

Student character building activities as a component of higher education primary educational program

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Abstract. The paper provides a solution to the task of implementing student's character building activities as a component of the main educational program of higher education in a technical university through the common universal competences formation, the educational process is considered as a single focused process of education and training in the interests of a person, family, society and the state, where education is an activity aimed at personal development, creating conditions for self-determination and socialization of the student.

The processes taking place in the political, economic, and spiritual life of our country and modern society make us look differently at the problems of education in general and at the formation of a harmoniously developed personality, in particular, through the prism of higher education. The most important purpose of higher education in Russia is to train highly moral, intellectually developed, and creatively working specialists, who will become professionals in their field. The higher education currently faces new, more complex challenges. The education should not be limited solely to the transfer of knowledge and retraining of people. It should change a person's attitude to the surrounding social and cultural environment, ensure the suitability of a person to work in rapidly changing labor and production conditions, and contribute to the formation of flexible thinking and attitudes towards dialogue and cooperation.

The Law "On Education in the Russian Federation" interprets education as a unified purposeful process of character building and training in the interests of a person, family, society, and state, while character building is viewed as an activity aimed at personal development and the creation of conditions for self-determination and socialization of students. Character building and training are two sides of a single personality formation process. While training is based on the cognitive activity of a person, providing him or her with a system of scientific knowledge and skills, education is based on the formation of a person's attitude towards life. Usually, the character building of students was more associated with their extracurricular activities, and the upbringing potential of the content of professional disciplines was not given due attention. Today, this issue has been resolved [1]. In 2020, certain amendments [2] were introduced into the Federal Law "On Education in the Russian Federation", which stated that the significance of the character building component was equal to that of the training one at such educational levels as bachelor's and specialist's degrees. Any technical university has its own specificity due to the fact that individuals with previously formed personalities come

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to receive higher education. Constituting a top priority in the higher education system, the character building activities are an organic component of pedagogical work, integrated into the general process of training and development of future specialists [3].

Nowadays, it is especially important to ensure the quality of vocational education and training of competitive, mobile, and highly demanded specialists for the labor market. A competitive specialist is a person who satisfies the needs of the market in terms of his or her professional, psychological, moral, and other qualities, possesses the adaptability and mobility, the ability to quickly adjust to the changing conditions, make decisions and take responsibility for them, as well as independently acquire new knowledge and develop skills for mastering new domains.

In accordance with paragraph 2 of Article 2 of the Federal Law “On Education in the Russian Federation”, character building is an activity aimed at developing personalities, creating conditions for self-determination and socialization of students on the basis of socio-cultural, spiritual, and moral values, as well as behavior rules and norms, adopted in the Russian society, for the benefit of a person, family, society, and state, fostering among students a sense of patriotism, civic consciousness, respect for the memory of the defenders of the Motherland and the feats of the Heroes of the Fatherland, law and order, a person of labor and the older generations, mutual respect, and caring attitude to the cultural heritage and traditions of the multinational population of the Russian Federation, nature, and the environment. Therefore, the following aspects can be named as the goals of the character building activities for the students of a technical university:

- developing the mindset and the world outlook, as well as updating the system of basic personal values;
- communicating the universal human norms of morality, national foundations, and academic traditions to the students;
- fostering respect for the law, the norms of collective life, the development of civil and social responsibility;
- fostering a positive attitude to work, socially significant dedication and responsibility in business relationships;
- ensuring the personality development of individuals and their socio-psychological support, the formation of personal qualities necessary for effective professional activities;
- identifying and supporting the talented part of students, developing organizational skills, creative potential, and involving students in the processes of their self-development and self-realization;
- forming the culture and ethics of professional communication;
- generating the own demand of individuals for a healthy lifestyle, a responsible attitude to the natural and socio-cultural environment;
- raising the level of safe behavior culture;
- developing personal qualities and attitudes, social skills, and managerial abilities.

