

THE ROLE OF UNIVERSITY IN SPREADING ENVIRONMENTAL AWARENESS AMONG STUDENTS TO ACHIEVE ENVIRONMENTAL CITIZENSHIP

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ABSTRACT: This study aims at identifying the nature of environmental citizenship and the role of university in spreading environmental awareness among students through the introduction of environmental culture. Moreover, it explores the methods to develop this culture through environmental education. Another aspect that this study identifies is the role of environmental media as far as the orientation toward descriptive method of analysis is concerned through administering a questionnaire. The latter is composed of three axes that were applied to a sample of 32 forms distributed to a group of master students (first year) in various fields of economics.

KEYWORDS: Environmental citizenship, Environmental Awareness, Environmental Education, Environmental Media, Environmental Culture

1. INTRODUCTION

Recently environmental issues have been occupying a large area within the fields of developmental, social, economic and educational studies, especially after 1987. The dimensions and aspects of these issues have varied in order to find the appropriate model that governs the form and nature of the relationship between the individual and his environment (Barreto, Larissa, & Shamy, 2021). It is undeniably noticed that the latter underwent an increasing set of environmental issues that kept on witnessing more and more complications throughout its different phases. These problems were a result of the individual's exploitation of natural resources regardless of the ecological balance and the need of other organisms for survival.

In fact, societies have recently reached a critical stage that necessitates the deliberation and understanding of the current situation. This latter, made it compulsory to change the way they deal with the current requirements available at the local and global levels alike, foremost of which is sustainable development. Hence the importance of adopting a new concept of responsibility based on the principle of voluntary initiatives that it must be carried out by the individual (citizen) in order to contribute to the protection of the environment in its various aspects. Environmental responsibility is one of the most important features of sustainable development (Martinho, Bacelar, Caeiro, Amador, & Oliveira, 2010). However, it is not sufficient unless responsible environmental behavior is developed. Some scholars like Carl Rogers (1961) and Jeremy Grantham (2012) believes that a radical solution to the current environmental situation resides chiefly in changing the individual's practices towards his environment. Actually, the environmental revolution that is needed at the moment is rather a citizenship one. Thus, the government and its institutions are obligated to change the individual's view of the environment by developing the ideology of environmental citizenship. The latter is based on the idea that the individual is part of society He has rights and duties that enable him to lead a healthy and productive life in harmony with the environment, and this is by respecting the enacted laws and awareness of the effects of his

activities on all components of the environment in line with the requirements of achieving a model Citizenship.

Addressing environmental problems stems from a society that can be aware of the risks facing it and its future generations. This problem can only be resolved through instilling cultural and behavioral values, especially within universities, on the grounds that they represent the educational institution most aware of the size and danger of these problems. The latter could be achieved through finding and generating the self-deterrent that stems from within universities' students pushing them to protect, maintain and respect the environment and help the community to reach the actual concept of environmental citizenship (Buko, 2009) by developing the levels of environmental awareness among them.

In light of the foregoing, the problematic features are embodied in the following question:

To what extent has Souk Ahras University been able to spread environmental awareness among master's students in light of its orientation towards introducing environmental citizenship?

In this aspect, and as far as the foregoing is concerned, the features of the problematic of this study revolve around the following sub-questions:

- What is meant by environmental citizenship?
- What is meant by environmental awareness, and how does the university work to spread it among its students?
- At what extent has Souk Ahras University succeeded in spreading environmental awareness among its students?

1.1. Study Hypotheses

Based on the problem of the study, hypotheses were formulated that are consistent with the subject of the research that will be tested, and conclusions and recommendations were drawn, which are:

- The first hypothesis: The master's student at Souk Ahras University has a high level of environmental culture
- The second hypothesis: Souk Ahras University is interested in spreading environmental awareness among its master's students by activating environmental education.
- The third hypothesis: Souk Ahras University is interested in spreading environmental awareness among its master's students by activating environmental media.

1.2. Study Objectives

This study aims to:

- Dissemination of various concepts related to the topic of environmental citizenship;
- Attempting to identify environmental awareness through its components and how to disseminate it in the university;
- An attempt to study and evaluate the level reached by Souk Ahras University in the field of spreading environmental awareness among master's students.

