

LEASECON 2021
Conference on Land Economy and Rural Studies Essentials

**HUMANITARIZATION OF EDUCATION: RAISING SOCIAL AND
POLITICAL AWARENESS OF TECHNICAL UNIVERSITIES’
POSTGRADUATES**

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Abstract

The article is devoted to the problem of the low level of socio-political awareness of engineering and technical postgraduates and the role of humanitarization of technical education in resolving this issue. The reasons for a higher risk of manipulation and provocation of graduate students of technical and engineering fields are analyzed. The concept of “humanitarization” is revealed, and the analysis of pedagogical literature published in recent years is made. The authors analyze the working curricula for the postgraduate programs of Moscow Automobile and Road State Technical University (MADI) for the 2020-2021 academic year. The topical relevance is based on susceptibility of modern youth to mass communication channels and the collateral necessity to increase the role of socio-political awareness of graduate students of engineering and technical fields by involving higher educational institutions in the process. The relevance of the article is also due to the aim of postgraduate education that is training of highly qualified scientific and pedagogical workers. The authors analyze an increase in teaching humanities as the key condition for the practically oriented engineering and technical educational process in graduate schools. The purpose of the paper is to study the significance of the process of humanitarization of technical education from the point of view of its impact on the socio-political awareness of graduate students of engineering and technical fields.

2357-1330 © 2022 Published by European Publisher.

Keywords: Engineering pedagogy, higher education, humanitarization, postgraduate, society, technical education



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1. Introduction

Modern society is characterized by deformed and in many aspects unstable social environment. In these conditions, the values and orientations of the youth social group, to which the vast majority of today's graduate students belong, are formed.

Social adaptation and personal development of modern youth is subject to the rapidly increasing influence of mass communication channels, including new digital formats. Young people tend to prefer the Internet and especially social networks while obtaining information and consuming content. In turn, these channels possess a maximum concentration of opportunities for manipulating and influencing public opinion, as well as the spread of protest sentiments. The unstable socio-cultural environment, combined with the psychological qualities characteristic of young people (instability, lack of stable values, labile consciousness, extremity, transgressiveness etc.), create conditions for changing political moods of young people.

Such a socio-cultural situation implies the adaptation of the modern educational process to rapidly changing conditions. The tasks of higher education now include not only the transfer of knowledge to subsequent generations. One of the priority activities of institutes and universities is the creation of conditions for the formation of a holistic worldview among students, taking into account the spectrum of acceptable strategies and tactics of action in any conditions. This, in turn, is one of the key conditions for increasing socio-political awareness among students of all levels of education, as well as the formation of young people who are able to resist various kinds of manipulations and provocations.

The relevance of the study is based on the purpose of postgraduate education – the training of highly qualified scientific and pedagogical workers. In the classical sense, today's graduate student is a future scientist and teacher. Accordingly, the issue of responsibility for the ideas and values transmitted in the future scientific and pedagogical career, which directly depend on the degree of personal development of the graduate student, comes to the fore.

2. Problem Statement

By the time of admission to the graduate school, students have certain life experience, knowledge and skills. However, for a number of reasons, future specialists often do not have the necessary basic knowledge about the socio-political life of society, the principles of its functioning and the tools used by political elites and political groups to achieve their goals, including social changes.

In this regard, the problem of socio-political awareness of graduate students comes to the fore. We believe that, when speaking about the socio-political awareness of an individual, one should mean not only his or her existing amount of knowledge about the social and economic structure, political orientations and attitudes, styles of governance and forms of mass political behaviour. Of high importance in determining socio-political awareness is the establishment of the degree of this knowledge possession, the ability to analyse the current political situation in the country, based on the historical path and experience of the state, as well as the ability to expose specific phenomena and processes in society and politics to critical analysis.

In accordance with the ILO/UNESCO Recommendation concerning the Status of Teachers (1966) and the UNESCO Recommendation concerning the Status of Higher-education Teaching Personnel (1997), one of the responsibilities of higher education institutions, their staff and students is to improve the effectiveness of critical thinking and foresight functions by constantly analysing the emerging social, economic, cultural and political trends, directing the work in the field of forecasting and prevention.

Thus, nowadays there is an urgent question about the level of socio-political awareness of today's graduate students of technical universities. Students in the technical and engineering areas of training have the opportunity to get a minimum knowledge base in the field of social and political structure, as well as cultural and historical processes. In Russia, the disciplines of the humanities cycle are necessarily present in the curriculum of each technical university in the amount established by the Ministry of Education. There is a "State educational standard" for each academic discipline containing a minimum list of requirements for the assimilation of educational material that is presented to the student. However, during the educational process, the subjects of this cycle are far from being in the foreground and are mastered by students mediocre. Among the reasons, the key circumstance is the complexity of the highly specialized disciplines of the technical block being studied and, accordingly, the greater amount of time spent on their development.

In the modern Russian discourse, this concept is not a key one while studying the problems of forming the comprehensive development of graduate students in the university environment and, as a result, it is not sufficiently investigated. Speaking about the requirements of modern realities, we can also observe the fact that today the definition of professional qualities of a specialist is not limited to specialized narrow professional qualities. Graduates should also have personal qualities and characteristics that are formed in the process of humanitarian training.