Education is a means of character development and the formation of an individual’s culture. During the learning process, the students develop views, a scientific worldview, an understanding of the laws of nature, society and thinking, moral and aesthetic ideas, and the ability to follow the norms of behavior in the society and comply with the laws adopted in it. In addition, personality needs, activity motives, social behavior patterns, values and value orientations are also formed.

Character building within higher education is, on the one hand, the assimilation of knowledge and generalized experience of people contained in the disciplines being taught, and, on the other hand, the management of the student’s independent work. The training organizes

and stimulates the cognitive process, contributing to the formation of the student's attitude towards life and worldview. When confirmed by personal practice, the acquired knowledge, views and ideas become the beliefs of students, their persistent opinions, allowing them to make independent decisions and choose the desired line of behavior in specific life situations, including those arising during professional activities. The character building impact of academic disciplines manifests itself in three main areas: the formation of favorable personality traits, the creation of a positive attitude towards the disciplines being studied, and the development of interest to the chosen training area or specialty. All studied disciplines, including humanitarian and socio-economic, mathematical and natural science, general professional, specialized disciplines of a profile, and elective disciplines, are designed to contribute not only to the professional, but, above all, to the spiritual and moral development of future specialists. The character building potential of the management of students' independent work is focused on the formation of their independent thinking skills, their own work styles, self-discipline and willingness to work hard, responsibility, self-control, and self-esteem.

The humanitarian and socio-economic disciplines are almost the same for all technical areas of training and specialties. They are aimed at forming a holistic worldview and desire to solve socio-political problems among future graduates.

The purpose of mathematical, natural science and general professional disciplines is to provide the future graduates with fundamental knowledge in the field of their professional activities, which will allow them to navigate within the framework of their professions, ensure their mobility and ability, if necessary, requalify for another direction of training or specialty, master new equipment and technologies.

An integrated approach towards teaching, combined with character building activities, requires conveying to the students the ideas about the integrity of the world, as well as the social purpose and humanistic content of any technical and scientific achievements. A future specialist should have the understanding of the need for harmonious coordination of science, technology, and people.

Character building activities should be carried out even when higher education institutions operate in an online format, and they should provide for the involvement of the students themselves. Education should include not only knowledge and skills, but also spiritual, moral values that shape the personality and unite the society.

Since the character bringing activities for a university student are focused on the purposeful formation of the civil and social image of a future professional and specialist and on the development of patriotic qualities of a person, capable of a flexible, evaluative thinking process, building a constructive dialogue and fruitful relationships in various fields, then their contents are embodied in the following areas:

- Civic and patriotic education, focused on the development of a set of general civil values and legal culture through the involvement in social and civic activities, the development of a sense of indifference to the fate of the Fatherland, to its past, present and future for the purpose of motivating students to fulfill and defend the interests of the Motherland.
- Legal education, focused on the formation of students' legal awareness and legal culture, as well as the development of students' stable orientation towards law-abiding behavior.
- Spiritual and moral education, focused on the development of the value-semantic sphere and spiritual culture, moral feelings and a strong moral foundation, moral and aesthetic personality qualities of the students, as well as on fostering the culture of interethnic communication.
- Cultural and creative education, which implies familiarization with the material and non-material objects of human culture and provides a humanistic orientation for the activities of the student youth.

- Sports and recreational education, focused on the formation of a healthy and safe lifestyle culture, the development of the ability to preserve and strengthen one's health, the formation of such personality qualities as high morality, aesthetic sense, positive moral, collectivist, vocational and physical qualities, as well as on ensuring moral, psychological, and physical readiness for the professional activity.
- Environmental education, focused on the development of environmental awareness and sustainable environmentally-friendly behavior.
- Professional and labor education, focused on the development of psychological readiness for professional activities within the chosen occupational area.
- Scientific and research education, focused on the formation of research skills and critical thinking, as well as motivation for scientific and research activities.

The requirements for employees, who are graduates of technical specialties, are currently changing. Employers increasingly value specialists, who are inclined to be creative, since routine operations are more and more automated. Thus, the professions, which will be in demand in the future, will be associated with creativity and the ability to consider problems comprehensively, instead of looking at them from the point of view of a narrowly focused specialist. Therefore, all the aforementioned areas of activities are applied as a comprehensive set. They cannot exist separately. All of them are targeted at the formation of a personality within one's professional sphere and ensuring the completeness of individual's moral development.