1.3. Methodology

This research applies a quantitative approach with a survey method. The study population was prospective master's students at the Faculty of Economic Commercial and Management Sciences at the University of Souk Ahras. The selection of the population study was done purposively. The reason these participants are chosen is their level of understanding of the study variables and their ability to understand the purpose of this study.

Data were gathered using a questionnaire, which was designed and addressed to the previously mentioned research sample. This questionnaire was built after reviewing many studies that revolve around the same variables as our subject, such as (Sarbaini, 2020) (Syazni, Mohd, Noorjima, Nurulhuda, & Nik, 2018) (Mravcová, 2019), and it was divided into 03 branches related to the level of environmental awareness at Souk Ahras University in field of citizenship environmental.

These questionnaires were determined by the proportional random sample technique per specialty (Table 1) based on the nominal lists of the specialization to the 32 students. Our study is distinguished from other studies by being recent at Souk Ahras University, and not previously conducted by a researcher. In addition, it addresses one of the most important variables that the university is working to publish, and so on in light of its endeavor to shift towards achieving sustainable development. This study also shows the level of student response to the university's efforts to spread environmental awareness dimensions. The study can also be a reference for future research in the same field.

1.4. Study Plan

In order to address this topic, it has been divided into the following elements:

- The concept of environmental citizenship.
- The nature of environmental awareness.
- A field study on master's students at the Faculty of Economics in the University of Souk Ahras.

2. THE CONCEPT OF ENVIRONMENTAL CITIZENSHIP

2.1. Definition of Citizenship

The one who delves deep into the subject of citizenship unintentionally leaves behind the development of this concept. The concept that first appeared during the Greek period BC is not the same as that which existed in the medieval period, nor is it the one that Europe was acquainted with after the French Revolution, which in turn differs from the contemporary concept of citizenship.

Citizenship is simultaneously one of the old and renewed issues that imposes itself whenever addressing any dimension of development in the comprehensive human concept, in particular, and reform and development projects, in general. Citizenship stems from Arabic it refers to the homeland: the house in which you reside, which is "the home and place of man." Citizenship is the source of the verb. As for the term, citizenship in its simplest sense means "mutual obligations between individuals and the state. Citizenship is also defined as "an arrangement of freedom with attendant responsibilities" (Gûlalp, 2006), and is seen as "a form of interdependence between individuals within a single society."

In this context, this issue occupied a large area in political, social and educational studies. The dimensions of citizenship in its extended relations were varied through issues that mainly centered on the individual's relationship with society and the state and this is manifested through legal frameworks regulating rights and duties. In addition, it produced several theses that covered various fields of thought in different countries of the world. Actually, many visions were embodied about the concept of citizenship and its principles, rights and duties, and from the womb of totalitarianism that this concept knew and because of its invasion of various fields of political, economic, social and environmental thought, a new term appeared called environmental citizenship (Pierre, Linda, & David, 2004) a concept that is not limited to directing attention to taking care of the local environment and its components only; Rather, it goes beyond that, with its broad horizons, to create a sustainable world.

2.2. Definition of Environmental Citizenship

Although there are many linguistic terms that accompanied the emergence of environmental citizenship, including what has been called green citizenship, ecological citizenship and sustainable citizenship, they all revolve around the same theme whose main concern is the environment. If one attempts to conceptualize a definition of environmental citizenship, he would realize that it vehemently aims at "Instilling a set of values, principles and ideals in the members of society, young or old, to help them be righteous and able to participate effectively and actively in all environmental issues and problems as well as the human community as a whole. In other words, The individual has duties towards the whole world just as he has duties towards his homeland, thus the citizen becomes of a global nature, bearing a broader responsibility towards his environment as a whole. Consequently, the concept of environmental citizenship and correct environmental behavior becomes an existential necessity for human survival and not just a desire or slogan. It is also defined as "the awareness of individuals about nature and its relationship to society and their willingness to take the necessary measures to protect the environment, and to identify their responsibilities to reduce the negative effects on it. Citizenship includes the public and private sectors and their effective participation in

the activities of society and democracy in general." (Dobson, 2003, p. 05), A sense of civilization that goes beyond awareness and adherence to rights and adherence to duties and moral and legal rules to respecting the environment (natural and urban) and contributing to preserving its integrity.