In Russia, work with young people is one of the directions of state policy. The Decree of the Government of the Russian Federation "On approval of the Fundamentals of the State Youth Policy of the Russian Federation for the period up to 2025" considers the development of educational work with young people, the formation of a system of values, improving the level of youth safety culture, creating conditions for the realization of youth potential in the socio-economic sphere as the mission of the state youth policy. This approach implies the formation of a personality in the process of education, including one with a high level of socio-political awareness.

In solving this problem, we face the humanization of higher technical education – the orientation of the educational process on the personal formation of a future specialist. The key aspect of the successful solution of the issue is the humanitarization of technical education.

3. Research Questions

In order to achieve the overall object of the article, we have set a number of tasks necessary for the full disclosure of the problem. The key task is to study the approaches to the definition of the concept of "humanitarization" in the modern scientific discourse. Another task of the paper is to determine the role of humanitarization in the educational process of technical higher educational institutions, as well as to identify its impact on the development of the socio-political knowledge base of students and their personal qualities.

When studying the impact of the humanitarization process on the socio-political awareness of graduate students in technical and engineering fields, our task was to define the concept of socio-political awareness.

In the practical part of the study, the main task was to analyze the working curricula for the postgraduate programs of Moscow Automobile and Road State Technical University (MADI) for the 2020-2021 academic year.

4. Purpose of the Study

Improving the level of socio-political awareness of engineering and technical postgraduates is impossible without involving higher educational institutions in this process. The purpose of this work is to investigate the significance of the process of humanitarization of technical education in the context of the impact on the socio-political awareness of graduate students of engineering and technical fields.

5. Research Methods

To achieve the purpose, we operated with such methods as analysis, comparison and generalization. We analysed and compared the results of research and publications related to the study of the humanitarization phenomena and its role in a higher technical pedagogical process. As for the practical part of our study, we have focused on the experience of the Moscow Automobile and Road State Technical University (MADI). We analysed its working curricula for the postgraduate programs for the 2020-2021 academic year in order to assess the level of integration of humanities subjects in educational process of technical postgraduates.

6. Findings

The topic of the relationship between the humanitarization of technical education and the increase in socio-political awareness of graduate students is poorly understood. Questions of the role of humanitarization in developing students' human potential and in forming a system of values and attitudes were studied by Bulanova-Toporkova (2002), Gorodetskaya and Trubnikova (2010), Istomina and Erbaeva (2012) as well as Molokova (2020).

As the researchers emphasize, humanitarization as one of the modern educational strategies means increasing the attention of society to social field studying that is of primary importance in people of today's life. This field includes the following subjects: economic theory, law, political science, sociology (Chernoyarova & Zarubkina, 2017). Studying the subjects of this cycle is of great importance for the formation of a comprehensive developed specialist. While studying, there is a broadening of the outlook, and the development of the ability to critical thinking, which is one of the fundamental conditions for forming a student's socio-political awareness.

Our analysis of the pedagogical literature of recent years shows that, in general, the authors interpret the concept of humanitarization of higher education and science in different ways. The reference points in setting out the term can be the following aspects:

- a change in value orientations and educational strategies;

- an increase in the number and volume of humanitarian, mainly cultural subjects;
- a new system of psychological communication between teachers and students;
- attention to the individual abilities of students, their personal interests;
- humanity and the rejection of standardization and conformity.

Increasing the amount of teaching humanities as an aspect of the humanitarization of higher technical education is one of the key conditions for the formation of a practically oriented engineering and technical educational process. This point of view is supported by many researchers who studied the issue. According to Bulanova-Toporkova (2002), the most effective one is the search for appropriate ways of humanization – the inclusion of humanities in the engineers’ training and the humanization of engineering education from the inside – that is, enriching engineering knowledge with a humanitarian component.

The definition of the process of humanitarization of education should not be limited only to an increase in the number of social block disciplines in the curricula of graduate students. According to the research of Ivanova (1998), the main task of humanitarization of education is to make socially significant values of any type of education personally significant.

The problem of humanitarization of the educational process of technical and engineering orientation is also reflected in foreign scientific literature. For example, B. Amadei (2004) calls the development of engineers’ creative potential, the formation of flexible, so-called “soft skills”, both professionally and personally significant, as the main function of humanitarian training in the process of education.

Gorodetskaya and Trubnikova (2010) state that the humanitarian orientation of education at the university is possible only when creating a humanitarian environment, i.e. a certain moral and psychological environment, supported by a set of organizational, methodological and psychological measures, ensuring the formation of a unified humanitarian culture in order to stimulate humanitarian thinking among students. The humanitarian environment presupposes the creation of such conditions at the university, in which the content, structure, methods of teaching and upbringing together would reflect the processes taking place at the level of culture as a whole, which provides for the use of historical experience, rich spiritual and general cultural traditions, achievements of world culture and technology.

