

18th PCSF 2018
Professional Culture of the Specialist of the Future

**PROFESSIONAL ORIENTATION OF THE FUTURE SPECIALIST
THROUGH THE ORGANIZATION OF INDUSTRIAL TOURISM**

Anna Matveevskaya (a)*, Sergey Pogodin (b)

*Corresponding author

(a) Saint-Petersburg State University, 7-9 Universitetskaya nab. Saint-Petersburg, Russia
annamatveevskaya@mail.ru, 8-921-427-56-64

(b) Peter the Great St. Petersburg Polytechnic University (SPbPU), Polytechnicheskaya 29, Saint Petersburg, 195251
Russia, Pogodin56@mail.ru, 8-921-336-57-72

Abstract

Modernization of modern higher professional education in Russia is a response to the social challenge - increasing requirements to professional training of specialists. At present, the future specialist needs not only a set of acquired knowledge and developed professional skills, but the development of readiness to use this knowledge and skills, to perceive new information creatively and productively, to master the experience of professionally significant activity. An aim of higher education is professional formation of socially mobile and responsible graduate, able to work successfully in the field of knowledge and practices, ready for continuing education and inclusion in innovative activities. In education, it is particularly important to achieve an optimal combination of theoretical and practical components of the forms of educational and scientific activities, as well as independent work, to use assignments that are practical and creative. Theoretical positions should be supported by the possibilities of their use in practice. Therefore, in modern society, the problem of creating conditions for the successful professional self-determination of future graduates, taking into account their abilities and interests, is becoming increasingly relevant. In this context, industrial tourism is a necessary set of measures aimed at providing professional-orientation information on the activities of leading Russian enterprises and popularizing professions and specialties in demand in industrial production. It also includes the acquaintance of schoolchildren, students and their parents with the work of enterprises located in their region.

© 2018 Published by Future Academy www.FutureAcademy.org.UK

Keywords: A professional-orientation project, excursions to enterprises, industrial tourism, industrial enterprises of Russian regions, the Council for the Development of Industrial Tourism.



1. Introduction

Today, more than 7,000 professions exist in the world. Only a few hundred of them are popular in megacities. Unfortunately, about half the Russian population does not work by profession presently. The main obstacle for university graduates wishing to work in the specialty is a difficult situation in the labor market. Namely, the received specialty is unclaimed, low-paid or, on the contrary, the competition in the labor market is so high that it is practically impossible to find a job (Zakirova, 2016).

Attracting the attention of students and youth to the industrial facilities of the country, the opportunity to visit institutions and communicate with workers of industrial facilities, (Kruglikov, 2015) as well as the patriotic education of young citizens of Russia, is the basis of industrial tourism. Industrial tourism unites people attending the tour operating industry. Tourists do not actively seek to explore objects themselves illegally enter their territory. Special tours to different cities of the world are organized for them.

Visit to scientific and production units; acquaintance with the museum of the history of the enterprise; master classes, familiarity with successful employees of the enterprise; (Krovopuskov, 2017) vocational guidance testing; cultural and entertainment events (quizzes, competitions, concerts); parent meetings in the format: school-university-enterprise can be included in the program of visiting enterprises.

The main objectives of organizing industrial tourism as a form of professional orientation for young people are:

- remove the communication gap between employers and the educational system (Vaganova, 2016);
- acquaint the younger generation with modern enterprises and professions demanded by modern industry;
- form a system of early career guidance aimed at the development of domestic engineering and industry in general;
- show students and schoolchildren the real working conditions (Razinkina, 2017).

The investigated objects of industrial tourism should include production centers (factories, workshops, etc.); transport infrastructure (railway stations, airports, cargo and passenger ports, underground, consisting of sea, highway, dirt roads, airlines and pipelines, etc.); urban infrastructure (water supply and wastewater treatment, sewerage, electricity, gas supply) (Perfetto, 2018).

