Innovative technologies in vocational tourist-excursion education

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Abstract. The present article is concerned with application of innovative technologies in modern tourist-excursion education. In the article, materials related to the study are reviewed; ways to put innovations into practice are analyzed. Moreover, the main types of innovative technologies in tourist-excursion education are identified.

1 Introduction

Tourist-excursion education, in line with other areas of vocational education, shall meet up-to-date needs of the industry of tourism and excursion activities. Moreover, special attention shall be paid to issues of teaching process optimization.

Within this context, particular importance is being attached to application of innovative technologies that enable future tourism workers to get required expertise, knowledge and skills by means of unstandardized techniques.

Application of such technologies may become a kind of bridge between theoretical education and obtaining practical skills, promote utilizing of individual approach to teaching, applying new educational forms and methods, which make it possible to train students with consideration for present-day imperatives and conditions for tourism development.

The purpose of the present article is to analyze innovative technologies and to define preferences for their application in the course of improvement of tourist-excursion education.

In accordance with the purpose in view, the following tasks were completed:
- to cover special aspects of innovative technologies in vocational tourist-excursion education and to define preferences for their application in the course of teaching;
- to defines the key lines of application of innovative technologies, their functions and types of activity in vocational tourist-excursion education.

2 Background and methods

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In the today's dynamic world, innovations are essential for sustainable development of any sphere of action. It is relevant for education in general and for touristic education in particular. Special aspects of innovations in higher education are extensively represented in modern scientific literature. So that, for the study academic paper of authors, where the necessity of application of innovations in higher education is argued for, were used Anna Lašáková, Ľubica Bajzíková, Indra Dedze, 2017 [1]. Moreover, opinions of scientists Barkathunnisha Abu Bakar, 2020 [2] on timeliness of further scientific insights in the sphere of innovative technologies of higher education in the area of tourism are considered.

Experience in application of teaching innovations in universities, represented in the academic paper of Anne Mai Walder, 2017 [3] is also taken into consideration in the present study. Concept of the present study is built to an extent on opinions of several scientists on dynamics of processes in higher education and innovative trends in the tourist-excursion sphere, such as Janne Liburd, Anne-Mette Hjalager, 2010 [4].

Up-to-date instructional techniques and technologies, on which the authors of the present study rest, are presented in academic papers of Ana Dias Daniel, Rui Augusto Costa, Mariana Pita, Carlos Costa, Valentina Ndou Gioconda Mele, Pasquale Del Vecchio, Jianwei Qian, Rob Law Xinjian Li, 2019 [5-7].

Scientific literature points that in terms of existing global challenges it is necessary to reorient and review tourism education in order to rear self-disciplined future practisers Abu Bakar Barkathunnisha, Diane Lee, Anne Price, 2017 [8]. To make a comprehensive study, it was nesessary to analyze academic papers of such authors as Narcís Bassols i Gardella, 2020, Chih-Hsing Liu, Jeou-Shyan Horng, Sheng-Fang Chou, Yung-Chuan Huang, 2017, Syed Zamberi Ahmad, Abdul Rahim Abu Bakar, Norita Ahmad, 2018 [9-11].

The authors' opinions are based on the academic paper of Cathy H.C. Hsu, 2018 [12], which highlights the necessity for groundbreaking innovative changes in tourism education, including programs of study, educational science and teaching environment.

Awareness of the necessity for enhancement of practical skills за students in the sphere of tourism education is based on opinions of Yang Zhang, 2017, Stephen Schweinsberg, Stephen L.Wearing, Phil McManus, 2013, Huei-Ming Chiao Yu-Li Chen, Wei-Hsin Huang, 2018 [13-15].

In the article, the authors used provisions of academic papers of Max Juraschek, Lennart Büth, Niels Martin, Stefanie Pulst, Christoph Herrmann, 2020 [16] on opportunity for training on the basis of newsworthy events that is a kind of innovation in education. Some aspects of the present article rest on materials of Nicole C. Jackson, 2019 [17], which present the rationale for development of new expertises on the ground of higher education digitization.

Academic papers of Meiju Keinänen, Jani Ursin, Kari Nissinen, 2018 [18], where innovative tools and assessment criteria in higher education are represented, were also taken into consideration.