The results of the analysis of the literature devoted to the definition of the phenomenon of humanitarization of education and science suggest that humanitarization of education involves a broad change in the content of higher education. The main features of these changes should be as follows:

- Fundamentalization of education combined with professionalization – fundamental and highly professional educational disciplines and issues should not be taught separately, but in close connection with each other.
- Universalization of education. This aspect assumes using different subjects and subject areas of achievements in the field of content and methods of various disciplines activity, orientation to interdisciplinary problems and content, to new scientific research directions.
- Applied nature of the educational process is the focus on solving practical problems related to the problems of substantiating and conducting independent research by students.

At the same time, the humanitarization of education is provided not by all sciences, traditionally called humanities, not by those that are aimed at creating the theoretical image of human individuality; not by those that help to identify the subjective beginning in any knowledge, and not even by scientific knowledge itself with the human “dimension” revealed in it. The humanitarization of education is focused on identifying the personal meaning of professional and specialized activities with the help of humanitarian knowledge. Only personally and professionally significant humanitarian knowledge provides a genuine process of humanitarization of education (Karelina, 2000).

In order to study the current situation with the involvement of subjects contributed to improve the socio-political awareness of students in engineering and technical postgraduates’ educational process, we have analysed the working curricula for the postgraduate programs of Moscow Automobile and Road Construction State Technical University (MADI) for the 2020-2021 academic year.

The analysis allows us to draw certain conclusions about the priorities in today's training of graduate students in engineering and technical areas. The subjects presented in the curricula show that the training of graduate students is not limited to special subjects focused on the formation of professional competencies in the field of study. Subjects aimed at supplying a graduate with the maximum set of skills necessary for further high-quality pedagogical and research activities (working with expert information and data, pedagogical practice) are also included in the educational process.

We have figured out that the programs under study contain a number of subjects focused on effective work in modern social and economic conditions – studying foreign languages, developing project management skills, mastering modern information tools and technologies. The study of these subjects is important for the formation of graduates who have a large arsenal of professional skills of an applied nature. This, in turn, guarantees the demand for these specialists in the modern labor market.

However, the humanities cycle in the curricula is represented minimally. During the analysis, we identified only two disciplines that can be classified as subjects of the humanitarian cycle of training. These are the subjects “Foreign Language” and “History and Philosophy of Science”.

There are a number of reasons that can explain the choice of these subjects as studied in graduate school. The main task of studying the course “Foreign Language” by postgraduate students is the need to teach the future scientist to freely use scientific literature (in the specialty) written in a foreign language. An important skill for future postgraduate graduates is also the ability to communicate in a foreign language in everyday and professional activities, make presentations at conferences and round tables, participate in discussions in a foreign language, perceive information by ear, be able to write a business letter and perform an oral / written translation of a professional article. Mastering these skills will allow the future scientist to meet the requirements of the process of globalization of scientific knowledge and successfully integrate into the modern international community.

The study of the discipline “History and Philosophy of Science” contributes to the development of students’ ability to think freely and the ability to insert a system of arguments around their own thoughts and theses. Mastering this subject allows you to further use the acquired knowledge to form effective search strategies and research work in your scientific specialty, as well as to be included in the current philosophical discourse.

However, during the analysis of the disciplines studied by graduate students, we found a complete lack of subjects aimed at obtaining knowledge about the principles of social structure and the current political process. Without this knowledge base, it is impossible to qualitatively increase the level of socio-political awareness among students, and consequently, the development of a person who is fully aware of the modern agenda.

Thus, the results of the study allow us to conclude that at the current stage educational programs do not provide for the sufficient incorporation in the process of training graduate students of engineering and technical areas of disciplines of the humanities cycle, focused on increasing the socio-political awareness of students.

7. Conclusion

Today, it is necessary to increase the level of socio-political awareness among graduate students of engineering and technical fields, which is impossible without involving higher educational institutions in the process. Universities should not only promote higher education, but also create the necessary conditions for self-realization and comprehensive development, including personal development and social adaptation.

The importance of humanitarian training in the system of technical education is also due to the fact that modern youth, who actively participate in social, political and economic processes, are often focused only on achieving a pragmatic result – professional demand in the labor market. Professional education, as one of the socio-cultural pillars of people's life, by means of humanitarian training is able to influence the process of forming not only professional competencies, but also the value orientations of young people, directing them in a socially and culturally useful direction.

Expanding the scope of teaching humanities in the educational process of postgraduates in technical fields is one of the aspects of the humanitarization of higher technical education. In modern conditions, this is a key tool for the formation of a practically-oriented engineering and technical educational process.

Using the results of the analysis of the curricula of postgraduates in technical and engineering fields, we have concluded that the current educational process is not fully focused on increasing the socio-political awareness of postgraduates. This state of affairs may be dangerous due to the increased susceptibility of people with a low level of socio-political awareness to manipulative influences in an unstable social or political situation.

Further research on this topic is important, since it is necessary to maintain the level of socio-political awareness of graduate students of technical universities.

Acknowledgments

The study has been conducted in MADI as an activity under the project “Effective training model of technical discipline lecturers for the purpose of obtaining “International Educator of Engineering University” certificate - “ING-PAED IGIP”. MADI is recognized as a Federal Innovative Platform according to Order № 1580 from 25.12.2020 (registered on 03.02.2021).

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