Western European and North American states have realized the importance of industrial tourism. Active development began more than 15 years ago. At the same time, such types of travel are considered not only as popular entertainment, but also as a suitable way to interest the audience with their brands, as well as to stimulate the sale of goods and services (Aleksandrov, 2018).

Excursions to the production of the leading manufacturers of BMW cars in Munich and Mercedes-Benz in Stuttgart are an absolute success. Excursions are organized in a variety of theme parks, for example, the car company Volkswagen's Autostadt, the children's entertainment park Legoland in Denmark, or to the factory of Swarovski crystals Krystallwelten in Austria. Not only individual brands, but also whole countries are doing well in industrial tourism. So, in the USA, for example, an industrial tour of the cities of the Northeast of the country is considered very popular. It offers a journey, ranging from 17th – 18th-century Boston businesses, through 19th-century factory clusters around New York City and the industrial districts of Pennsylvania and Michigan that played a special role in the 20th century. Czech beer tours, wine

tours in Spain, perfumery tours in France, chocolate trips in Switzerland, flower tours in the Netherlands, diamond factories in Namibia are internationally recognized.

2. Problem Statement

In Russia, industrial tourism is just beginning to develop. However, visits to enterprises (industrial, agricultural, transportation) (Slesarev, 2012) have traditionally been organized, for example, for the practice of students - geographers in Soviet times. For example, enterprises in the city where the branch of the university is located were visited in the process of studying the discipline "Industrial and agricultural production technologies". In the Urals, students visited the Karagai quarry for the extraction of magnesite. Excursions were organized at the Magnezit, the world's largest enterprise for the production of highly resistant refractory materials.

Russian entrepreneurs are just beginning to understand all the advantages of industrial tourism and the advantages of their participation in it. Industrial tourism is very beneficial for enterprises from the economic point of view. They, accepting guests, warm up interest in their production and expand the range of partnerships. In addition, enterprises that promote industrial tourism indirectly motivate their employees (Nikulin, 2015). Any employee is pleased to realize that his work is interesting. This awareness can contribute to increased productivity and a "culture of production".

3. Research Questions

The implementation of this goal involves the following tasks: 1. Assess the current state of industrial tourism as a professional orientation of schoolchildren and students. 2. Identify the main problems of industrial tourism development. 3. Consider the positive experience of enterprises in the country's regions for its further use in our country.

4. Purpose of the Study

The study is aimed to explore industrial tourism as a basis of professional orientation of schoolchildren, students and youth with drawing attention to the industrial facilities of our country, with the possibility of visiting institutions and communicating with employees of industrial facilities, as well as the ideas of Patriotic education of young citizens of Russia.

5. Research Methods

In the research, we used the method of system analysis of existing tourist offers of industrial tourism, as well as a comparative method of significant prospects in this field, proposed by regional and state-level structures. We conducted a synthesis of psychological-pedagogical and methodological literature, Internet materials on the research problem. Selected methods are based on the study and generalization of research results achieved by well-known specialists in pedagogy. We intend to delve into the following issues: popularization of industrial excursions, rapprochement of the educational system and production, acquaintance with modern professions, support for the ideas of patriotic education of youth, creation of a positive image of our country.

6. Findings

Russia is rich in unique factories and plants, promising tourist sites for the development of industrial tourism in the country (Klyuev, 2018). Food production is the most popular. Namely, the excursion to the factory "Coca-Cola" and confectionery factory "Rot-Front" as well as the Mikoyanovsk Combine and cheese factory "Carat" in Moscow, the factory of "Chupa-Chups", confectionary factory. N.K. Krupskaya and bakery "Karavay" in St. Petersburg; concern "Baltika" (St. Petersburg, Tula and Chelyabinsk); confectionery Association in the Leningrad region "Favorite region "and the Tomsk Association "Tomsk beer".