Despite the multiplicity of definitions and viewpoints, a significant shift is noticed in the concept of citizenship, as it moved from the political field to the environmental field, and this is due to what this concept carries of faith, trust and belonging to the individual within his community. Preserving the environment, not on the grounds that he is a consumer only, but that he has become an essential partner in society as well, with rights and duties towards his environment in general and the ecological environment in particular. So, the individual must work concurrently with the various public and private sectors of the state to protect this environment based on his own conviction in the first place (Andreas & Others, 2020). Environmental citizenship in its developed form of the concept does not mean that the citizen of the age is a citizen within his homeland only, but an active member of a society larger than his homeland. Therefore, his citizenship has become of a regional and global nature.

2.3. Environmental citizenship requirements

Supporting environmental citizenship among the general public and consolidating it for the younger generations for a sustainable future for humanity requires reliance on a set of principles that can be summarized in (Dobson & Angel, 2006, p. 39):

- Recognizing that all organisms have their place in the ecosystem and that all aspects of life on Earth have value and importance, whatever their relationship with humans;
- Protecting the ecosystem and preserving its integrity through the protection of biodiversity and the natural factors that constitute the continuity of life;
- Not harming the environmental components and preventing their distortion, in addition to avoiding pollution of all kinds and forms;
- Ensure the selection of production and consumption methods that protect the potential of the earth to restore its capabilities, preserve human rights and work on the welfare of society, by recycling waste in a controlled manner, investing in renewable energies, choosing clean technology;
- Encouraging the study of environmental sustainability and the appropriate application of knowledge by supporting scientific and technological cooperation;
- Ensuring access to potable water, electric lighting, clean air, food security and uncontaminated soil;
- Recognizing the self-dignity of all human beings and their intellectual, creative and spiritual properties;
- Defining clear and procedural goals for each action related to environmental preservation and the consolidation of sustainable development;
- Adapting the contents of educational programs and aids to the spirit of the age by selecting the appropriate contents with a constructive gradation corresponding to the intellectual maturity of the target audience.

3. WHAT IS ENVIRONMENTAL AWARENESS?

3.1. Defining Environmental Awareness

The individual of the twenty-first century has concluded that his future has become dependent on the future of the surrounding environment, so his continuity depends on his level of awareness and conviction of the need to preserve his environment and to dispense with his reckless and irrational lifestyle of the available natural resources (François, 2016, p. 07).

The word awareness is derived from the Arabic language from the verb "aware" meaning "to preserve the heart of something," and "awareness of a thing" means to preserve it, understand it and accept it.

While environmental awareness is defined as "all mental activities that increase awareness, feeling and sense of all environmental problems and issues," and defines it based on knowledge and awareness of something in the environment, whether this thing is abstract or tangible, which is the lowest level of the emotional field, and Charles defined it as "perception of something in the environment." (Narula, Swapril, & Archana, 2018, p. 18) It aims to extract a good citizen who has knowledge and interest in environmental problems from providing assistance and encouraging their solution."

3.2. Environmental Awareness Components

Consciousness consists of the following components:

3.2.1. *Environmental education*

Environmental education or as it is also termed as environmental education is a continuous process as long as human life continues, needed by young and old alike, and aims to communicate environmental awareness (David, 2013, p. 10), knowledge, behaviors and ecological values to target groups in the formal and non-formal education sectors, in addition to commitment to the Ethical responsibility towards the rational use of resources for sound and sustainable development, and environmental education is an essential part of programs and strategies for spreading environmental awareness. This term was first addressed by Professor William b.stapp in 1969 when he revealed that environmental education aims to produce a citizen capable of Knowledge of the topics related to the environment and its diversity and knowledge of environmental problems to create incentives for him to move and address these problems in the right way.

3.2.2. *Environmental culture*

This term refers to the elements of individual possession of cognitive and emotional behaviors through which he can interact with the environment in a correct and non-negative manner, by making the task of protecting the environment the responsibility of every individual in society and in all, so we will provide you in this article a comprehensive and detailed view of culture environment, and how to spread it among individuals (Plumwood, 2002, p. 06).

