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Developing the Ecological Citizenship of Older Adolescents

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Abstract. The idea of sustainable development at the global level occupies one of the most important places. The Earth can manage itself and maintain all biological diversity, adhere to democracy, equality, take into account human rights, freedom and equal opportunities. Since climate change poses an increasing risk to human health and safety, the development of public ecological awareness becomes extremely important. The fact that the problem of climate change is increasing and confirmed by increasing emissions of greenhouse gases, rising sea levels, longer droughts, stronger and more frequent storms, melting ice sheets, larger and more frequent fires. Advances in technology such as smartphones, streaming, social media, and touch screens have affected teenagers' connection to nature. Being interested in the ecological citizenship of older teenagers raises the question, why and how can the younger generation contribute to the solution of ecological problems? Whether there are educational models that can help strengthen young people's beliefs and abilities to solve climate change problems. In this article will be reviewed the literature from the aspect of ecological culture education, ecological position as the goal of education, the concept of ecological citizenship, its education and suggestions.

1. Introduction

The Intergovernmental Panel on Climate Change [27] emphasizes that current levels of emissions have already contributed to changes in Earth systems that will require people and communities to respond to potentially negative impacts, so mitigation alone will not be sufficient. However, little research has focused on what society understands about the role of adaptation and how individuals distinguish between adaptive and mitigation responses [25].

In European Union documents Lifelong Learning Program Call for Proposals 2011–2013 Strategic Priorities, Developing Key Competences at School in Europe: Challenges and Opportunities for Policy, Education and Training in Europe 2020 – the Contribution of Education and Training to Economic Recovery, Growth and Jobs emphasizes that it is very important to develop general competences that would help young people to work and study in multicultural situations and adapt to rapidly changing globalizing environment. Also, the document of the National Sustainable Development Strategy adopted by the Republic of Lithuania defines the importance of sustainable development in order to reduce pollution and the effects of globalization, therefore ecological education is included in the General curriculum and educational standards for pre-school, primary and basic education. However, the European Union is beginning to pay even more attention to globalization issues and in the new European Union documents published in 2019, the European Green Deal and the EU-US agenda for global change, provide for an exceptional need to focus on sustainable consumption and pollution reduction.

Education is one of the areas that helps improve public understanding of ecology [13]. More and more ecological programs and projects are being initiated and integrated into the educational process in



order to acquaint young people with ecology. Today's youth are often called the digital generation, they are taught to deal with mobile devices and the Internet from childhood, so they are often called truth seekers who value self-expression, avoid labels, mobilize to raise relevant issues, but lose touch with nature [26].

Although global climate change has been a growing concern for several decades and research on the possibilities of ecological citizenship among young people is rare, especially when it comes to models of ecological citizenship behavior formation [20]. Since the beginning of the 90s, the idea of ecological (environmental, sustainable, green) citizenship has been gaining ground in the theoretical and public discourse, which corresponds to the following attitude: that we as citizens not only have the right to demand from our states that they provide us with an unpolluted, clean environment, but we must also contribute to the implementation of environmentally friendly changes, since ecology is not only a connection with nature, but also with the prevailing values in the family [18]. Research identifies this period as the beginning of a growing trend of teenagers spending far less time in nature than ever before [21]. Since the gap between younger generation and the environment is growing it is necessary to grow the awareness of ecological citizenship and its development. In this article I will reveal the concept of ecological citizenship and its education.

2. Ecological citizenship as a component of common citizenship

Thus, an increasing number of scientists [22÷33] emphasize the issue of climate change and promote the expansion of public understanding of climate change, paying special attention to the development of young people's ecological citizenship [23]. The concept of ecological citizenship as a combination of ecological, civil society and state action has grown over the past few decades in both environmental policy and academia [7]. Ecological citizenship as a concept is supported by philosophers and sociologists, examining how society solves the environmental and ecological problems it faces every day [8]. Ecological citizenship as an expression of citizenship is defined as the action of a citizen in society (with its needs, rights, duties), as a creator (making decisions and feeling responsible for those decisions), as a participant (having certain abilities, skills, knowledge) [12].