The Ural region offers excursions to such industrial enterprises as the Malyshevsky underground mine and the kolykol Plant "Pyatkov and Co" (Sverdlovsk Region), Chelyabinsk Tube Rolling Plant (Chelyabinsk). The project ""Voentur", implemented by Federal tourism Agency together with the SPC "Uralvagonzavod" is one of the most popular tourist routes, including visits to production workshops, the museum and the tank range.

In general, today's Russian industrial tourism market is represented by 130 enterprises, which conducted tens of thousands of tours per year. The active involvement of industrial enterprises in the tourist industry began with the development of the "Unified Industrial Map", proposed in 2014 in the Sverdlovsk region. Initially, students of different classes for the purpose of vocational guidance and education were the target audience of the developed programs. Popularization of industrial excursions is carried out through the program "Living lessons", which is conducted jointly with the Ministry of Culture and Federal tourism Agency in educational projects in different regions of Russia (Matveevskaya, 2016b). One of the prerequisites of these educational programs is a visit to industrial enterprises. For example, the Chuvash Republic conducts excursions to the Cheboksary hydropower plant, confectionery factory "AKKOND", a dairy farm "Akkond-Agro", the history museum of "Khimprom", the Kazan Helicopter Plant, the "Almaz" Jewelry Factory and the University of Innopolis in the framework of the "Living lessons".

The all-Russian, professional orientation project "Work in Russia!" carries out an active popularization work. Starting in 2016, the all-Russian professional orientation action "Week without Turnstiles" is held in the framework of the federal program "Work in Russia!". The idea of the action is to ensure effective interaction, blurring the boundaries between employers and the educational system, the opportunity to meet and popularize modern enterprises and professions, and to promote further employment.

The international tourist exhibition Expotravel-2017 was held from 6 to 7 October 2017 on the platform of the President's Center B. N. Yeltsin (Ekaterinburg). The Conference of the Council for the Development of industrial tourism in the Russian Federation was organized there. Representatives of 15 regions of Russia and 6 countries of the world: heads of executive power of the subjects of the Russian Federation, heads of industrial enterprises, representatives of tourist and transport companies, the Russian Union of Travel Industry took part in the conference. The Council for the Development of Industrial Tourism was the result of the conference. The Council aims to stimulate the organization and promotion of interregional industrial tours, to strengthen the relations between industrial institutions and tourist companies offering educational tours to industrial facilities.

The organization of industrial tourism in the Arctic region also has good prospects. Government

resolution No. 366 (21 April 2014) adopted the "State Program for the social and economic development of the Arctic zone of the Russian Federation until 2020". The purpose of this program is the realization of Russia's national interests in the Arctic. The implementation of the state program's measures, along with the measures envisaged by the sector state programs and federal target programs of the development of the Arctic zone of Russia, will have a positive impact on its social and economic development and national security (Ob utverzhdenii, 2017).

The history of the development of the Arctic areas by tourists began in the 90s of the XIX century. Since 1875, the "Partnership Arkhangelsk-Murmansk Express Steamship Company" has been engaged in financing and organization of sea's voyages. The end of XIX century can be considered as the beginning of Russian Arctic expeditions. The Arctic fleet for the development of the Northern sea route was created in the Russian Empire. Vice Admiral Stepan Makarov suggested the beginning of the construction of special strong and powerful ships that are able to overcome the ice and clear the way for the rest of the ships. In this regard, the world's first icebreaker "Ermak" was built in 1899 (Matveevskaya, 2016a).

Expedition cruises to Arctic are accomplished on icebreakers and ice class vessels, on that comfort terms are created for trips for the Arctic Circle. One of the most popular routes is expeditionary tours to Spitsbergen and Franz Josef Land, where it is possible to see walrus, seals and whales, visit picturesque bays with bird bazaars, and polar bears sometimes come straight to the icebreaker standing in ice.