3.2.3. *Environmental media*

Environmental media is a new specialty in the field of media that began to grow in the early seventies. In general, it is defined as "a type of specialized media aimed at disseminating correct information and data about the environment and related opinions and trends, with the aim of informing the public of

everything related to the environment surrounding them and creating awareness. It is also known as “the systematic use of the media by qualified environmental and media persons to raise awareness of environmental issues, and to create a public opinion that interacts positively with those issues.” (Anders, 2010) The importance of environmental media does not come from being an essential element in building environmental awareness and spreading the concept of sustainable development. Not only, but its importance now lies in spreading the culture of disasters and awareness of them and building the adaptive capacities of the human being to confront them rationally.

3.3. Means of Spreading Environmental Awareness Within the University

The most important means of achieving environmental awareness in the following elements:

- Providing students with educational skills and experiences that make the student positive in their behavior and interactions with the environment (Jnan, 2016, p. 239);
- Active participation in various academic events and days that study the dangers of environmental pollution on the individual, society and the environment, and interest in spreading the necessary awareness through various educational activities such as seminars, conferences and scientific forums dealing with environmental matters;
- Providing the various disciplines with at least a standard for defining environmental issues and how to protect and prevent them;
- Celebrating events that concern environmental issues and publicizing their importance, such as World Water Day, etc.;
- Sending missions abroad to attend international events related to the environment;
- The use of places of worship to develop the mimetic aspect of the human being;
- Using modern means and technology to attract and pay attention to students inside and outside the university in order to preserve the environment and its components;
- Focusing on studying vital local and regional issues related to environmental problems and working to change negative trends.

4. A FIELD STUDY AT SOUK AHRAS UNIVERSITY

4.1. Methodology of the Study

In order to answer the problem of the study, we tried to drop the theoretical study on a group of master students registered in the first year at the Faculty of Economics, Commercial and Management Sciences at the University of Souk Ahras – Algeria-, and we relied on a sample of 32 students out of 160 master First year students, that is, 20% divided into 6 specialties.

In order to determine the representation of the sample in each discipline, the researcher relied on the stratified sampling method in order to ensure the representation of the various disciplines in the research sample, based on the percentage of participation of each discipline in the community, through the following equation:

$$(\text{Number of students in the major/Number of students in the community as a whole}) \times (\text{Research sample}) \quad (1)$$

Table 1. Research Population and Sample

Specialty	The total number of students in each major (student)	The proportion of the sample from the specialty %	The number of individuals in the sample in each specialty
Marketing services	14	8.75	3
Economics and corporate management	34	21.25	7
Monetary and banking economics	33	20.625	6
Business management	28	17.5	6
Corporate finance	27	16.875	5
Accounting and Auditing	24	15	5
Total	160	100	32

Source: prepared by the researcher based on information from faculty

These questionnaires were distributed to the study sample based on the random distribution for each specialty based on the nominal lists of the specialization. All of them were retrieved and are valid for analysis. This questionnaire was divided into 03 branches containing 20 phrases related to the level of environmental awareness at Souk Ahras University:

- Section one: related to the student’s level of environmental culture and contains 08 phrases;
- The second section: related to education and environmental education and contains 08 phrases;
- The third branch: related to the use of environmental media in the university and contains 04 phrases.

The five-point Likert scale was relied upon in the preparation of the answers tests on the expressions, so that each test was given a specific weight as follows:

Table 2. Five Likert scale

Strongly agree	Agree	Neutral	Not agree	Strongly disagree
5	4	3	2	1

Source: prepared by the researcher

Accordingly, the values of the arithmetic means reached by the study will be dealt with according to the following equation:

$$\text{Category length} = (\text{maximum value} - \text{minimum value}) / \text{number of levels} \quad (2)$$

$$\text{So the length of the class} = \frac{5-1}{5} = 0.8$$

Table 3. The scale of tests adopted in the analysis of arithmetic averages

Testing	Too week	Week	Intermediate	High	Very high
Scope	1.00-1.79	1.80-2.59	2.6- 3.39	3.4-4.19	4.9-5.0

Source: prepared by the researcher

4.2. Reliability of the Study

In order to know the apparent validity of the questionnaire, it was presented to a group of arbitrators and various observations were taken.