Ecological citizenship can be defined as a set of actions inspired by green ideas to protect the environment [9]. Green political theory is an important element in moving towards sustainability and developing ecological citizenship [2]. Ecological citizenship is defined as values, attitudes, awareness, and practical abilities that enable the development of ecological identification and the strengthening of ecological power, together with others to create a sustainable society in a creative and socially responsible manner, and to strengthen environmentalism in the community [12].

Thomashow [32] defines ecological citizenship as the way in which people understand themselves in relation to the Earth and as a responsible environmental citizen who behaves and acts to solve contemporary ecological problems, prevent the emergence of new ecological problems, and achieve sustainability. These indicators of ecological citizenship can be found in a person's personality, values, actions and sense of self. Pelo [25] partially focuses on ecological education and emphasizes that children's ecological citizenship includes their imagination, emotions, experiences, knowledge and ethics.

Chawla [5] describes two ways in which adolescents relate to the natural environment, including projecting their feelings toward the ecosystem and recognizing living systems as having their own intrinsic rights, needs, and feelings. Ecological citizenship must be reflected not only in a person's perception, but also in his behavior, promoting sustainability, ecological, economic, and social well-being. If the last aspect is not taken into account, then the rapid growth of the economy will quickly deplete natural resources, increase environmental pollution and thus prevent the improvement of the economy [13].

Ecological citizenship is seen as important in addressing global environmental issues such as climate change as well as supporting environmental organizations and individuals, as well as contributing to public pressure for political action [31÷24]. Ecological citizenship consists of holistic aspects of

essential natural science knowledge, as awareness of organisms' relationships and interactions with other living organisms and their surrounding physical environment is important [17]. The concept of ecological citizenship includes not only actions that protect the environment, but also beliefs, motivation and thinking that encourage the development of ecological values of awareness [29].

According to Dobson [10] ecological citizenship refers to environmentally friendly behavior in public and private environments, encouraging the choice of sustainable living, participation and co-creating sustainability policies. Ecological citizenship is needed to create a more sustainable society and world by transforming the values, beliefs, behaviors and attitudes of individuals [3].

Representatives of cognitive theory: Piaget, Kohlberg, Eisenberg point out that the formation of citizenship at a younger school age depends on the cognitive development of the child [21]. Ecological citizenship has a strong political and social and educational basis, as one must act responsibly in the environment, and one must have an environmentally oriented understanding and attitude that forces one to act in a way that preserves the environment [30]. An important aspect of ecological citizenship is raising awareness that citizens not only have the right to demand from their states that they ensure an unpolluted, clean environment, but also must themselves contribute to the implementation of environmentally friendly changes, participate in creating environmental welfare [20]. A central goal of ecological citizenship education is to develop individuals' ability to act as informed and empowered citizens [6].

3. Ecological education as a component of ecological citizenship education

Ecological education can be carried out in a formal or informal way according to the planned educational program, which aims to provide knowledge through different areas that nature is a very important part of a person's life, to understand that nature is the basis for the existence of all life, to develop love for nature [18]. According to researcher Judson [19] ecological education is divided into components: 1) cognitive (knowledge about nature); 2) emotional and value (emotional experiences in relation to nature); 3) practical (ecological knowledge and skills).

Other researchers emphasize that ecological education in the context of sustainable development is characterized by: diversity of educational forms and methods; continuity, relationship with other educational programs; adaptability; local context; in connection with practical activities [4]. It is understood that ecological education can occur in various areas of a young person's life, which ensures children's opportunities to think critically and take responsibility for solving ecological problems [23].

Ecological education is studied in various aspects by scientists from foreign countries, such as Hall [15] examines the issues of combining nationality with globality. Gurr [14] substantiates the importance of ecological education. Hannerz [16] notes the importance of knowing the cultural heritage of one's country and emphasizes the importance of combining it with interculturality ideas. Ross et al. [27] examines the ecological education of young people and emphasize the importance of long-term monitoring. According to Aramavičiūtė [1], it can be observed that all phenomena acting in a person's life have one or another influence on his educational process and behavior, which means that in order to develop ecological citizenship, not only formal but also non-formal education is important.