Special attention was paid to practice of Turkey related to change of tourism education from secondary to higher one by means of reorganizing of tourism schools to faculties in universities Zeynep Karsavuran, Bahattin Özdemir, 2019 [19], which indicates to importance of tourism education for qualitative training of specialists.

In terms of today's situation, when on-line education becomes relevant more than ever, the necessity for innovative techniques in tourism and hospitality education. Such techniques are described in the academic paper of Hyun Jeong Kim, Miyoung Jeong, 2018, Marianna Sigala, 2012 [20-21].

In the study, the authors used scientific findings in the sphere of innovative approaches in tourism education, which proved to be effective Zuzana Sándorová, Terézia Repáňová,

Zuzana Palenčíková, Norbert Beták, 2020, Susan L.Slocum, Daniela Y.Dimitrov, KelleyWebb, 2019, Jude Walker, Vimbiso Ngara Manyamba, 2020 [22, 23, 24].

The following research methods were used when conducting the research: descriptive, hindsight, system-oriented, and comparative study.

3 Results

Educational technology is a system of methods, approaches, steps, execution sequence of which enables to complete tasks of education, training, and personal development of a learner. The activity as itself is presented procedurally, i.e. as a specified action system; development and procedural implementation of components of pedagogical process in the form of a system of actions that deliver a guaranteed end-result [25].

At the same time, M. B. Lebedeva identifies the following components of educational technologies: planned learning outcomes, diagnostic tools for the initial, current and final state of learners, a set of learning models, criteria for choosing the optimal learning model for given specific conditions [26].

The process of using basic educational technologies and their components is constantly being improved by introducing new elements that meet the requirements of development of modern society. Therefore, we can talk about the continuity of introduction of innovations in this area of activity.

Scientific literature distinguishes such innovative educational technologies as developmental learning, problem-based learning, multilevel learning, collective learning system, technology for solving research problems, applying of the research method in teaching, project methods, debate technology, technology of modular and block-modular learning, lecture-seminar-credit training system, technology for development of "critical thinking", technology of using game methods in teaching: role-playing, business and other educational games, learning in collaboration, information and communication technologies, health-saving technologies, a system of innovative assessment - "portfolio", distance learning technology [27, 28].

In terms of the content specifics, informational learning technologies, game learning technologies, interactive learning technologies, problem learning technologies and project-based learning technologies are distinguished [29].

The defined technologies are also relevant for vocational education, targeted at training a specialist in a particular field of activity, orientable in modern economic and social realities and able to optimally fulfill himself or herself in the chosen profession.

At that, it is necessary to focus on advanced technologies, that is, those that both correspond to the current level of development of the tourist-excursion industry and are also oriented to the future, since, as a rule, a learner starts active professional activity upon completion of the training process, that is, in several years after receiving basic knowledge and skills.

In modern professional tourist-excursion education, the most relevant are project technologies (project learning), brainstorm (problem learning), training in the format of management decision simulation (dialogue and game learning), interactive and video technologies (information learning).

In our opinion, the technologies exhibiting the most promise for modern tourist-excursion education are project technologies, brainstorm, and management decision simulation, interactive and video technologies.

Project technologies are related to development of a tourist-excursion product that meets modern needs of the tourism sector and tasks of tourism development at the regional and state level. The projects developed in the learning process cannot be separated from reality and shall take actual regional tourist resources, infrastructure, and availability of

promising excursion sites into account. Therefore, it is important to develop skills of analyzing the resource base, which is formed, among others, in the course of practices, in particular in potential territory for sale of a tourist product.

Tourist-excursion vocational education shall comply with tasks of modern development of the tourism industry. That is why, application of innovative educational technologies in the tourism sector should be, first of all, practice-oriented. In this regard, in the course of practical training and job training it seems necessary to focus on introduction into the specifics of natural landscapes, cultural and historical territories, obtaining a set of knowledge about the peculiarities of using certain regions in tourist activities. The innovativeness of this direction shall consist of a combination of office job training and "field" practice, implemented in places of tours and excursions.