Table 4. Cronbach's alpha coefficient for the questionnaire expressions

The number of phrases	Cronbach's alpha coefficient
20	0.827

Source: prepared by the researcher based on the outputs of the spss version 19

Through the above table, we note that Cronbach's alpha coefficient is 0.827, which is greater than 0.6, and therefore it can be said that the resolution is characterized by stability and analysis can be performed on it.

4.3. Results

For the purposes of data analysis and testing the research hypotheses, we extracted the arithmetic means and standard deviations of the individuals' answers to the statements.

4.3.1. Results related to the level of environmental culture among students in the study sample

Table 5 represents the arithmetic averages and standard deviation of answers about the level of environmental culture of the students.

Table 5. Arithmetic averages and standard deviation of answers about the level of environmental culture of the students

No	Phrase	Arithmetic mean	Standard deviation	Ranking
01	Environmental issues are one of your main concerns	3.937	0.532	3
02	All of your behaviors are eco-friendly	3.853	0.519	4
03	You are aware of all the causes of pollution in your surroundings	4.503	0.352	1
04	Sustainable development is one of the topics that arouse your curiosity	3.260	0.273	6
05	I follow up regularly, through newspapers and television, news related to environmental issues	2.518	0.542	7
06	Better waste recycling than disposal	4.395	0.891	2
07	Protecting the environment is the government's responsibility, not mine	2.003	0.760	8
08	I would like to volunteer to work with private associations concerned with the environment	3.619	0.659	5
	Total Arithmetic mean	3.512	0.430	

Source: prepared by the researcher based on the outputs of the SPSS version 19

We note from the above table that the arithmetic mean of the sample's answers about the level of their environmental culture is estimated at 3,512, which belongs to 3.40-4.19, which agrees with the phrase "high." This indicates that the level of environmental culture among students is high and with a rather

low standard deviation, which explains the low-level Community dispersal.

As for the phrases level (3-6), their arithmetic mean values ranged between 4.503 and 4.395, which belong to the range 4.20-5.00, which corresponds to the phrase very high, while phrase 7 recorded the lowest mean of 2.003, which is a level that indicates that The responsibility to protect the environment is not only limited to the role of the state, but it goes beyond that, as it is the responsibility of the individual before the group.

4.3.2. Results related to the level of environmental education at the university

The table below shows the arithmetic mean and standard deviation of the sample answers about environmental education.

Table 6. Arithmetic mean and standard deviation of the sample answers about environmental education

No	Phrase	Arithmetic mean	Standard deviation	Ranking
01	The university is keen to pay attention to environmental issues	3.212	1.023	5
02	The university schedules seminars and study days on environmental issues	2.873	0.762	6
03	Whatever your major, it includes at least one measure of environmental issues	4.234	0.518	2
04	There is a direct link between your specialization and the topic of the environment	3.232	0.340	4
05	Professors always work to refer to topics related to environmental aspects	4.127	0.529	3
06	The university library has a significant number of books dealing with environmental issues	4.876	0.726	1
07	The clubs in the university work on environmental awareness	2.837	1.011	7
08	The university is working on displaying and placing posters and brochures in order to consolidate your environmental culture	2.343	0.843	8
	Total Arithmetic mean	3.467	0.453	

Source: prepared by the researcher based on the outputs of the SPSS version 19

The statistical results related to environmental education showed that the university is keen on activating environmental education programs to a medium degree, and this was indicated by the total arithmetic average, which recorded 3,467, which is a value located in the field of 2.6-3.39, but with a relatively low standard deviation indicative of the low rate of dispersion and variance in the answers. The sample, and phrase 06 scored the highest arithmetic average of 4,876, which is indicative of a high level in the provision of books on environmental issues, while phrase 08 recorded the lowest level, and this indicates that the university did not reach the culture of relying on

posters and brochures in order to consolidate environmental culture.

4.3.3. Results related to the level of environmental media at the university

The table below shows the arithmetic averages and standard deviation of the sample answers about the environmental media.

