of higher education.”(S6) This situation should be an equal and fair education system and everyone’s opportunities should be created in terms of access to education should be equal. This will reduce inequalities in education.

“In order for a qualified education to take place, an equal environment must be created first. Because we cannot talk about equal education in a place where there is no equality. To create accessible and effective learning environments. Eliminating gender and wealth inequalities. Making a large proportion of adults literate. Developing a culture of human rights, gender equality, diversity, peace and non-violence. When people can get quality education, they can get rid of the poverty swirl. Therefore, education helps to reduce inequalities and achieve gender equality. It also enables people to have healthier and more sustainable lives wherever they are. In this way, quality education is provided equally.” (S21) The majority of higher education students emphasize the importance of quality education. This means that universities must offer higher quality and effective education. The views of these students encourage improvements such as updating curricula, diversifying teaching methods, and adopting a student-centred approach.

“Eliminating gender and wealth inequalities.” (S51) Some of the students argue that gender equality should also be achieved in higher education. This includes measures such as reducing gender-based discrimination and inequalities, ensuring access to equal opportunities and resources for women and men, and raising awareness of gender equality.

“A good education, a just and equal future does not end with achieving ecological goals or inclusive economic growth. We know that one of the most effective and powerful ways to achieve sustainable development is to provide accessible and qualified education for everyone. Not everyone in the world can meet these conditions. Crises such as severe poverty, conflicts, natural disasters and finally the global pandemic prevent the elimination of inequalities in access to education”.(S13) Students demand an environment where everyone can participate equally and maximize their learning potential.

“Adults who are illiterate, parents should be taught to read and write. The socioeconomic status of the families greatly affects the educational life of the children. Therefore, it is necessary to intervene in the socio-economic inequalities of the society. Education is a right, and necessary studies should be carried out in order to reach qualified education more easily.”(S54) Students emphasize that literacy is an important skill for all segments of society.

According to Table 5, students’ responses on sustainable cities and communities are gathered under 10 different themes for the Q_SDG-4. 22 of them were mentioned “cities should be organized by foreseeing the future”, 19 of them were mentioned “protection of cultural heritage identity”, 17 of them were mentioned “having green living spaces”, 16 of the students were mentioned “ensure socio-economic development”, 15 of them were mentioned “safe environment and durable buildings”, 12 of them were mentioned “modern irrigation and waste method”, 10 of them were mentioned “public transportation”, 9 of them were mentioned “use of renewable energy”, 6 of them were mentioned “inclusive and holistic understanding”, and 5 of them were mentioned “reducing air pollution”.

The most five important and more frequent responses of students are directly given following part on the subject of Q_SDG-4.

Table 5. Q_SDG-4: What do you think sustainable cities and communities should look like?

Themes	Frequency	%
Ensuring socio-economic development	16	12.2
Protection of cultural heritage identity	19	14.5
Safe environment and durable buildings	15	11.5
Cities should be organized in anticipation of the future	22	16.8
Public transport	10	7.6
Having green living spaces	17	13
Use of renewable energy	9	6.9
Inclusive and holistic understanding	6	4.6
Modern irrigation and waste method	12	9.2
Reducing air pollution	5	3.8
Total	131	100

“Sustainable cities and communities mean living spaces that meet the needs of today and the future in the most comprehensive and effective way. These cities and communities are settlements where environmental impact is reduced while ensuring socio-economic development. Therefore, the people raised must be well-trained.” (S5) It means maintaining a balanced economic growth and social welfare. According to these students, sustainability efforts should focus on increasing local economic opportunities, creating jobs and promoting equitable economic development.

“A sustainable city must preserve its cultural heritage and identity through renewal and restoration. For this, it should resort to the renewal of modern irrigation and waste management practices, as well as public spaces such as parks, streets, urban areas. Sustainable communities are; should meet the diverse needs of current and future users.” (S33)

“How urban areas are built and managed is extremely important for sustainable development. Making cities safe and sustainable means much more than providing safe and accessible housing and transforming slums. Topics such as investing in public transportation, creating public green spaces, improving urban planning and management in a way that is both participatory and inclusive should also be taken into account.”(S50) Structures resistant to natural disasters are of great importance to ensure the safety of people in cities and to ensure the longevity of structures.

