

**SCTCMG 2019**  
**International Scientific Conference «Social and Cultural  
Transformations in the Context of Modern Globalism»**

**INTEGRATIVE TRAINING OF HIGH SCHOOL STUDENTS FOR  
MILITARY EDUCATION**

Snezhana Khazova (a)\*, Aleksandr Grechko (b), Svetlana Begidova (c), Bella Dzhabatyrova  
(d), Nataliya Kraft (e)

\*Corresponding author

(a) Kuban State University, 149, Stavropolskaia st., Krasnodar, 350040, Russia, rector@kubsu.ru, (8612) 19-95-02

(b) Kuban State University, 3149, Stavropolskaia st., Krasnodar, 50040, Russia, rector@kubsu.ru, (8612) 19-95-02

(c) Adygeya State University, 208, Pervomaiskaia st., Maikop, 385000, Russia, adsu@adygnet.ru, (8772) 57-11-72

(d) Adygeya State University, 208, Pervomaiskaia st., Maikop, 385000, Russia, adsu@adygnet.ru, (8772) 57-11-72

(e) National State University of Physical Education, Sport and Health, 35, Dekabristov st., Saint Petersburg,  
190121, Russia, e.rachkova@lesgaft.spb.ru, (812) 714-40-14

***Abstract***

The article presents results of a study on the definition of integrative characteristics of the pre-university training process of high school students for enrollment and training in military vocational institutions. The need for such training is based on results of the theoretical analysis of scientific literature, study of statistical documentation. These data testify to the insufficient basic level of preparedness of high school students. Theoretical clarification of the required content and formed level of preparedness of high school students for military-vocational education, the identified difficulties in adapting first-year students to a specific learning process in these educational institutions have determined the leading idea of the study. It lies in the fact that the preparation of high school students for military-vocational education should: be based on regulations of the integrative approach; assume the potential use of supplementary and professional education; be focused on the formation of intellectual, motivational and valuable, physical characteristics of students. On this basis, the following tasks are set and solved in the study: the essence, structure and content of preparedness of high school students for military-vocational education are substantiated; leading areas of pre-university training are identified; basic principles, conditions, means and methods of preparing high school students for military-vocational education are argued; characteristics of pre-university training, describing the objective, methodological, organizational, informative and methodical integrity of this process, are comprehensively described. Methods and factors of the integrative solution success of pre-university training tasks in a designed educational process, class hours and educative activities, are indicated.

© 2019 Published by Future Academy [www.FutureAcademy.org.UK](http://www.FutureAcademy.org.UK)

**Keywords:** Integrative approach, supplementary education, military-vocational.



## 1. Introduction

The events taking place in our country and in the world in the late 20th – early 21st century led to the need of modernization of the national vocational training system, including its targets, content and technology, functioning mechanisms, etc., which was reflected in state concepts, strategies and programs. These trends are also characteristic to the military-vocational education system; they are carried out in line with the general processes of reforming the state military system. However, the insufficient basic level of intellectual, moral-volitional and physical preparedness of cadets, the lack of a significant part of their installation on long-term military-vocational activities hamper the full implementation of strategic measures (Kirilenko, 2003; Obratsov & Kosukhin, 2004).

At present, general education does not fully provide pupils with the necessary level of preparedness for entering and studying in universities. In this regard, there is a formed contingent of people being keenly in need of supplementary educational services in Russia and applicants preparing to enter a university are among them. A survey conducted among applicants and students of some military universities revealed that, firstly, the overwhelming majority of high school students need additional training for entering a military university (93.5% of those who had entered the universities confirmed getting supplementary educational services, while 95.6% of those who failed the entry did not get such services) and, secondly, in Russia the system of training for entry to universities, the most common components of which are tutoring institutes and preparatory courses at universities, has spontaneously been developed. At the same time, none of the components of this system fully meets the expectations and needs of applicants and their parents (in terms of the complexity of the solved tasks, availability of supplementary educational services, variability of educational programs, etc.).

Requirements for the level and content of military education, for the personal qualities of officers, their theoretical and psychological, combat and physical preparedness indicate the need for targeted pre-university training of young people for enrollment and training in military-vocational schools, and after graduation for continuing military service as an officer (Kirilenko, 2003; Obratsov & Kosukhin, 2004; Hantington, 1957). Considering the specifics of the educational process in military higher educational institutions, the value-targeted and organizational-informative features of the military-professional activity, this training should be integrative, ensure the comprehensive formation of intellectual, moral, physical and other personality traits of future cadets.

Without introducing organizational, informative, methodical innovations into the educational process of high school, this training is difficult (Kirilenko, 2003; Kremneva, 2015; Savenkova, 2018; Kashekova & Kolosova, 2016). It seems appropriate to use the potential of supplementary education, which is not sufficiently taken into account as an organizational-informative resource for the modernization of Russian education, including military-vocational education, and improving its quality.