Table 7. Arithmetic averages and standard deviation of the sample answers about the environmental media

No	Phrase	Arithmetic mean	Standard deviation	Ranking
01	The University is working to publish various topics related to the environment on its website	3.680	0.543	2
02	The University has a journal for environmental research	1.223	0.324	4
03	The University has special and specific places to throw waste	4.211	0.114	1
04	The University displays environmental awareness campaigns based on data show, for example.	1.238	0.543	3
	Total Arithmetic mean	2.588	0.895	

Source: prepared by the researcher based on the outputs of the SPSS version 19

In the above table, one notes that the answers of the sample members about the level of environmental media at the university recorded an arithmetic mean of 2.588, which is a weak level because it is located in the range 1.8-2.59 and this is with a relatively high standard deviation, which indicates a discrepancy in the positives of the sample, but at the level of the expressions of this In the branch, we see that there is a discrepancy in the criterion of importance, as the phrase “the university has special and specific places to throw waste” recorded the highest arithmetic average in the group 4.211, which is located in a very high field according to the test schedule, and it also recorded the lowest variation in the group 0.114, while the phrase “the university has a special magazine” recorded In research related to the environment, the lowest arithmetic average is 1.223, which is a very poor level according to the examination schedule.

4.4. Testing the Hypotheses of the Study

The main problem of this study revolves around “to what extent was Souk Ahras University able to spread environmental awareness among the master’s students in light of its orientation towards achieving the entrance to environmental citizenship?”

In order to answer this question, we will discuss the results in the light of testing the sub-hypotheses.

The following table shows the arithmetic averages and standard deviations for each component of spreading environmental awareness at the university.

Table 8. Arithmetic means and standard deviation of the answers of the study sample on the axis of environmental awareness

Axes (hypotheses)	Arithmetic mean	Orientation
The level of environmental culture of the student in light of environmental citizenship	3.512	High level
Environmental education (environmental education) within the university in light of environmental citizenship	3.467	High level
Environmental media inside the University in light of the trend towards environmental citizenship	2.588	Week level
The total arithmetic mean	3.189	

Source: prepared by the researcher

The first hypothesis: If the arithmetic mean is greater than 3.4, then the master's student at Souk Ahras University has a high level of environmental culture.

We note from the above table that the value of the general arithmetic mean of the responses of the environmental culture sample members is 3.512, which is greater than the hypothetical average of 3.4, and this indicates that the master’s student at the Souk Ahras University, and precisely in the Faculty of Economics, has a high cultural level in the environmental aspect. (The validity of the first hypothesis).

The second hypothesis: If the arithmetic mean is greater than 3.4, then Souk Ahras University is interested in spreading environmental awareness among its master's students through activating environmental education.

The above table shows us that the value of the general arithmetic mean of the answers of the sample members about education or environmental education amounted to 3,467, which is greater than the hypothetical average of 3.4, and this indicates that Souk Ahras University cares about environmental education, and this proves (the validity of the second hypothesis).

The third hypothesis: If the arithmetic mean is greater than 3.4, then Souk Ahras University is interested in spreading environmental awareness among its master's students by activating environmental media.

The above table shows us that the value of the general arithmetic mean of the answers of the sample members about the environmental media amounted to 2,588, which is less than the hypothetical average of 3.4, and this indicates that Souk Ahras University does not care about the environmental media, and this negates the validity of the third hypothesis).

Finally, and based on the sub-hypotheses, we can say that Souk Ahras University was partially able to spread environmental awareness among the master’s students in light of its orientation towards achieving the entrance to environmental citizenship, as the level of environmental culture available among its master’s students and its environmental education programs scored a high level, but it remains The problem is the necessity of activating the available media and directing it to serve the environmental requirements.

5. RESULTS AND RECOMMENDATIONS

After completing our study, both theoretical and practical, we reached a set of results and suggestions that can be summarized as follows:

From the results of the field study and hypothesis testing, the results of the study were determined as follows:

- Citizenship represents the effort to inculcate a set of values, principles and ideals in the members of society, in order for them to be fit and able to participate effectively and actively in all environmental issues;
- Citizenship represents the effort to inculcate a set of values, principles and ideals in the members of society, in order for them to be fit and able to participate effectively and actively in all environmental issues;
- Souk Ahras University seeks to move towards the concept of environmental citizenship by activating the requirements of spreading environmental awareness among its students;
- The majority of the sample members possess a relatively strong environmental culture;
- It became clear through the field study that one of the most important means of spreading environmental awareness within the university is the level of the student per se, its capabilities, and its knowledge, scientific and ethical balance regarding the environmental aspect;
- The great importance that environmental education and environmental education play in achieving the requirements of spreading environmental awareness within the university;