The components of ecological citizenship education include environment, education, and motivation, which contribute to ecological self-awareness [27]. Knowledge is important for the development of ecological citizenship, but the mere cultivation of knowledge in the development of ecological citizenship, without links to real life, personal experience, and values, is not sufficient and purposeful [17]. Education should be focused on the development of environmental and ecological values, knowledge, and skills, since the development of ecological citizenship requires integrated knowledge systems focused on understanding the interaction between humans and the environment [11].

According to Dobson [9], in order to solve ecological problems, increasing economic insecurity, destruction of nature, people need to develop ecological citizenship. The development of ecological citizenship aims to free people from predetermined behavioral norms and functions, to provide the opportunity to be part of the community, not to be afraid to submit their ideas and get involved in the

process [28]. Thus, most authors emphasize the necessity of ecological education for students as an educational goal, as well as the interaction of ecological values and raise questions about the nature, origins and causes of ecological crises. However, there is little analysis of the methodology of ecological education.

In response to the global situation, the resolution of the Minister of Education and Science of the Republic of Lithuania specifies the concept of ecology and environmental technology education and encourages the inclusion of the specified aspects in formal and non-formal education. This means that formal and non-formal education institutions increasingly include ecological topics in general education programs.

When developing an ecological citizen, it is important that the person understands what is happening (what processes) around him and how/why it is important to develop a person's self-awareness of the environment and its preservation. Equally important is the educator's ability not only to recognize the processes, but also the ability to correctly communicate the desired message to the student. In order to achieve a purposeful and focused intervention in the development of ecological citizenship, taking into account the theoretical and practical significance of the problem, the insufficient study of the manifestations of ecological citizenship of students and educational opportunities, it is appropriate to study the development of ecological citizenship, choosing older teenagers as the target group.

4. Conclusion

Nowadays a lot is being said and written about ecology and its problems. Many of them are the result of man's predatory behaviour with nature. One of the most important reasons for such behaviour is the lost spiritual connection of the present with the environment. Therefore, the maintenance of natural relations with nature, its patronage and the regulation of human activities are a particularly relevant problem these days.

In order to overcome the ecological crisis, it is necessary to develop human awareness and responsibility. Only then will the selfish attitude change, and a harmonious relationship between human and the natural environment will emerge. In solving this problem, the education of schoolchildren's ecological culture can play a significant role. It is a long and complex process, the foundations of which are laid in the family, and later they are improved at school.

Although global climate change has been a growing concern for several decades, studies on the development of ecological citizenship among young people (older teenagers) are rare. An interest in the ecological citizenship of older teenagers begs the question, why does generation Z seem more inclined than previous generations to address what is seen as potentially the greatest global threat?

Considering how generation Z interacts with social networks, this future research can provide organizations, politicians, non-profit organizations and other government officials with information that can help accelerate and improve the impact of teenagers on climate change. Looking at young climate change activists, we can sense the changing relationship with teaching/learning practices.

Climate activism activities can be seen as a unique or new learning medium that complements existing formal education practices. However, it is necessary to pay attention to the obvious doubts, mistrust, and disappointment of the young climate activists in formal education, its practices, its future.

Reviewing the literature from the aspect of ecological culture education, we can say in general that most authors emphasize the necessity of developing students' ecological position as the goal of this education, as well as the interaction of ecological and moral education, raise questions about the nature, origins and causes of the ecological crisis.

Last but not least, as it was said in this article, the gap between the younger generation and the environment is growing, adolescents start to raise questions about their future, ecological situation in the world and how they can contribute to the solution of ecological problems. Therefore, it is necessary to grow the awareness of ecological citizenship, pay attention to their needs and future, develop their knowledge about ecology and involve them in decision-making.

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