In terms of project technologies, a variety of projects is especially relevant both by type of tourism: educational, ecological, health resort, sports, business, ethnic, religious, gastronomic, weekend tours, and by types of excursions: sightseeing tours, architectural, religious, naturalistic, and others

Brainstorm technologies make it possible to simulate specific situations of tourist-excursion activities. Optimization of formation of necessary knowledge and skills shall follow the line of maximum immersion of learners into the atmosphere of tourist-excursion activities. For this purpose in the course of training it is essential to use specific professional situations, reflecting the specifics of clients' requests, seasonality of certain types of tourism, the specifics of promoting a tourist product, etc.

The joint solution of a specific professional situation makes it possible to develop skills of collective activity, while simultaneously fulfilling the individual potential of each learner. In this case, student's sciences societies play a special role, within the framework of which it is possible to set tasks of a scientific and practical nature.

Problematic situations may relate to activity of a touristic enterprise, the hotel industry, the main types of transport. Since the great majority of touristic enterprises are private, it is also necessary to analyze situations arising in the process of doing business. In the course of excursion activities, problematic issues of working with various types of tourists (by age group, professional and social status, etc.) are considered.

Technologies of management decision simulation imitate work in the tourist-excursion industry. Learners obtain practical skills of working with different segments of clients, guiding excursions, etc. Participation in practical touristic activities, even in the form of management decision simulation, enables students to experience the specifics of their future profession. For optimal implementation of these technologies, it is also important to take the regional specifics of tourism development into account.

Management decision simulation, oriented on identifying prospects of touristic activity in any given region is considered acceptable. The described technologies may include management decision simulation "manager-client", "tour operator-travel agent", "tour guide-tourist", workshop, quest-events, etc.

Interactive and video technologies include, first of all, distant training and visual elements of training. Distance education is relevant at all times, as gives students, living far from industry-specific higher education institutions, the opportunity to be professionally educated. Distance education increases opportunities of applying state-of-the-art technical and multimedia technologies, enhances visibility of the information provided.

When implementing distance learning forms, it is possible to use innovative technologies that are difficult to apply in a classroom with a large number of students. In this case, it is possible to use computer technologies of the tourism sector, tour booking systems, and conduct demonstration virtual excursions at several locations. Visual elements of teaching are applied when demonstrating educational films, cartographic material, and virtual excursions.

4 Discussion

Each of the described technologies has its own functional significance, and in the course of its implementation, certain types of activities are used (Table 1).

Table 1. Main innovative educational technologies in vocational tourist-excursion education

Technologies	Functions	Type of activity
Project	Disciplinary function Cognitive function Introduction to state-of-the-art technologies Personal enhancement Obtaining of professional skills	Development of a touristic product Development of an excursion service Development of a net of tour circuits Development of a program oriented to promotion of touristic products and services Project of a touristic enterprise establishing Development of a regional tourism development program Development of a net of tour circuits Project of a regional tourist-excursion cluster Formation of educational tours Formation of spa tours Formation of ecological tours Formation of ethnographic tours Formation of religious tours Formation of gastronomic tours Formation of advertising tours Formation of cruise routes Activity of student scientific societies
Brainstorm	Socialization of students Disciplinary function Personal enhancement Obtaining of professional skills Development of team work basis	Dealing with problematic situations Modeling of a touristic enterprise's activity Arrangement of training sessions Formation of expositions of touristic exhibitions Activity of students' sciences societies Identifying erroneous actions Solving process tasks Formation of the training seminar program Discussion of urgent tasks of development of the tourism sector Finding partners for the provision of travel services
Management decision simulation	Socialization of students Disciplinary function Communicative function Personal enhancement Obtaining of professional skills Development of team work basis	Management decision simulation "manager-client" Management decision simulation "tour operator-travel agent" Management decision simulation "tour guide-tourist" Workshop Quest-events Guiding a tour Identifying of prospects for further development of tourism in regions World Skills
Interactive and video technologies	Introduction to state-of-the-art technologies Personal enhancement Obtaining of professional skills Cognitive function Communicative function	Distance education Demonstration of video materials Tutorial films Demonstration of graphic maps Using of geo-information technologies Virtual tours Demonstration of graphic material Figures and tables Online seminars Master classes and trainings

The described technologies of tourist-excursion education shall be implemented within the frame of several major directions. In this case, they will be proactive and will promote the formation of students' skills that are relevant in the medium term. It is important if upon completion of the education process students could fully fulfill themselves in practical activities.

