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The role of environmental education in the training of tourism specialists: a case study of the “Sustainable tourism” course

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Роль экологического образования в подготовке специалистов сферы туризма на примере дисциплины «Устойчивый туризм»

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Abstract

This article examines the role of environmental education in the professional training of future tourism and service industry specialists, using the “Sustainable Tourism” course as a case study. The relevance of the study stems from the growing negative impact of tourism on the environment and the corresponding need to develop environmental competencies among students majoring in Tourism. The aim of the study is to determine the significance of environmental education in the training of future tourism and service specialists through the example of the “Sustainable Tourism” course. The methodological framework of the study is based on the competency-based approach; the research methods include analysis of scientific and educational literature and pedagogical observation of the educational process during the teaching of the course at the Professional College

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of Kyrgyz-Turkish Manas University. The study clarifies the content of the concepts “environmental education” and “environmental competence” and describes the structure and content of the “Sustainable Tourism” course, including a fragment of a practical class devoted to overtourism. The pedagogical observation revealed positive dynamics: students began to use environmental terminology more actively, to take environmental aspects into account when analyzing professional situations, and to propose their own solutions for promoting sustainable tourism development in Kyrgyzstan. The findings confirm that environmental education is an essential component of the professional training of future tourism and service specialists.

Аннотация

В данной статье рассматривается роль экологического образования в подготовке будущих специалистов сферы туризма и сервиса на примере дисциплины «Устойчивый туризм». Актуальность исследования обусловлена значительным негативным воздействием туризма на окружающую среду и, соответственно, необходимостью формирования экологических компетенций у студентов направления подготовки «Туризм». Целью исследования является определение значения экологического образования в подготовке будущих специалистов сферы туризма и сервиса на примере дисциплины «Устойчивый туризм». Методологическую основу исследования составляет компетентностный подход; в работе использованы методы анализа научной и учебной литературы, а также метод педагогического наблюдения за образовательным процессом в ходе преподавания курса в Профессиональном колледже Кыргызско-Турецкого университета «Манас». В статье раскрыто содержание понятий «экологическое образование» и «экологическая компетенция», а также рассмотрены структура и содержание дисциплины «Устойчивый туризм», включая фрагмент практического занятия по теме сверттуризма. Результаты педагогического наблюдения показали положительную динамику: студенты стали активнее использовать экологическую терминологию, учитывать экологические аспекты при анализе профессиональных ситуаций и предлагать собственные решения по продвижению устойчивого туризма в Кыргызстане. Полученные результаты подтверждают, что экологическое образование является важным компонентом профессиональной подготовки будущих специалистов сферы туризма и сервиса.

Keywords: environmental education, environmental competencies, sustainable tourism, specialist training, tourism industry, pedagogical observation, competency-based approach, environmental culture, tourism and hospitality education.

Ключевые слова: экологическое образование, экологические компетенции, устойчивый туризм, подготовка специалистов, сфера туризма, педагогическое наблюдение, компетентностный подход, экологическая культура, туристское и гостиничное образование.

Introduction

Etymologically, the word “tourism,” borrowed from French, denotes “travel” or “journey” and implies a person’s temporary departure from their usual environment [1]. Today tourism is one of the most dynamically developing sectors of the global economy: it stimulates job creation,

promotes the development of hospitality and transport infrastructure, and contributes to closer ties between nations and the expansion of international cultural relations. In many countries, tourism remains one of the principal sources of national income.

However, despite its positive economic effects, the active growth of tourism places considerable pressure on the natural environment: air and water pollution, depletion of natural resources, excessive use of natural areas, and adverse effects on flora and fauna are among its most visible consequences. Tourism should therefore be regarded not merely as a form of travel and leisure but as a significant economic sector whose sustainable development depends directly on the quality of professional training received by its future workforce. In particular, tourism industry employees increasingly need to possess environmental knowledge and competencies alongside their professional skills. The combination of these factors determines the relevance of the present study.