“Sustainable cities and communities mean living spaces that meet the needs of today and the future in the most comprehensive and effective way. These cities and communities are settlements where the environmental impact is reduced while providing socio-economic development” (S5) City planning and infrastructure projects should include sustainable solutions for the future, taking into account factors such as population growth, climate change and resource use.

“We need to increase public green spaces and put an end to urbanization. Finally, the development of waste management and the use of renewable energy should be given priority.” (S51) According to the students, parks, gardens, green spaces and afforestation support natural life in cities, provide living spaces for people and maintain environmental balance.

3.2. Higher Education Students’ Perceptions on GC

The students’ perceptions on the evaluation of the first question of global citizenship form are given in Table 6. The opinions of the students were gathered under 3 different themes for the Q_GC-1. 35 of them were mentioned “a person who can see and understand the world”, 28 of them were mentioned “a person who is equal and fair”, and 25 of them were mentioned “playing an active role in problems and solutions”.

Table 6. Q_GC-1: How should a global citizen be?

Gender	Frequency	%
Equal and just person	28	32
Playing an active role in problems and solutions	25	28
The person who can see and understand the world	35	40
Total	88	100

The most five important and more frequent responses of students are directly given following part on the subject of Q_GC-1.

“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) It means recognizing that everyone has equal rights, fighting discrimination and striving for social justice.

“A global citizen is a person with a worldview who works in harmony and takes an active role in order 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) It includes understanding different cultures, understanding global conflicts, and evaluating different perspectives.

“Global citizenship is not just a citizen who is interested in the society he lives in, it is a universal citizen who adapts to the necessary people in order to turn these situations into positive in societies where all inequality and injustice in all societies in the world arise. In other words, 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) It emphasizes that the global citizen must have the ability to understand world events and grasp cultural diversity.

The opinions of the students on the concepts and information that should be known in the development of global citizenship are given in Table 7. The opinions of higher education students are gathered under 9 different themes for the Q_GC-2 as shown in Table 7. 22 of them were mentioned “Social justice and equality”, 10 of them were mentioned “altruism”, 14 of them were mentioned “globalization and social values”, 14 of them were mentioned “sustainable future and responsibility”, 4 of them were mentioned “peace”, 7 of them were mentioned “global problems and communication”, 2 of them were mentioned “seeing as opportunity”, 9 of them were mentioned “global citizenship education”, and 9 of them were mentioned “awareness and respect”.

Table 7. Q_GC-2: What are the concepts and information that should be known for the development of global citizenship?

Themes	Frequency	%
Social justice and equality	22	24
Sacrifice	10	11
Globalization and social values	14	15
Sustainable future and responsibility	14	15
Peace	4	4
Global issues and communication	7	8
Seeing it as an opportunity	2	2
Global citizenship education	9	10
Awareness and respect	9	10
Total	91	100

The most five important and more frequent responses of students are directly given following part on the subject of Q_GC-2.

“It should respect and value differences.” (S14) In addition, awareness and respect issues are also considered important by the survey participants. This points to the need for global citizens to respect different cultures, beliefs and lifestyles and to understand the importance of cultural diversity.

“Global citizen is used to mean that students are equipped 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 known. In order to develop global citizenship, the individual must receive 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, it is important for children to experience the knowledge and skills required by 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)

It was conducted to determine what concepts and information are considered important in the development of the concept of global citizenship. It was seen that social justice and equality were emphasized the most among the respondents (24%). In addition, sustainable future and responsibility (15%) and globalization and social values (15%) have an important place.

The students’ opinions on the skills that should be possessed in the development of global citizenship are given in Table 8. According to responses of higher education students on the skills that should be possessed in the development of global citizenship are gathered under 8 different themes as shown in Table 8. 23 of them were mentioned “tolerance-respectful”, 22 of them were mentioned “communication skills-cooperation”, 21 of them were mentioned “social justice and equality”, 15 of them were mentioned “preparing individuals for globalization through education”, 11 of them were mentioned “solution-oriented thinking”, 7 of them were mentioned “being able to empathize”, 7 of them were mentioned “Thinker-investigator-questioning” and 6 of them were mentioned “awareness”.

Table 8. Q_GC-3: What are the required skills for the development of global citizenship?

Themes	Frequency	%
Tolerance / respectful	23	21
Ability to empathize	7	6
Social justice and equality	21	19
Awareness	6	5
Communication skill / collaboration	22	20
Preparing individuals for globalization through education	15	13
Thinker-investigator-questioning	7	6
Solution oriented thinking	11	10
Total	112	100

The most five important and more frequent responses of students are directly given following part on the subject of Q_GC-3.