According to the authors, one of the main directions is practice-oriented education. Tourism is a unique type of activity, as when selling a tourist product and tourist services, the place of sale and the place of consumption are geographically distant from each other. Therefore, optimum preparation requires knowledge of not only sales technologies and the specifics of office work, but also knowledge of the area where the tour or excursion will be realized.

Optimum content of practical trainings should include acquaintance of students with the specifics of office work, functions of tourism managers and other employees of travel companies, as well as field practical exercises in the locations of the main tourist resources of the region of study and other regions. Practical training of future tour guides should include, in addition to the methodological aspects of conducting excursions, speech technique and psychological components of work with individual segments of tourists.

When implementing this direction, it is possible to use all major technologies, especially project technologies, management decision simulation and video technologies. If necessary, it is possible to implement practices in the format of distance learning.

Second line - parallel education In the course of teaching, forms of further education including club activities majoring in profession and participation in students' sciences societies play an essential role. Implementation of this direction is possible for all the selected technologies, especially in project technologies and brainstorm technologies.

The advantages of such forms of education are that they are focused on learners, who want to realize themselves as fully as possible in the specialized field and provide an opportunity for in-depth research work. While participating in such activities, learners can both obtain additional knowledge about the tourism sector, and participate in scientific activities, publish articles, and apply for scientific grants.

The third area is simulation. Optimization of formation of necessary knowledge and skills shall follow the line of maximum immersion of learners into the atmosphere of tourist-excursion activities. At the same time, the simulated situations should correspond to the real ones as much as possible.

Simulation is possible in both project technologies, in the case of using real-life projects, tourism development programs, and management decision simulation, and brainstorm technologies. Optimum distance education, orientation to practical skills and knowledge, should also include solving of problems based on specific professional situations.

Application of advanced technologies in this case consists in the use of specific situations that took place in activities of tour operators, travel agents and tour guides. Note that in simulation, presence of problematicity and variability of potential solutions is essential.

5 Conclusions

Consequently, on the basis of the material presented, the following conclusions can be drawn. Innovative technologies in vocational tourist-excursion education play a special role, since they contribute to formation of necessary knowledges and skills in students learners within the framework of modern trends in the tourism and hospitality industry.

At the same time, such technologies are oriented to solving problem situations, relevant challenges of development of the tourism sector, formation of sustainable development of

tourism in regions, development of innovative excursion services, i.e. are inherently advanced.

The authors gave accent to project technologies, brainstorm, management decision simulation, as well as interactive and video technologies as to mainstreaming innovative technologies in vocational tourist-excursion education.

Application of these technologies should be complex (technologies should be applied in parallel, but at the same time complement one another), as well as end-to-end, that is, consistently go through the entire learning process.

Application of innovative technologies seems to be optimal in view of several areas of education. Major directions are practice-oriented education, parallel learning and modeling.

Within the framework of these directions, innovative technologies can be the most effective ones and contribute to formation of a harmonious personality and a skilled specialist related to tourist and excursion profile.

In general, application of innovative advanced technologies in vocational tourist-excursion education can bring the process of specialized education to a higher level and become one of the "growth points" of the tourism and hospitality industry in general, and the excursion sphere in particular, and be consumer-oriented.