The development of Arctic tourism is impossible without international cooperation. Arctic international tourism covers the entire Arctic region of the market for rendering a complex of tourist services not only in the Russian Arctic, but also abroad. These are the North Pole, Spitsbergen, Alaska (USA), and Norway, Greenland, Iceland, Canada, islands and waters of all the seas of the Arctic Ocean. Providing safe tourist trips in the extreme conditions of the Far North requires a large capital outlay, specific knowledge and skills that is simply impossible without international integration.

However, Russia divides the Arctic tourism market with 4 more countries, which have been developing it for a long time and not without success. This significantly complicates the task of promoting the domestic product in the tourist services market. The creation of national regional tourism clusters with the support of the state will help to solve logistics and infrastructure problems, which are the main obstacle to the promotion of the domestic Arctic tourism product. It is necessary to determine the competitive advantages of our country in the tourism industry, the achievement of which is aimed at the development strategy of our state.

The realized programs in the Arctic usually attribute to polar (or northern, or arctic) tourism. Such tourism differs in a high cost; however, it attracts thirsty exclusive suggestions. Arctic seas are in demand by modern tourists. The Northern Sea Route is promising in terms of tourism. The main barrier for a navigation is numerous ice massifs, because of which the navigation terms on the Northern Sea Route change greatly in certain years.

The seaport of Murmansk is the only non-freezing port of the country beyond the Arctic Circle, capable of taking ships in the mode of year-round navigation. You can make a sea cruise to the North Pole from Murmansk. The icebreaker operates flights from Murmansk through Spitsbergen or through Franz Josef Land with a call to Novaya Zemlya. Expedition tours are designed for a small number of participants - from 50 to 110 people. The world's most powerful nuclear icebreaker, "50 Years of Victory" makes at

least four flights per year from Murmansk to the pole point (over 500 passengers per year). The average cost of the tour is 27 thousand US dollars (Geography, 2017).

The use of an icebreaker for tourist trips to the North Pole demonstrates the possibilities of our country to create a positive image abroad politically. "Technologically backward" state cannot provide foreign tourists with a service that no other "technologically advanced" Arctic country is not able to provide. Such Arctic cruises have one significant drawback. All of them are connected with sea cruises, which take place in rather difficult arctic natural conditions, requiring specialized vessels. Icebreakers are not only expensive for tourist purposes, but also in short supply. Already, the freight of such vessels for tour operators is scheduled for the year ahead.

Cities as cultural centers are not remarkable at all. Either these are port cities or railway junctions, where the buildings of the Stalin period predominate. At the same time, there are other opportunities to create an exclusive tourist product, which our country will be able to attract a foreign user. This product has long been known not only in the international market, but also successfully used in the domestic tourist industry.

A number of enterprises from Arctic regions have also joined the nationwide action "Week without turnstiles" since October 2016. The leading enterprises of Arkhangelsk and the Arkhangelsk region have become active participants. These are "Severalmaz", "Zvezdochka", Archangelsk branch of "SRZ Krasnaya Kuznitsa", "Arkhangelsk trawling fleet", "Arkhangelsk pulp and paper mill", "Northern Raid". Murmansk companies are Murmansk a branch "Rostelecom", a regulated facility 35 of the Shipyard, a branch of the "Zvezdochka", and the "82 Shiprepairing Plant." The Kola Mining and Metallurgical Company, "Kovdorsky Mining and Concentrating Plant" conduct excursions for students and youth. The Kola nuclear power plant annually receives more than 5 thousand visitors. In the Yamal-Nenets Autonomous District, "Gazprom dobycha Nadym" and "Gazprom dobycha Noyabrsk" hold seminars and excursions not only for schoolchildren, but also organize an internship for Chinese colleagues – representatives of the Chinese national oil and gas Corporation (CNPC). Since 2013, "Urengoygazprom", participant of the program "The Future Together - Start in the Profession", also organizes excursions to the production facilities of the gas producing enterprise. Bilibinskaya NPP and Anadyrskaya CHPP conduct professional-orientation work in the Chukotka Autonomous District, and "Norilsk Nickel" companies operate in the Krasnoyarsk region.