The analysis of modern theory and practice of military-vocational education shows that research devoted to solving the problem of integrative pre-university training of high school students for military-vocational education is not enough today. There is a number of contradictions that need scientific and practical resolution, including: the inconsistency of basic cognitive, motivational-valuable, and physical preparedness of high school students to the requirements of entrance examinations and the content of educational programs of military institutions; incoordination of the existing and described potential of an

integrative approach to education and the extent of its use in preparing high school students for military-vocational education due to the lack of knowledge about the integrative characteristics of this process, its key content and conditions of effectiveness.

The above has identified the leading idea of the study, according to which the pre-university training of high school students for military-vocational education should be based on regulations of the integrative approach, assume the potential use of supplementary and professional education, and also be focused on the formation of intellectual, motivational-valuable, physical characteristics that meet the requirements of personal qualities of cadets.

## **2. Problem Statement**

The recorded contradictions have determined the formulation of the research problem, which consists in the need to define the integrative characteristics and content of the preparation of high school students for military-vocational education. Its resolution requires the search for answers to a number of scientific questions, including: the essence, structure and content of high school students preparedness for military-vocational education; the leading directions and stages of pre-university training; the use of basic principles, conditions, means and methods for high school students getting military-vocational education; the components of the educational process and their implementation in the system of pre-university training of high school students for military-vocational education.

## **3. Research Questions**

The research subject is the organization and content of pre-university training for high school students to military-vocational education based on an integrative approach.

## **4. Purpose of the Study**

The purpose of the study is the identification and theoretical substantiation of integrative characteristics of the pre-university training process of high school students for military-vocational education.

## **5. Research Methods**

To overcome the revealed contradictions and solve the set tasks, the following research methods are used:

– theoretical - a comparative analysis of normative-legal and sociological (statistical) materials, which allows substantiating the relevance of organizing pre-university training for high school students for military-vocational education, roughly determining its key directions and expected results; the analysis of psychological and pedagogical literature, through which the content of high school students preparedness for military-vocational education is determined; the potential of an integrative approach to the organization of pre-university training, the expediency and possibility of using supplementary and vocational education

resources in this process are revealed; modelling of the holistic educational process of pre-university training in the aggregate of its integrative characteristics; theoretical generalization of research results;

– empirical - pedagogical observation, conversation, questioning, results of which, firstly, confirmed the theoretical conclusions about the need for a special organization of pre-university training of high school students for military-vocational education, and secondly, made it possible to clarify the leading requirements for the content and results of this training.

## 6. Findings

Based on state requirements for the results and content of military-vocational education, the leading requirement for applicants of military universities is their readiness to master military professional educational programs, based on: socially and professionally significant motivation for obtaining military education; conscious choice of military profession, awareness of its nature and features; moral and volitional qualities of a professional military; the required level of basic general education; a sufficient level of physical training. These requirements, as well as the analysis results of scientific studies characterizing the readiness phenomenon for activity as a quality of a person, made it possible to determine the essence, structure and content of the preparedness of high school students for military-vocational education.

The readiness of high school students for military-vocational education is an integrative quality of the individual, ensuring the possibility of entering higher military-vocational institutions and the qualitative development of military professional educational programs. It includes three interrelated components:

– cognitive - a set of subject and interdisciplinary knowledge and intellectual skills (deep knowledge of mathematics, physics, computer science, the basics of military history; developed intellectual skills, creative thinking, etc.);

– motivational and valuable - a set of professionally significant motives, valuable orientations, personal qualities and abilities (steady positive motivation of military-vocational education and military-vocational activity; love to the Motherland, desire to protect its interests; discipline state and responsibility, purposefulness and determination, etc.);

– physical - a high level of general physical training, possession of military-applied skills (overcoming obstacles, swimming, movement over rough terrain and first aid dressing, etc.), high working efficiency, physical health, resistance to adverse environmental factors, etc. (Kirilenko, 2003; Obraztsov & Kosukhin, 2004; Andronnikova, 2018; Khazova, Begidova, Akhtaov, & Dzhabatyrova, 2018).

The integrative essence of preparedness of high school students for military-vocational education, as a personality trait, is manifested in the interrelation and interdependence of the content of cognitive, motivational-valuable, physical components, as well as in the conditionality of readiness to master military-vocational education programs by a high level of basic theoretical and physical training, socially-significant motivation for obtaining military-vocational education. Based on the revealed problems of military-vocational education and the needs of applicants to prepare for it, it can be stated that the process of pre-university training should include professional selection (identification and dropout of schoolchildren who are not suitable for military professional activities for health reasons) and, in fact, the educational process (formation of the system of necessary knowledge and skills, development of professionally significant qualities and abilities). Thus, the modeled activity is focused on a two-stage solution of three groups of

tasks - intellectual, moral and psychological and physical preparation for entering and training in military universities. All of the above, in turn, necessitates the need for integrative training of high school students, including the provision of target orientation (preparation for entry and preparation for training in military institutions) and goal-informative (interrelated intellectual, psychological and physical directions of preparation) of this process integration.