References

1. A. Lašáková, Ľ. Bajzíková, I. Dedze, International Journal of Educational Development, **55**, 69-79 (2017) https://doi.org/10.1016/j.ijedudev.2017.06.002
2. B. A. Bakar, Tourism Management Perspectives, **34**, 100653 (2020) https://doi.org/10.1016/j.tmp.2020.100653
3. A. MaiWalder, Studies in Educational Evaluation, **54**, 71-82 (2017) https://doi.org/10.1016/j.stueduc.2016.11.001
4. J. Liburd, A.-M. Hjalager, Journal of Hospitality and Tourism Management, **17(1)**, 12-20 (2010) https://doi.org/10.1375/jhtm.17.1.12
5. A. D. Daniel, R. A. Costa, M. Pita, C. Costa, Journal of Hospitality and Tourism Management, **30**, 65-72 (2017) https://doi.org/10.1016/j.jhtm.2017.01.002
6. V. N. G. Mele, P. Del Vecchio, Journal of Hospitality, Leisure, Sport & Tourism Education, **25**, 100175 (2019) https://doi.org/10.1016/j.jhlste.2018.10.003
7. J. Qian, R. L. X. Li, Journal of Hospitality, Leisure, Sport & Tourism Education, **24**, 120-129 (2019) https://doi.org/10.1016/j.jhlste.2019.02.003
8. A. B. Barkathunnisha, D. Lee, A. Price, Journal of Hospitality, Leisure, Sport & Tourism Education, **21 (B)**, 174-184 (2017) https://doi.org/10.1016/j.jhlste.2016.11.003
9. N. B. i Gardella, Journal of Hospitality, Leisure, Sport & Tourism Education, **26**, 100244 (2020) https://doi.org/10.1016/j.jhlste.2020.100244
10. C.-H. Liu, J.-S. Horng, S.-F. Chou, Y.-C. Huang, Journal of Hospitality, Leisure, Sport & Tourism Education, **21(A)**, 88-100 (2017) https://doi.org/10.1016/j.jhlste.2017.08.008
11. S. Z. Ahmad, A. R. A. Bakar, N. Ahmad, The International Journal of Management Education, **16(1)**, 14-25 (2018) https://doi.org/10.1016/j.ijme.2017.11.002
12. C. H. C. Hsu, Tourism Management Perspectives, **25**, 181-183 (2018) https://doi.org/10.1016/j.tmp.2017.11.022
13. Y. Zhang, Journal of Hospitality and Tourism Management, **30**, 47-54 (2017) YuXiongbhttps://doi.org/10.1016/j.jhtm.2017.01.003

14. S. Schweinsberg, S. L. Wearing, P. McManus, Journal of Hospitality and Tourism Management, **20**, 53-60 (2013) https://doi.org/10.1016/j.jhtm.2013.05.003

15. H.-M. Chiao Yu-Li Chen, W.-H. Huang, Journal of Hospitality, Leisure, Sport & Tourism Education, **23**, 29-38 (2018) https://doi.org/10.1016/j.jhlste.2018.05.002

16. M. Juraschek, L. Büth, N. Martin, S. Pulst, C. Herrmann, *Procedia Manufacturing*, **45**, 43-48 (2020) https://doi.org/10.1016/j.promfg.2020.04.057

17. N. C. Jackson, Business Horizons, **62(6)**, 761-772 (2019) https://doi.org/10.1016/j.bushor.2019.08.002

18. M. Keinänen, J. Ursin, K. Nissinen, Studies in Educational Evaluation, **58**, 30-36 (2018) https://doi.org/10.1016/j.stueduc.2018.05.007

19. Z. Karsavuran, B. Özdemir, Journal of Hospitality, Leisure, Sport & Tourism Education, **25**, 100199 (2019) https://doi.org/10.1016/j.jhlste.2019.100199

20. H. J. Kim, M. Jeong, Tourism Management Perspectives, **25**, 119-122 (2018) https://doi.org/10.1016/j.tmp.2017.11.025

21. M. Sigala, Journal of Hospitality, Leisure, Sport & Tourism Education, **11(1)**, 50-66 (2012) https://doi.org/10.1016/j.jhlste.2012.02.001

22. Z. Sándorová, T. Repáňová, Z. Palenčíková, Norbert Beták, Journal of Hospitality, Leisure, Sport & Tourism Education, **26**, 100238 (2020) https://doi.org/10.1016/j.jhlste.2019.100238

23. S. L. Slocum, D. Y. Dimitrov, K. Webb, Tourism Management Perspectives, **30**, 33-42 (2019) https://doi.org/10.1016/j.tmp.2019.01.004

24. J. Walker, V. N. Manyamba, Journal of Hospitality, Leisure, Sport & Tourism Education, **26**, 100213 (2020) https://doi.org/10.1016/j.jhlste.2019.100213

25. G. Kodzhaspirova, Pedagogy, 719 (2019)

26. M. Lebedeva, Y. Pedagogical Bulletin, **1(2)**, 17-21 (2011)

27. A. Bagautdinova, Scientific journal of NRU ITMO. Series "Economics and Environmental Management", **1**, 1-10 (2014)

28. V. Kreuzova, Bulletin of the Kutafin Moscow State Law University (MSAL), **11**, 132-138 (2015)

29. E. Noskov, Yaroslavl Pedagogical Bulletin, **6(105)**, 138-143 (2018)