Nowadays, higher education provides for the application of a competence-based approach, which allows to determine the content of character building and the quality of training of a specialist, reveals an integrated characteristic of the graduate training quality, which is the result of education and a set of interrelated personality traits [5].

Most Russian universities shall ensure the compliance of their educational process with the requirements of the Federal State Educational Standard of Higher Education (hereinafter referred to as the Educational Standard). One of the Educational Standard requirements to a university graduate is the development of a set of universal competencies (hereinafter referred to as UC), which are common for all training areas/specialties [6]. For the inclusion of character building activities into the primary educational programs of higher education (hereinafter referred to as the Primary Educational Programs), a higher education institution needs to incorporate character building work programs and a calendar plan of the relevant student activities with the appropriate forms of their certification [4]. For the bachelors' and specialists' areas of training, it is advisable to implement character building activities as part of the formation of general universal competencies, defined by the categories of health preservation, intercultural and interethnic communication, patriotism, and citizenship. As part of the Primary Educational Programs, the character building work program is implemented through the reflection of the directions of character building activities within academic disciplines. Thus, a university provides specialists who are not only brought up in a patriotic and cultural sense, but are also able to comprehensively solve the professional tasks assigned to them, taking into account legal, social, and economic norms and restrictions. The correlation of the directions of character building activities with academic disciplines is presented in table 1, which uses a bachelor's degree program as an example.

For each discipline, educational outcomes (knowledge, skills, abilities) are determined, which are correlated with indicators for determining the formation of competences related to the character building activities of a student. An example of the correlation between learning outcomes associated with character building activities of a student and indicators for determining the formation of competence according to UC-1 of the bachelor's degree program is presented in table 2. This ensures monitoring of the quality of the character building component implementation within the student educational process by checking the level of knowledge, skills, and abilities acquired by him or her.

Table 1. Correlation of the directions of character building activities with academic disciplines, using a bachelor’s program as an example

Direction of character building activities	Code and name of the universal competence from the Educational Standard	Discipline
Scientific and educational, Civic and patriotic	UC-1. Capable of performing data search, critical analysis and synthesis, applying a systematic approach to solving the assigned tasks	History, Philosophy, Introduction into Aviation and Aerospace Technology
Legal, Professional and labor, Scientific and educational	UC-2. Capable of determining a range of tasks within the framework of the assigned goal and choose the best ways to solve them, based on the current legal norms, available resources, and restrictions	Legal Science, Economic Theory, Fundamentals of Management, Economics of the Industry
Spiritual and moral	UC-3. Capable of carrying out social interaction and fulfilling his or her role within a team	Sociology, Fundamentals of Psychology
Professional and labor, Scientific and educational	UC-4. Capable of carrying out business communication in oral and written forms in the state language of the Russian Federation and a foreign language(-s)	Foreign Language
Civic and patriotic, Spiritual and moral, Cultural and creative	UC-5. Capable of perceiving the intercultural diversity of the society in its socio-historical, ethical, and philosophical contexts	History, Philosophy, Sociology, Cultural Studies
Professional and labor	UC-6. Capable of managing his or her time, building and implementing a self-development path based on the principles of education throughout the entire life	Fundamentals of Psychology
Sports and recreational, Environmental	UC-7. Capable of maintaining a proper level of physical fitness to support full-fledged social and professional activities	Physical Training (sports sections), Physical Training, Ecology
Sports and recreational, Environmental	UC-8. Capable of creating and maintaining safe living conditions in everyday life and during professional activity, intended to preserve the natural environment, ensure sustainable development of the society, including in the event of a threat of emergencies and military conflicts or their actual occurrence	Health and Safety Training

Table 1. (Continue)