The research problem lies in the insufficient formation of environmental competencies among future tourism and service specialists — competencies that are indispensable for organizing the activities of tourism enterprises in accordance with the principles of sustainable development. In practice, this deficit manifests itself in a number of ways: hotel staff rarely separate waste for recycling; hotels seldom introduce water- and energy-saving technologies; tour guides design excursion routes without regard for the permissible recreational load, leading to soil trampling and disturbance of wildlife; and front-line staff rarely explain the rules of conduct in natural recreational areas to tourists. Furthermore, graduates of tourism programs are often familiar with environmental issues only at a theoretical level and struggle to apply this knowledge in practice.

The aim of the study is to determine the role of environmental education in the training of specialists for the tourism and service sector, using the “Sustainable Tourism” course as a case study.

To achieve this aim, the following objectives were set: (1) to examine the significance of environmental education; (2) to determine the role of environmental competencies for future specialists in tourism and service; (3) to analyze the contribution of the “Sustainable Tourism” course to the formation of students’ environmental competencies.

The object of the study is the professional training of students majoring in Tourism. The subject of the study is environmental education and the “Sustainable Tourism” course as instruments for developing environmental competencies among future tourism and service specialists.

According to N.V. Belonova and I.B. Bicheva, environmental education is a process aimed at transforming the individual and helping students develop a system of knowledge and skills to foster an environmentally responsible and respectful attitude toward the environment [2, p. 114–121]. Treshchev regards environmental education not merely as a separate subject or occasional activity, but as a key priority of higher education as a whole [3]. Environmental education enables individuals to understand the negative consequences of their actions on the environment and teaches them to minimize this impact. G.G. Nedyurmagomedov emphasizes the importance of forming, by the time of graduation, environmental competencies and a responsible attitude toward the environment among university graduates [4, p. 141–146]. Issues related to environmental education in the Kyrgyz Republic are addressed in the works of authors such as L.A. Baklykova [5],

A.R. Zhunusakunova [6], D.J. Kendirbaeva N.S. Orozalieva [7], T.E. Kylchykbaeva [8], K.O. Osmonbetova, and A.A. Yergeshova [9]. In our view, environmental education is one of the key components in the training of future professionals in the tourism industry.

At present, the integration of sustainable development principles into the professional training of tourism and service specialists has become particularly important. Accordingly, the “Sustainable Tourism” course plays a significant role in preparing future specialists for the sector, being aimed at forming students’ environmental culture, a responsible attitude toward the environment, and knowledge of contemporary approaches to organizing tourism activities. Sustainable tourism is not a distinct type of leisure but a form of tourism service delivery oriented toward meeting the needs of four core stakeholder groups: business, the environment, tourists, and the host community [10].

As they study this course, students learn about the key principles of sustainable development, environmental safety in tourism, and other topics essential for the professional practice of future specialists in this field. In addition, the “Sustainable Tourism” course helps develop the environmental competencies that future industry professionals need to make professional decisions regarding the impact of tourism on the environment.

As part of the “Sustainable Tourism” course, which is taught in the second year of the Professional College at the Kyrgyz-Turkish Manas University, Department of Tourism, students explore topics such as: the concepts of sustainable development and sustainable tourism, international standards for sustainable tourism, the environmental footprint of tourism and the tourist’s carbon footprint, local communities in tourism, overtourism, and the principles of ecotourism, sustainable tourism in Kyrgyzstan, resource conservation in tourism and slow tourism, eco-hotels as an element of sustainable tourism, tourism and cultural heritage preservation, rural tourism within the framework of sustainable tourism as a means of supporting local communities, as well as sustainable management of tourist destinations. The course is designed to last 14 weeks, with 3 hours per week, totaling 42 academic hours. In addition to traditional lectures, the course includes practical sessions, seminars, and project work aimed at developing students’ analytical thinking, teamwork, and practical skills. Special attention is given in class to understanding the importance of treating the environment with care and preserving natural and cultural resources in tourism. This course aims to develop competencies such as universal, general professional, and environmental skills.