REFERENCES

1. Anders, H. (2010) *Environmental media and communication*. London: Routledge.
2. Andreas, C.H.; & others. (2020). *Conceptualizing environmental citizenship for 21st century education*. Springer open: cost European Cooperation in Science and Technology.
3. Barreto, M.C.A ; Larissa , F.A ; Shamy, S.C. (2022). Relationship between personal and Environmental factors and prevalence physical impairment in Brazil -a population-based study-. *Ciência & Saúde Coletiva*, 27(04) *SciELO*, Brasil. Available at: <https://doi.org/10.1590/1413-81232022274.06472021>.
4. Buko, A. (August 2009). *Enironmental citizenship for sustainable consumption*. Master Thesis. School of Management and Governance, Public Administration, university of twente, Netherland. Available at: https://essay.utwente.nl/60267/1/MA_thesis_A_Buko.pdf.
5. David, H.E. (2014). *Environmental Education: key of issues of the future*. U.S.A: pergamon press.
6. Dobson, A. (2003). *Citizenship and the Environment*. United Kingdom: Oxford University Press.
7. Dobson, A.; Angel, V.S. (2006). *Citizenship, Environment, Economy*. Hampshire, Routledge, UK: Taylor and Francis Group Ltd.
8. François, S. (2016). *Environmental awareness and the design of literature*. (Vol. 3), Brill rodopi.
9. Grantham, J. (2012). Living on a finit planet: where no-one likes to hear bad news. Programme for sustainability leadership, University of Cambridge. Available at: <https://www.cisl.cam.ac.uk/system/files/documents/jeremy-grantham-living-on-a-finite-planet-sosl12-h.pdf>.
10. Gülalp, H. (2006). *Citizenship and ethnic conflict: challenging the nation-state*. London: published by Routledge.
11. Jnan, Q. S. (2016). Level of awarness of intermediate students in kirkus governrate. *kirkuk journal for human studies*, 11(02), 239.
12. Martinho, A.P.; Bacelar, P.N; Caeiro, S.; Amador, F; Oliveira, C. (2010). Environmental citizenship and participation: The role of Education peograms. *Knowledge of collaboration and learning for sustainable innovation*, Netherlands: ERSCP-EMSU conference.
13. Mravcová, A. (2019). Environmental awareness and environmental citizenship dimension. *slovak journal of political sciences*, 19(02), Available at: <https://doi.org/10.34135/sjps.190202>.
14. Narula, S.; Swapril, R.; Archana, S. (2018). *Environmental awareness and the role of social media*. united states of america: IGI globe.
15. Pierre, B.; Lnda, C.; David, H. (2004). *From subjects to citizens*. Canada: national library of canada cataloguing in publication. University of Ottawa press.
16. Plumwood, V. (2002). *Environmental Culture: The ecological crisis of reason*. New York, Routledge, U.S.A: Taylor and Francis Group.
17. Rogers, C. (1961). On becoming a person: a therapists view of psychotherapy. (Peter, D.; Kramer, M.Trans.) Boston, New york: Houghton Mifflin Company.
18. Sarbaini, F. (2020). Evaluation of Environmental Citizenship Levels and Their Implications Against Ecological Values and Practices; How about Prospective

Based on the results of the study, the researcher recommends:

- Benefiting from the expertise of professors in the field of raising environmental awareness through direct contact between the student and the professor regarding environmental issues;
- Coordinating with specialists in environmental issues to hold seminars and study days that contribute to environmental awareness;
- The necessity of relying on environmental education in order to build a knowledge base for students and encourage them to research environmental issues in the future;
- Encouraging students to carry out environmentally friendly practices through their presence in or outside the university, such as reducing printing and smoking, etc.;
- The necessity of coordination between the university and the media to make television programs aimed at environmental awareness.

Teacher Students. *Social Science, Education and Humanities Research*, 525.

19. Syazni, J.; Mohd, K.A.K; Noorjima, A.; Nurulhuda, R.; Nik, H.N.M. (2018). Environmental awareness level among University Students in Malaysia: A review.

International Journal of Engineering & Technology,
7(4.34). Available at:
<https://doi.org/10.14419/ijet.v7i4.34.23575>.