Direction of character building activities	Code and name of the universal competence from the Educational Standard	Discipline
Professional and labor, Spiritual and moral	UC-9. Capable of applying basic development pathology knowledge in social and professional spheres	Fundamentals of Psychology
Professional and labor	UC-10. Capable of making informed economic decisions in various areas of life	Economics of the Industry, Economic Theory, Fundamentals of Management
Legal	UC-11. Capable of forming an intolerant attitude towards corrupt behavior	Legal Science

Table 2. Correlation between learning outcomes (knowledge, skills, abilities), associated with character building activities of a student, and indicators for determining the formation of competence, using the bachelor's degree program UC-1 competence as an example

Competence code and name	Indicator code and name	Discipline	Learning outcomes (knowledge, skills, abilities)
UC-1. Capable of performing data search, critical analysis and synthesis, applying a systematic approach to solving the assigned tasks	UC-1.1. Searches and critically evaluates the information needed to solve a problem	History	Possess the tools of historical knowledge and analysis in order to form a civic position
		Philosophy	Be capable of applying the terminology, categorical apparatus used in philosophy when arranging problem solving based on the principles of systematic thinking
			Have an idea about the main scientific paradigms and research programs
	UC-1.2. Proposes and evaluates various options for solving the problem based on the application of a systematic approach	Philosophy	Know the scientific image of the world, features of the modern civilization development, and basic concepts of the global philosophy

Table 2. (Continue)

Competence code and name	Indicator code and name	Discipline	Learning outcomes (knowledge, skills, abilities)
UC-1. Capable of performing data search, critical analysis and synthesis, applying a systematic approach to solving the assigned tasks	UC-1.2. Proposes and evaluates various options for solving the problem based on the application of a systematic approach	Philosophy	Be capable of distinguishing between a disciplinary and an interdisciplinary approach to the study of objects as systems and the focus of the study towards identifying ties within an object and between an object and the environment
	UC-1.3. Formulates a professional activity problem statement based on the critical analysis of the available data and on the systematic approach	Philosophy	Be capable of selecting, understanding, and structuring modern scientific literature, identifying its theoretical and methodological directions
	UC-1.4. Uses the knowledge of the main paths for developing and enhancing the aviation and aerospace equipment during the professional activities	Introduction into Aviation and Aerospace Technology	Know the basics of the design of aircraft and their systems, the main directions of the modern development of science and technology in the field of aviation and aerospace equipment

The proposed approach to the implementation of the student character building activities as a component of the primary educational program is applicable both for Russian students and for foreign students who are trained at the universities of their countries during their junior student years and at a Russian university during their senior student and receive two diplomas of higher education at the same time, Russian and foreign. For example, for students from the People’s Republic of China, spending their first student years at a university of their country, the civil and patriotic education is composed of studying the history and philosophy of China.

The calendar plan of the student’s character building activities and their forms of certification is a sequence of mastering the mentioned disciplines in accordance with the educational schedule, indicating the form of certification for each discipline. To implement character building activities within the teaching process, it is advisable for the professor to be guided by the following principles:

- strengthening the connection between learning and life, theory and practice;
- establishing interdisciplinary ties within the disciplines of various cycles, taking into account the profession being mastered;

- involving students in the social activities of production teams and forming their professional mentality;
- studying the advanced experience, including foreign data.

Group cooperation, team rivalry, brainstorming, business games, organizational self-administration, and many other forms are those interaction processes, which foster creativity, freedom, tolerance, citizenship, and other qualities of the students when their arrangement is well thought out.

Therefore, for the purpose of implementing paragraphs 1 and 2 of Article 12.1 of the Federal Law No. 273-FZ dated December 29, 2012 “On Education in the Russian Federation” [4], the Moscow Aviation Institute has introduced the character building activities of students into all its Primary Educational Programs starting from September 1, 2021. The introduction of the proposed model of student character building activities into the Moscow Aviation Institute educational process provides an opportunity to enhance the process of training in technical specialties by developing creative individuals, who will be able to work in a team, self-educate, apply a comprehensive approach while solving professional problems, make decisions and take responsibility for them. The educational process with the implemented character building activities is the future of training personnel for high-tech areas of the Russian industry.

References

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