A number of modern scientists associate the education integrity with the effectiveness of its functioning and development, justifying it with the integrity of modern world, practically all areas of activity, and social practice spheres (Kasheikova, 2006; Kremneva, 2015; Savenkova, 2018). The integration, in this case, should characterize all components of the educational process (goals and objectives, content and methods, subjects and their interaction), types of educational activities (general, supplementary, higher, education etc.; theoretical education and practical activity, etc.), scientific approaches and principles, etc. Thus, in addition to targeted integration, the process of preparing high school students for military education should be characterized by methodological, organizational, substantive and methodical integrity.

The preparedness formation of high school students to enter military universities and master military-professional educational programs requires special organization of the educational process. Taking into account modern targets and trends in the development of education in Russia, as well as the identified requests of future military universities for applicants and their parents, it is reasonable and necessary to build this training using supplementary education resources, namely, the school system of supplementary education.

Today, school supplementary education for children is considered as one of the promising models of supplementary education providing for the implementation of general and additional educational resources (Builova & Klenova, 2005; Podvoznykh, Bednova, & Igoshina, 2015; Kupriianov & Kosaretskii, 2017). This model functions to ensure the full satisfaction of educational needs of students, the creation of diverse individual educational routes and, in general, the creation of conditions for increasing the effectiveness of pre-vocational education. Its key tasks are ensuring the practical application of subject knowledge by students; theoretical and practical acquaintance of schoolchildren with professional fields, professional orientation; development of independence, ability to self-determination, self-education, self-organization and self-management. In addition, the important results of functioning are the increase in academic motivation, a conscious attitude towards education, creative and intellectual development, which corresponds to the needs of preparing high school students for military education in the context of the idea of our study.

One of the effective ways of organizing the school system of supplementary education is the interaction of school with other organizations (with institutions of supplementary education, culture, vocational education). The participants in such interaction organize cooperation to achieve their educational goals on the basis of a joint developing program, and if necessary to use resources of each other (Builova & Klenova, 2005; Zemsh, 2014; Kupriianov, 2012). In the context of our study, with such an organization of the school system of supplementary education, there is an opportunity for a comprehensive solution to the tasks of improving the quality of general education (in accordance with modern requirements of the

state) and the military-vocational orientation of high school students, forming their intellectual, moral, physical qualities necessary for entering military universities and training in them.

Thus, the organizational integrity of high school students training for military education, involving the integration of general and supplementary education, as well as the integration of the school system resources of supplementary education and institutions of military vocational education is promising. This organizational integrity, together with targeted integrity, in turn, actualize the importance of the methodological integrity of the preparing process of high school students for military education, assuming the support of the ideas and principles of general education, supplementary education, and military-vocational education.

In accordance with theoretical and methodological foundations of general, supplementary, military education, the following principles of organization and functioning of the preparing process of high school students for military education are defined:

- principles of supplementary education of children in the Russian Federation: personalization (provided by the individualization of educational process, practice-oriented education, the non-delayed applicability of knowledge and skills gained); openness (continuous cooperation with military professional community);

- general principles of modern education, the most significant for this study: problematic, contextual, programmed education, involving the use of appropriate forms, means and methods of training and education;

- principles of military education: social conditionality and science; practical orientation; purposefulness, systematicity and consistency; increasing the level of learning complexity; awareness, activity and independence of students; strength of knowledge and skills mastery; differentiated and individual approaches to learning, unity of training and education.

Considering the outlined principles, the leading methods of pre-university training of high school students for entering and studying in military universities are: methods of problem-based training, methods of mnemonic activity; methods of formation of interest in learning, the call of duty and responsibility formation; methods of awareness, behaviour, and feelings formation. They are implemented in the following basic organizational forms: problem lectures and seminars of the university type, lectures-consultations, lectures with the use of feedback technique, active seminars, seminars using the “round table” method; conversations, meetings with interesting people, excursions and hikes, business and role-playing games, militarized games, analysis of the specific situation; comprehensive physical training classes (general physical training, training in military-applied sports and a mini-competition).

Thus, the methodical integrity of preparing high school students for military education is characterized by the use of didactic tools of general and military-vocational education, traditional and innovative approaches to training and education. In turn, the targeted, methodological, methodical integrity necessitates a meaningful integrity of pre-university training of high school students for military vocational education, involving interdisciplinary integration, the content integration of training and educational activities (Postil & Yarova, 2018). In this context, the complex of training content includes: additional classes in mathematics, computer science and physics (as the leading specialized disciplines - the basis of theoretical training); career-oriented special courses (for example, “Profession choice”, “Introduction to

specialty”, “Military professional development”, etc.) and educational activities (class hours, excursions, volunteer work, etc.) that provide psychological training; supplementary physical training classes (including military applied exercises and exercise complexes).