In October 2015, an agreement was signed between the government of the Arkhangelsk region and the leadership of the First State Test Cosmodrome Plesetsk on the organization of new tourist routes. State testing spaceport "Plesetsk" is one of the largest spaceport in the world. It is located in the Arkhangelsk region, Mirny. It covers an area of 1,762 square km. The state autonomous institution of the Arkhangelsk region "Regional Center for Patriotic Education and Training of Citizens (Youth) for Military Service" works as a regional operator and organizer of excursions at the spaceport. Applications for visits to the spaceport are taken from educational institutions. Students and students can visit "Plesetsk".

7. Conclusion

The 8th International Industrial Exhibition INNOPROM-2017 was held in Ekaterinburg from July 9 to July 13, 2017. Panel session "Industrial tourism as a mechanism for economic diversification of regions. The best regional and international practices" was organized during the exhibition (Rezolutsiya,

2017). The main problems hampering the development of industrial tourism in Russia were identified during this session. Namely, it is noted:

- Lack of a unified concept and information field for the development of industrial tourism,
- Deficiency of a commercial component of projects, the need for methodological development of tour programs,
- Lack of a strategy to promote industrial tours abroad,
- Closure of enterprises for new activities,
- Low mobility of schoolchildren and students between regions,
- Deficiency of professional guides.

The Committee on the Hospitality Industry of Business Russia proposed a number of recommendations for consideration of the draft concept of the Association of Industrial Tourism. Despite the existing problems, industrial tourism in Russia has a huge potential for further development. Russian enterprises involved in industrial tourism are open to the consumer, are able to show their advantages over competitors, which means that they should be open to curious tourists. Moreover, excursions can bring additional income to enterprises regardless of seasonality, as well as serve as very effective and cost-effective advertising. These circumstances are not only a serious preference for the development of industrial tourism in the country, but they allow us to position it as a fundamental element for the transformation of international tourism into a political tool.

At the same time, industrial tourism as an educational activity is one of the most important conditions for increasing the effectiveness of the process of education and upbringing at any educational level. Industrial tourism requires special attention of the Government of the Russian Federation, as it can contribute to the development of the industrial complex of Russia, as well as previous levels of knowledge of future specialists in the field of production.

References

- Aleksandrov, I., & Fedorova, M. (2018). Strategic planning of the tourism development in small cities and rural territories as a tool for the development of the regional economy. *International Science Conference on Business Technologies for Sustainable Urban Development*, 132-137. St. Petersburg: Peter the Great Polytechnic University Press. doi: 10.1051/mateconf/201817001011
- Klyuev, N.N. (2018). Industrial and Transport development of the territory of Russia in the Post-Soviet Period. *Geography and Natural Resources* 39 (1). doi: 10.1134/S1875372818010018
- Krovopuskov, P., Babariko, D., & Tsymbal, T. (2017). Promyshlenniy turizm kak predposylka dlya formirovaniya interesa u vypusknikov k buduchshei professii [Industrial tourism as a prerequisite for the formation of interest among university graduates to the future profession]. *Aktual'nye voprosy razvitiya stankostroitel'noy otrasli* [Topical issues of machine tool industry development]. 141-144. Lipetsk State Technical University Press. (in Rus.)
- Kruglikov, V.N., & Kasianik, P.M. (2015). Rol' aktivnogo obucheniya v koncepcii global'nogo inzhenernogo obrazovaniya [The role of active learning in the concept of global engineering education]. *St. Petersburg State Polytechnical University Journal//Humanities and Social Sciences* 3(227), 159-168. (in Rus.)
- Matveevskaya, A.S., & Pogodina, V.L. (2016a). Resursy industrial'nogo turizma kak ob'ekty kul'turnogo naslediya [Resources of industrial tourism as objects of cultural heritage]. *Prirodnoe i kul'turnoe nasledie: mezhdisciplinarnie issledovaniya, sohranenie i razvitie* [Natural and cultural heritage: interdisciplinary research, conservation and development]. Collective monograph. St. Petersburg:

- Russian state pedagogical University. A. I. Herzen Press. 381-384. ISBN: 978-5-8064-2301-7 (in Rus.)
- Matveevskaya, A.S., & Pogodina, V.L. (2016b). Regional'nie osobennosti razvitiya special'nih vidov turizma v rossiyskoy arktike [Regional features of development of the special types of tourism in Russian Arctic]. *Geographiya: razvitie nauki i obrazovaniya* [Geography: development of science and education]. Collective monograph. St. Petersburg: Russian state pedagogical University. A. I. Herzen Press. 382-387. ISBN: 978-5-8064-2301-7 (in Rus.)
- Nikulin, Yu.N., & Struzberg, G.V. (2015). Promyshlenniy turizm v sisteme vzaimodeystviya vuzov i predpriyatiy: sodержanie I perspektivy razvitiya [Industrial tourism in the system of interaction between universities and enterprises: content and prospects of development]. *M. Pero.* (in Rus.)
- Ob utverzhdenii gosudarstvennoi programmi "Social'no-ekonomicheskoe razvitie Arkticheskoy zony Rossiyskoy Federacii na period do 2020 goda (2017). [On the approval of the state program "Socio-economic development of the Arctic zone of the Russian Federation for the period until 2020"] Retrieved from <http://government.ru/docs/29164/> (In Rus.)
- Perfetto, M.C., & Vargas-Sánchez, A. (2018). Towards a Smart Tourism Business Ecosystem based on Industrial Heritage: research perspectives from the mining region of Rio Tinto, Spain. *Journal of Heritage Tourism.* 1-22. doi: 10.1080/1743873X.2018.1445258
- Razinkina, E., Pankova, L., Trostinskaya, I., Pozdeeva, E., Evseesva, L., & Tanova, A. (2017). Student satisfaction as an element of education quality monitoring in innovative higher education institution. *International Scientific Conference on High-Rise Construction*, Samara State Technical University. 33. doi: 10.1051/e3sconf/20183303043
- Rezolutsiya panel'noy sessii "Promyshlenniy turizm kak mehanizm diversifikacii ekonomiki regionov. Luchshie regional'nie i mezhdunarodnie praktiki" [Resolution of the panel session "Industrial tourism as a mechanism of regional economic diversification. The best regional and international practices"] (2017). Retrieved from <https://deloros.ru/assets/files/2-2017/rezolyuciya.pdf> (in Rus.)
- Slesarev, Yu. V., & Kozlov, V.N. (2012). Tendencii formirovaniya professional'noy i social'noy kompetentnosti urovnei sistemi vysshego professional'nogo obrazovaniya [Trends in the formation of professional and social competence of the level system of higher professional education]. *St. Petersburg State Polytechnical University Journal//Humanities and Social Sciences* 1(143), 72-77. (in Rus.)
- Vaganova, O.I., Madvedeva, T.Y., Kirdeyanova, E.R., Kazantseva, G.A., & Karpukova, A.A. (2016). Innovative approaches to assessment of results of higher school students training. *International Journal of Environment and Science Education.* 11 (13). 6246-6254
- Wyrzykowski, J., & Widawski, K. (Ed.) (2017). *Geography of tourism of Central and Eastern Europe countries.* Springer International publishing AG. Wroclaw. doi: 10.1007/978-3-319-42205-3_1
- Zakirova, V.G., & Gilmiyarova, S.G. (2016). The problem of developing professional expertise of vocational college students. *International Journal of Environment and Science Education.* 11(8). 1807-1819. doi: 10.12973/ijese.2016.556a