"The fact that honest and accurate information is solid and people are treated with respect and tolerance should ensure the development of nervous stress management." (S5) It demonstrates students' acceptance of tolerance and respect as an essential element of coexistence and cultural interaction in a global society.

"Global citizens also have an attitude of individual self-esteem, commitment to social justice and equality, valuing and respecting diversity, concern for the environment, and a commitment to action." (S37) It shows that students have an understanding of global citizenship that cares about ensuring justice in society and reducing inequalities.

"Critical thinking, effective discussion, tackling injustice and inequality, respect for people and things, cooperation and conflict resolution are among the skills." (S6)

"There should be people who have received global citizenship education. There should be individuals who are open to economics, politics and social data, to develop the individual, to communication and who can criticize." (S15)

"A global citizen must first be aware of the fact that he lives in a global world. A global citizen requires being active and participatory as well as an inquiring and questioning consciousness, that is, they should think, research and question." (S34) It shows that students stated that active and critical thinking skills and an inquiring mind set are important for global citizenship.

The responders' frequency and percentage on the development of global citizenship, values and attitudes are shown in Table 9 for the Q_GC-4.

Table 9. Q_GC-4: What are values and attitudes for the development of global citizenship?

Themes	Frequency	%
Empathy	11	11
Justice and equality	32	31
Taking responsibility	7	7
Identity and self-esteem	18	18
Preparing individuals for globalization through education	7	7
Protecting their own culture and respecting other cultures	6	6
Awareness	13	13
Able to think critically	4	4
Total	98	100

According to students' responses on values and attitudes in the development of global citizenship are grouped under 8 different themes as shown in Table 9. 32 of them were mentioned "justice and equality", 18 of them were mentioned "identity and self-esteem", 13 of them were mentioned "awareness", 11 of them were mentioned "empathy", 7 of them were mentioned "taking responsibility", 7 of them were mentioned "preparing individuals for globalization through

education", 6 of them were mentioned "protecting their own culture and respecting other cultures", and 4 of them were mentioned "Able to think critically".

The most three important and more frequent responses of students are directly given following part on the subject of Q_GC-4.

"Taking care of the environment and taking responsibility for sustainable development." (S20)

"It is concerned with learning about the customs and traditions of multiple cultures and peoples of the world, and to reduce the cultural gap on the basis of mutual respect and respect for cultural diversity, which leads to cultural convergence between peoples." (S47)

"The increase in intercultural connections creates differences on the one hand, and enables creativity and innovation on the other. In this context, individuals' expressing themselves with their historical and social (local) identities can help to form a citizen type who is more at peace with himself and his environment and more socio-economically productive. In the process of globalization, it is very important for citizens to know their own identity and culture and to introduce themselves to other cultures at the international level." (S4)

4. Discussion, Recommendations and Conclusions

When the students' perceptions on the evaluation of the sustainable development goals were assessed, the most common ones among the SDGs were determined as the awareness of the society. The goals of quality education, gender equality, health and quality of life, reduction of inequalities and peace, justice and strong institutions are among the most frequently mentioned by the students in education faculty. However, environmental protection, partnerships for purposes, and decent work and economic growth targets are less stated considerations. Whilst the information was gathered on the idea about the priorities of the society, it also reminds that all objectives should be handled in a balanced way in order to fully realize sustainable development [9]. Transformative or transformative teaching fundamentally changes people by changing the way. Students understand the ways in which they and others participate and contribute to their greater learning [10]. There is a need to integrate sustainability into existing systems. Within the scope of this integration are training routes with a more discipline-specific focus, a new topic, assignment, case study, module or service-learning project. Similar approaches can be developed in all schools and universities as a stand-alone course, subject or as an interdisciplinary program as a major or minor. In this way, individuals who plan for the future will be trained in the event that new students who are newly trained in sustainable development goals are included in the education system.