During practical sessions, students complete assignments designed to develop environmental competencies. As part of their study of the topic “The Environmental Footprint of Tourism,” students analyze the impact of tourism on the environment and develop strategies to reduce the negative effects of tourism activities. The study of the topic “Eco-Hotels as an Element of Sustainable Tourism” involves familiarizing students with the environmental practices of hotels and analyzing how well these practices align with the principles of sustainable development. Additionally, as part of their project work, students prepare their own proposals for the development of sustainable tourism in Kyrgyzstan.

Excerpt from a class on the topic: “Overtourism”

Lesson Objective: To study and analyze the causes and consequences of overtourism; to help students develop skills in analyzing tourism processes and fostering a responsible attitude toward natural and cultural resources; and to develop students’ ability to work in teams.

Case Study: Overtourism in Venice

A photo of Venice is displayed on the screen. (The instructor reads the case study text: “Venice is one of the most visited tourist destinations in the world. Millions of tourists visit Venice every year, which leads to overburdening the city’s infrastructure, rising housing costs, and a decline in the quality of life for the local population. In addition, cruise ships create further challenges. Local authorities are implementing measures to regulate tourist flows, including restricting the entry of large cruise ships, controlling visitor numbers at specific sites, and introducing a fee for visiting the city during certain periods.”)

Questions for group discussion

1. Describe the signs of overtourism in Venice and what the consequences are for the local population.

2. What are local authorities doing to address the problem?

3. What additional measures can you suggest to ensure sustainable tourism in the city?

Students then give presentations on the topic of “overtourism,” selecting specific destinations. During their presentations, they analyze the problem and its impact on the local population and the environment. In addition, students propose their own measures to regulate tourist flows and address issues related to overtourism.

As can be seen, such classes help develop public speaking skills, critical thinking, and the ability to defend one’s point of view.

The methodological foundation of the study is the competency-based approach, which is primarily aimed at developing students’ professional and environmental competencies—skills that are essential for their future careers in the tourism sector.

This study employs research methods such as the analysis of scientific and educational literature, as well as pedagogical observation of the educational process during the teaching of the “Sustainable Tourism” course.

The literature review allowed us to examine scientific approaches to the issue of environmental education. According to D.S. Ermakov, the knowledge of ecology acquired by students through environmental education fosters an awareness of the importance of environmental issues and the value of natural resources [11].

It was previously believed that the goal of higher professional education was for students to acquire a specific set of knowledge, skills, and abilities. However, this approach to education is no longer sufficient. Today, employers prefer graduates who are able to apply their knowledge in practice. It is clear that the knowledge-based approach to learning has been replaced by a competency-based one. This transition is, in a sense, a response to the demands of the modern labor market and involves distinguishing between the concepts of “competence” and “competency.”

Thus, greater attention is now paid to what a person is capable of doing rather than to what they know. It follows that competence, as a characteristic of a person’s effectiveness, serves as a measure of their success [12, pp. 154–156].

According to A.V. Khutorskoy, “competence encompasses a set of interrelated personal qualities (knowledge, abilities, skills, and methods of activity) defined in relation to a specific range of subjects and processes necessary for high-quality, productive activity in relation to them. He views “competence” as a person’s mastery of and possession of the appropriate competence, including their personal attitude toward it and the object of their activity” [13].

In discussing ecological competence, Zakhlebny, A.N., and Dzyatkovskaya, E.N., define it as an integrative quality that includes not only knowledge about nature and its processes but also the ability to apply this knowledge in daily life and the development of ecologically literate and responsible behavior [14].