The integrative characteristics of educational process identified and presented in the article make it possible to build a complete model of integrative training of high school students for military-vocational education, which will systematically reflect: directions and tasks, organizational and pedagogical conditions of preparedness, stages and calendar target steps of preparation; training-educational content, preparatory forms and methods; criterial-diagnostic tools of steps and stages of preparation. We believe that the model implementation will significantly increase the readiness of high school students to enter military-vocational schools and the quality of mastering educational programs.

## 7. Conclusion

Generalization of the results of theoretical research and analysis of empirical data allows us to state that the following types of integration characterize the effective pre-university training of high school students for military-vocational education:

- target - preparation for the entering and studying in military-vocational education (goal-oriented integration); interrelated intellectual, psychological and physical areas of training (goal-informative integration);
- methodological - reliance on the ideas and principles of supplementary, military, general education;
- organizational - the use of school system resources (staff, methodical, material) of supplementary education and the military education system;
- substantive - interdisciplinary integration, content integration of training and educational activities;
- methodical - the use of didactic tools of general and military-vocational education, traditional and innovative approaches to training and education.

This makes it possible to determine the set of organizational and pedagogical conditions for integrative pre-university training of high school students for military-vocational education theoretically. In our opinion, the main are: the integrity of goals, directions, content, methods and forms, resources (staff, methodical, material) of training; reliance on the principles of supplementary education (personalization, openness), military (social conditionality, practical orientation, increasing the level of complexity, etc.), general education; implementation of organizational-controlling and consulting-methodical functions by military educational institutions; sufficient pre-university training period (3 years); reasonable choice of educational disciplines (mathematics, physics, physical culture, training-educational special courses); the system implementation of educational measures of vocational orientation and military-patriotic content; ensuring the relationship of training and educational work; structuring of educational material and the choice of its content in accordance with principles of interdisciplinary integration, contextuality, science, presentation sequence; predominant use of methods of problem-based, game, programmed learning; implementation of means and forms of training organization in the educational process being specific to

the practice of military universities; reliance on an individually-differentiated approach to intellectual, psychological and physical training of schoolchildren.

## References

- Andronnikova, O. O. (2018). Safe educational environment as a condition of preservation of physical and mental health of participants of educational space. *Sciences of Europe*, 4(34), 51–56.
- Builova, L. N., & Klenova, N. V. (2005). *Supplementary education in modern school*. Moscow: Sentiabr.
- Hantington, P. (1957). *Officership as a Profession*. Harvard: The Belknap Press of Harvard University Press.
- Kashekova, I. (2006). Integration educational school space in action. *Art at school*, 5, 7–10.
- Kashekova, I. E., & Kolosova, S. N. (2016). In continuation of the discussion about ratio science and human knowledge in the education of modern man. *International Journal of Environmental and Science Education*, 18, 12593–12603.
- Khazova, S. A., Begidova, S. N., Akhtaov, R. A., & Dzhabatyrova, B. K. (2018). Problem organization of process of physical training of school students as condition of formation of personal physical culture. *Sciences of Europe*, 4(34), 8–15.
- Kirilenko, G. V. (2003). Main directions of the system development of training military personnel in Russia: history and modernity. *Law and security*, 1–2, 6–7.
- Kremneva, A. V. (2015). Integration of semiotic and cognitive approaches to the study of intertextuality. *Cognitive language studies*, 22, 364–366.
- Kupriianov, B. V. (2012). Supplementary education and off-hour activities: problems of interaction and integration. *Education of pupils*, 6, 3–7.
- Kupriianov, B. V., & Kosaretskii, S. G. (2017). Updating the content of supplementary education of children: a new stage. *Education of pupils*, 2, 51–58.
- Obraztsov, P. I., & Kosukhin, V. M. (2004). *Didactics of higher military school*. Oryol: Academy of Special Communications of Russia.
- Podvoznykh, G. P., Bednova, V. I., & Igoshina, O. F. (2015). On the forms of network interaction of general and supplementary education in the organization of off-hour activities of students. *Municipal education: innovation and experiment*, 2, 34–37.
- Postil, S. D., & Yarova, O. A. (2018). Development of informational and mathematical competence in the interdisciplinary information modelling. *Sciences of Europe*, 4(34), 27–32.
- Savenkova, L. G. (2018). Integrated technology and humanitarization of education. *Humanitarian space*, 1, 142–166.
- Zemsh, M. B. (2014). Problems of supplementary education organization in Moscow region in the context of the use of socio-cultural resources of territories. *Success of modern natural science*, 11(2), 87–91.