When the proposals for qualified education according to higher education students are examined; focuses on quality education, gender equality, reducing inequalities, sustainable cities and communities, peace, justice and non-violence, creating an accessible and effective learning environment, and literacy. These themes show that higher education students make certain demands for improving the education system, realizing social transformation and ensuring social justice. Students need to update their curricula, diversity their teaching methods, develop policies to reduce gender-based discrimination and inequalities, adopt the principles of sustainability, take steps to create a peaceful environment and ensure justice, provide appropriate support for students with disabilities and those with different learning needs, and ensure the general literacy of society. Demands to organize programs aimed at raising the level of. These results reveal that educational institutions should review their policies and practices in order to better respond to student needs, reduce social inequalities and contribute to sustainable development goals. Some activities are recommended as; the sustainable development goals of values education, integration of students with disabilities, and promotion of self-employment should be included, taking into account social responsibility from the university administration [10]. Promoting learning in ethical principles and values in educational institutions that form the basis of the strategies that form it, students' perceptions of relevant actions and recommends education and participation aimed at respecting the needs of various interest groups in [11]. Thus, it is ensured that all segments of the society are reached through qualified education.

When the responses of the students of the Education Faculty on the subject of sustainable cities and communities are assessed; these themes include ensuring socio-economic development,

preserving cultural heritage identity, safe environment and durable buildings, regulation based on future projections, public transportation, green living spaces, use of renewable energy, inclusive and holistic understanding, modern irrigation and waste methods, and reducing air pollution is located. Their opinions are; by playing an important role in sustainable urban planning, policies and practices, it can support the achievement of goals such as economic development, protection of cultural heritage, environmental sustainability, social inclusion and air quality. However, suggestions for the creation of sustainable cities have become widespread, both for the problems caused by increasing urbanization and for combating climate change. Smart Sustainable City developments supported by thrifty innovation are basically defined around two overarching concepts of the city of the future; innovation and sustainability [12,13]. The sustainable and innovative state is often characterized by green spaces, low carbon emissions, net zero buildings, affordable and clean water and energy, efficient mobility and infrastructure, adequate employment, big data capture, data storage and management [14], governance mechanisms such as privacy and security, innovation and entrepreneurship, cultural diversity [15] and appropriate governance [16,17] are among other ideals.

The students agree that it should have universal qualifications for global citizenship. Among these qualities; 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 is mentioned *"enhances the capacity of people to increase knowledge, develop skills, clarify values and contribute to their communities"* [18]. In an effort to student development as global citizens and global leaders, experiential learning and experiential education have been recognized as the most appropriate teaching approach [19]. In this study, the values and attitudes of higher education students regarding the development of global citizenship were examined under 8 different themes. The themes are; 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 reflect students' views on global citizenship. As a result of the study, it was observed that the students gave the most importance to values such as; empathy, justice and equality, identity and self-respect, and were conscious of taking responsibility, education, cultural diversity and awareness. These findings show that higher education students support the understanding of global citizenship and adopt these values and take steps towards becoming individuals sensitive to global problems. These results emphasize that educational institutions should give more importance to global citizenship education and the development of values. When the students' views on Global Citizenship skills are assessed; it is seen that themes such as tolerance/respect, social justice and equality, communication skills/cooperation and the importance of education come to the first. These results show that students show sensitivity to global issues such as cultural diversity, human rights, and sustainability and that they care about these issues. It is also emphasized that skills such as communication skills, cooperation and solution-oriented thinking are also important. This analysis shows that higher education students develop awareness of Global Citizenship and focus on these skills. Global citizenship courses, university programs, and study abroad experience require faculty and staff to be familiar with the concept and its advocates. This primarily requires individuals to reflect on their own practices and understanding of global citizenship [20]. Therefore, if global citizenship continues to be a concept emphasized by higher education institutions, then it is necessary to start developing faculty and staff perceptions.

The UNESCO report Education for Global Citizenship: Preparing students for the challenges of the 21st century' outlines the organization's values for global citizenship education [21]. The third part of the UNESCO report, focused on knowledge and understanding, 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 is stated in [19]. The report also focused on social skills, behavioural skills.

Similar studies can make a great contribution to the realization of sustainable development goals. In addition, it should not be forgotten that global citizenship directly contribute to the sustainability goals and that wider social, economic and political efforts are required to achieve these goals. In this way, the potential of global citizenship can have a wider impact in the field of sustainable development and play an important role for a liveable world for future generations. In addition, it is expected that future studies on this subject will be carried out with a larger sample and more comprehensive results will be achieved.