In her study, T.V. Korosteleva identifies four groups of environmental competencies: transformative, cognitive, communicative, and evaluative. Cognitive competencies are observed when acquiring knowledge about the environment. Transformative competencies, on the other hand, involve the ability to anticipate changes in the environment and take into account the laws of nature when interacting with it. Evaluative competencies represent the ability to appreciate the beauty of nature and recognize the impact of human activity on the environment. Communicative competencies, according to the author, involve the ability to interact with people, organize, and participate in environmental activities [15, pp. 92–94]. E.V. Melnikova views environmental competence not merely as the result of studying individual subjects, but as an indicator formed during the educational and upbringing process at an educational institution [16, pp. 347–349].

A. Panov believes that the training of tourism professionals has its own distinctive features, linked to the need for students to acquire knowledge in both the humanities and the natural sciences, as well as to develop an understanding of environmental values [17].

An analysis of the scientific literature leads to the conclusion that environmental education is an important component of the professional training of future specialists in the tourism and service sectors. It contributes to the development of environmental knowledge and a responsible attitude toward the environment.

It should be noted that environmental education is of particular importance for students majoring in “Tourism,” as their future professional activities are directly linked to the use of natural and cultural resources. Therefore, in our view, the course “Sustainable Tourism” plays a key role in developing environmental competencies.

Through this course, students learn about the principles of sustainable development, the responsible use of natural resources, and issues related to the preservation of cultural heritage. Thus, the knowledge gained by students

While studying this course, students learn about the principles of sustainable development, issues of environmental safety in tourism, the rational use of natural resources, and the preservation of cultural heritage. The knowledge gained by students will enable them to consider environmental aspects when making professional decisions in the future. In our view, this knowledge will enable future professionals to recognize the potential environmental impacts of tourism and to consider environmental aspects when making professional decisions.

During the course, it was noted that students showed great interest in topics related to contemporary environmental issues in tourism. Students are highly engaged in discussions of issues such as the environmental footprint of tourism, overtourism, and ecotourism. Working with specific case studies helps them not only better assimilate the material covered but also recognize its importance for their future professional careers.

Practical classes not only allow students to reinforce their theoretical knowledge but also help develop their analytical skills. Project-based work helps students develop the ability to work with various sources of information, articulate their own points of view, and respond to questions from the group. In addition, students learn to identify environmental problems, assess them, and propose possible solutions.

The results of pedagogical observation showed that at the beginning of the course, students viewed environmental issues as secondary compared to other topics in tourism. However, as the course progressed, environmental issues began to be taken into account when discussing various professional scenarios. It was also noted that, in discussions of various situations in tourism, students began to use environmental terminology more frequently—such as “overtourism,” “carbon footprint,” “sustainable development,” “resource conservation,” and others. Furthermore, while preparing for projects as part of the “Sustainable Tourism” course, students not only described specific situations related to the environment but also developed concrete practical solutions specifically for tourism in Kyrgyzstan (for example, the development of ecotourism, the implementation of environmental technologies in the hospitality sector, etc.).

Conclusion

It should be noted that environmental education is one of the most important components of the professional training of future tourism specialists. Every tourism professional today must understand the basic principles of sustainable tourism. Therefore, including the course “Sustainable Tourism” in the educational curriculum for future tourism and service professionals helps students develop environmental competencies, enabling them to take environmental issues into account in their professional work. During discussions with students, it became evident that they understood the need to maintain a balance between the economic benefits of tourism and the conservation of natural and cultural resources.

Environmental education plays an important role in the training of tourism and service professionals. It helps students better understand the impact of tourism on the environment and fosters a responsible attitude toward natural and cultural resources.

The course “Sustainable Tourism” demonstrates that studying environmental issues in tourism helps students not only acquire knowledge but also apply it in practice. Practical assignments, case studies, and group discussions help develop students’ ability to analyze situations and propose solutions.

Thus, environmental education is an important part of training future tourism professionals and helps students develop the skills they will need to work in the tourism sector.

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