

III International Scientific Conference "Sustainable and efficient use of energy, water and natural resources – SEWAN-2021"





Title: Environmental education for sustainable development on the example of developing an educational module "Conscious Consumption" for non-core specializations

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education, sustainable development, conscious consumption

Keywords:

Research Objective:

Consumption and production around the world are the driving force of the global economy, based on the resources consumption in a way that continues to have a devastating impact on the environment.

Environmental education and awareness are the basis for ensuring environmental safety.

The relevance of the project lies in the necessity to develop the personal responsibility of population through practical experience. There are many educational courses for students on sustainable development, but they are either for specialized areas, or provide a theoretical basis that is difficult for a student to apply in practice.

The **goal of the project** is the formation of an ecological culture among students of all specializations and qualifacation through a deep systemic transition from a culture of consumption to awareness in the choice of goods and services, based on personal responsibility and understanding of their place in the environment.

Project objectives:

- 1. Development of the discipline pedagogical design.
- 2. Preparing lecture material on relevant environmental topics for Generation Z.
- 3. Creation of modern media content.
- 4. Development of an online educational module dedicated to the basics of sustainable development and conscious consumption for students of non-core training areas that meets the modern needs of generation Z.
- 5. Placement of the educational module on the website https://openedu.ru/
- 6. Formation of personal responsibility for the state of the environment among course participants.
- 7. Practical application of the provisions of ecology as a science in human life as an element of the environment.





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Results

As a result of the work an educational module was created. In this module there are a series of seven lectures, a laboratory work and a final test on how to reflect conscious consumption in a lifestyle and what global environmental, economic and social problems everyone can help to solve. In the developed module in the learning process modern technologies are used to avoid the monotony of the educational environment and the monotony of the educational process. Conditions for changing the types of activities of students and ways of perceiving information have been created.

The developed module "Conscious consumption" forms the necessary basis for understanding the patterns of production and consumption, rational use of resources, human influence on the environment. The module allows you not only to listen to a course that includes such modern concepts and concepts as: Sustainable Development, circular economy, zero waste, fast and slow fashion, microplastics, greenwashing, eco-shaming, eco-anxiety, and others, but also to master daily "eco-habits" through practical work.

The online module is designed in such a way that the student does not need to complete additional disciplines before starting training. Despite the fact that the lectures contain topical issues related to global world problems and trends, including environmental, economic, social, all information is presented in such a way that it will be understandable to a modern student of any level of training.

The project team has done a lot of work on the preparation of theoretical material on the project topic as well as its adaptation for the modern generation. An extensive analysis of the available materials on the project topic was carried out; as a result, a detailed list of additional modern materials was compiled, including blogs, documentaries and services that facilitate the understanding of the concept of Sustainable Development and the transition to mindfulness in the choice of goods and services.

Upon completion of the module students will:

- Know the main threats to the environment and human health today.
- Wil be able to choose goods and services that are safe for the environment and human health, organize their life and work in accordance with modern social and environmental concepts.
- Will be able to create and maintain safe living conditions and assess critically threats to health and the environment.







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Conclusions

Based on the received feedback the authors received confirmation that the module really deserves the attention of young people and its topic is relevant and in demand.

- 1. The educational module was posted on the website https://openedu.ru/.
- 2. As a result of the project, from September 28 to October 26, 2020, an online course was implemented on the Open Education platform, which was studied by 399 people.
- 3. After completing the course, some participants left feedback.

Participants commended:

- analysis of all components of our life;
- the usefulness and importance of the information;
- the relevance of the voiced topics;
- the material supply;
- a task for self-study (laboratory work), performing which "you will definitely learn many useful things".
- 4. By completing the assignments, the student understands how to apply practical advice to reduce the negative impact on the environment in everyday life based on the concept of sustainable development and conscious consumption using personal input, knowledge, skills and abilities. As a result, the students become motivated to further expand knowledge in the studied area and an incentive to apply them.
- 5. Based on the work done and the results obtained, it is planned to supplement the course with theoretical information, based on the requests and wishes of the listeners. After which the project can be scaled up and become open to students of other educational institutions.
- 6. At ITMO University, the module can also be implemented at all levels of qualifications as an optional discipline included in any curriculum.
- 7. If necessary, the content of the module can be supplemented or reduced in accordance with the request of the heads of educational programs. Which will not be difficult, because the author of the module has the appropriate competencies.

References

- 1. Stepanova V.A. Environmental education and personal responsibility for "green" development. //Scientific notes of young researchers, 2015. № 3. P. 67–72.
- 2. Elhacham, E., Ben-Uri, L., Grozovski, J. et al. Global human-made mass exceeds all living biomass. //Nature, 2020. № 588, P. 442–444.







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Thank you for your attention!

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