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References

1. Hajer, M.; Nilsson, M.; Raworth, K.; Bakker, P.; Berkhout, F.; De Boer, Y.; Rockström J.; Ludwig, K.; Kok, M. Beyond Cockpit-ism: 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, 02- 04 May 2019.
3. United Nations. THE 17 GOALS - Sustainable Development Goals. Available online: <https://sdgs.un.org/goals> (Accessed on 18 September 2022).
4. Savelyeva, T.; & Rickards, S.; Education for sustainability in higher education: The Asia-Pacific region. *International Journal of Sustainability in Higher Education* 2017, 18(2), 166–170. <https://doi.org/10.1108/IJSHE-10-2016-0193>
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 University Journal of Social Sciences Institute* 2022, 1, 33 – 51. <https://doi.org/10.38122/ased.976188>
7. Tanrıverdi, B, Evaluation of primary education programs in terms of sustainable environmental education. *Education and Science*, 2009, 34(151), 89-103.
8. Demirbaş Ç. Ö. Sustainable development awareness levels of teacher candidates. *Marmara Journal of Geography*, 2015, 0(31), 300- 316. <https://doi.org/10.14781/mcd.09811>
9. Menninger, K. A. What the Teacher is, is more important than what he teaches. Available online: <https://www.opencolleges.edu.au/blogs/articles/5-big-things-transformational-teachers-do> (Accessed on 10 March 2022).
10. Gallardo-Vázquez, D.; Folgado-Fernández, J.A.; Hipólito-Ojalvo, F.; Valdez-Juárez; L.E. Social responsibility attitudes and behaviors' influence on university students' satisfaction. *Soc. Sci.* 2020, 9(2). <https://doi.org/10.3390/socsci9020008>
11. Gallardo-Vázquez, D. Escala de medida de responsabilidad social en el contexto universitario: Una triple visión basada en competencias, formación y participación del estudiante. *Rev. Estud. Gerenc.* 2019, 35, 159–177. <https://doi.org/10.18046/j.estger.2019.151.3138>
12. Ebolor, A.; Agarwal, N.; Brem, A. Fostering the Sustainable Development Goals with technologies underpinned by frugal innovation. *Int. J. Technol. Management* 2022, 88(2-4), 155-174. <https://doi.org/10.1504/IJTM.2022.121503>

13. Buck, T. N.; While, A. Competitive urbanism and the limits to smart city innovation: the UK Future Cities initiative. *Urban Stud.* 2017, 54, 501–519. <https://doi.org/10.1177/0042098015597162>
14. Kong, L.; Liu, Z.; Wu, J. A systematic review of big data-based urban sustainability research: state-of-the-science and future directions. *J. Clean. Prod.* 2020, 273, 123142. <https://doi.org/10.1016/j.jclepro.2020.123142>
15. Khan, S.; Zaman, A. U. Future cities: Conceptualizing the future based on a critical examination of existing notions of cities. *Cities* 2018, 72, B, 217–225. <https://doi.org/10.1016/j.cities.2017.08.022>
16. Billi, M.; Mascareno, A.; Edwards, J. Governing sustainability or sustainable governance? Semantic constellations on the sustainability-governance intersection in academic literature. *J. Clean. Prod.* 2021, 279, 123523. <https://doi.org/10.1016/j.jclepro.2020.123523>
17. Founoun, A.; Hayar, A.; Essefar, K.; Haqiq, A. Agile governance supported by the frugal smart city. *Intelligent Sustainable Systems. Springer Singapore*, 2022, 95–105. <https://www.researchgate.net/publication/354527724>
18. Association for Experiential Education. Experiential Education Careers. Available on: <https://www.aee.org/> (Accessed on 20 December 2022).
19. Haynes, J. Religion, education and security: The United Nations alliance of civilizations and global citizenship. *Religions* 2019, 10(1), 1–14.
20. Tenuto, P. L. Teaching in a global society: Considerations for university-based educational leadership. *Journal of Global Education and Research* 2021, 5(1), 96–110.
21. Vaccari V.; Gardinier M.P. Toward one world or many? A comparative analysis of OECD and UNESCO global education policy documents. *International Journal of Development Education and Global Learning* 2021, 11(1), 68–86.
22. Savelyeva, T.; Rickards, S. Education for sustainability in higher education: The Asia-Pacific region. *International Journal of Sustainability in Higher Education* 2017, 18(2), 166–170. <https://doi.org/10.1108/IJSHE-10-2016-0193>.

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