

# TOPICAL ISSUES OF CREATING A UNIFIED EDUCATIONAL SPACE THROUGH THE SYSTEM OF PRE-UNIVERSAL TRAINING FOR HIGH SCHOOLS

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## Annotation

The article deals with the issues of pre-university preparation of applicants for entering a university in the regional system of continuing education. The authors identify the peculiarities of education at school and university in order to determine what should be transformed in the system of pre-university training of applicants in order to close the existing gap in continuity in the lifelong education of high school students, forms and methods of teaching, teaching and control of knowledge, skills and abilities.

**Keywords:** unified educational space, pre-university training, continuous education system, high school students, applicants.

## INTRODUCTION

In our opinion, consideration of the issues of pre-university preparation of applicants for entering a university in the regional system of continuing education, in our opinion, should begin with identifying the features of education at school and university, which will determine what, where and how should be transformed in the system of pre-university training of applicants in order to eliminate the existing a break in continuity in the lifelong education of schoolchildren, forms and methods of teaching, teaching and control of knowledge, skills and abilities [1].

## MAIN PART

The experience of working with first-year students of the university convinces us that there is a certain gap between the knowledge gained at school and the requirements for students in the study of certain sections of general education subjects at the university. Despite the fact that the course programs contain a number of sections, to some extent studied in high school, the number of first-year students experiencing almost insurmountable difficulties in studying disciplines increases every year. Based on the analysis of the available literature, the following main shortcomings of the general education of secondary school graduates can be identified [1]. First, the school does not prepare students for the perception of lectures. This is manifested in the inability of first-year students to simultaneously assimilate and take notes of the lecture material, in the inability to compose a summary. The desire at all costs to write down for the lecturer all that has been said leads to the impossibility of concentrating on the main thoughts, to grasp the logic of presentation, the main argumentation, the meaning of the illustrated provisions. Secondly, the school does not develop the interests and abilities of students to read additional literature on theoretical issues of the subjects studied, therefore many students limit the range of theoretical sources when preparing for exams and practical classes only with lecture notes and one or more textbooks. Thirdly, which in our opinion is the most significant, students do not have the ability to connect theoretical material with the solution of practical problems, a clearly expressed desire to use ready-made algorithms for their solution. This is due to the teacher's desire to train students to solve typical problems. Fourth, unpreparedness for independent study of literature and the related inability to present the material pose serious

obstacles to improving university education, one of the areas of which is the fulfillment of the requirement "to reduce the burden of students with compulsory classroom studies, to improve the organization of independent work" [1,2,5]. Entrance tests at a university in the form and according to the USE materials should reveal the level of knowledge, skills and abilities of schoolchildren, their readiness to independently master new knowledge, skills and abilities, the ability to apply theory to solving practical problems and study at a university without daily supervision from outside. One of the main difficulties that a first-year student encounters at a university is the proposed new system of work, in which a large amount of material is studied at lectures, subject to independent comprehension, and the control and management of this work is significantly weakened in comparison with the school. Internal resistance to new requirements caused by the discrepancy between the past experience of cognitive activity and its new forms, exacerbates the difficulties associated with the development of the new content of academic disciplines. The survey conducted by us showed that among the difficulties in preparing for exams in general subjects, 67% of the respondents named the difficulty of assimilating and memorizing a large amount of material, and half of them noted that they could not distinguish the main thing from the main material. The latter is, obviously, a consequence of the fact that in preparation for the Unified State Exam, accustomed to memorizing the answers to questions without proper understanding of their essence, yesterday's school graduate finds himself in difficulty when he is required to mentally cover some section and choose the main thing from it. Applicants do not have a holistic idea of the discipline being studied, and the haphazard nature of knowledge leads to the inability to apply it, to a quick loss, and thus creates serious difficulties in the further study of the subject [3]. Observations of the course of the educational process show that the modernization of programs in general education subjects has led to such a situation that a modern schoolchild practically does not get acquainted with generalized knowledge at the level of a picture of the world, there are no generalized ideas in his preparation, which is why a particular subject appears as a set of separate fragmentary recipes for solving a number of local practical problems. A way out of this situation must be sought, first of all, in the formulation of the question of the study of general

## *Topical Issues Of Creating A Unified Educational Space Through The System Of Pre-Universal Training For High Schools*

education subjects in the system of pre-university training, in particular at preparatory departments and courses at universities. Professional knowledge should be based on pre-professional knowledge, abilities and skills of students, which are the foundation of most general education disciplines. The lack of continuity in the forms and methods of work during the transition from school to university creates an obstacle for mutual understanding between students and teachers, as a result of which the learning process does not have the character of a dialogue, which is necessary for effective assimilation of knowledge. Psychologically, this leads to the fact that some of the talented students lose faith in themselves. It should be noted that higher and secondary schools differ in goals, objectives, forms, methods and organization of education, therefore, young people, having entered a university, find themselves in a completely new environment for them and from the very first days of study should be able to properly organize their work. Let us dwell on the comparison of the peculiarities of education in higher and secondary general education schools in more detail [4,7].

The main task of the secondary school is the implementation of general secondary education for children and youth that meets the modern requirements of social and scientific and technological progress, equipping students with deep and solid knowledge of the foundations of science. The main task of higher educational institutions is to train highly qualified specialists with extensive theoretical knowledge and practical skills in the chosen specialty, to form young people aspiring to continuously improve their knowledge, skills and abilities, to independently replenish and apply them in practice. School and university differ in the structure of curricula. Education in secondary school covers a large age period in a person's life: childhood, adolescence, adolescence. Education at the university falls mainly in the second period of adolescence - the period of the formation of a boy or girl into an adult. In secondary school, the fundamentals of science, polytechnic and labor education run in parallel. In higher education, curricula, as a rule, have a linear structure: general theoretical subjects - general vocational training - disciplines of specialization. School and university differ in the forms of education. At school, the main form of teaching is a lesson. A daily lesson is most often the acquisition of new knowledge, and their consolidation, and the test of assimilation. The main type of study at the university - lecture - aims to form the student's motivation to acquire knowledge, draw his attention to the main system of concepts of this science, inform him of the latest achievements, teach him to think logically in one area or another, and provide material for thought. The lecturer introduces the student to the circle of his scientific interests, poses questions for research, etc. But the center of gravity in mastering the subject lies in the student's subsequent independent work on teaching aids, in his performance of practical and laboratory work, and so on. For the speedy adaptation of schoolchildren to university learning conditions, it is necessary to build the educational process on the PC and software of universities so that the transition from the lesson system to the lecture system takes place gradually, from lesson to lesson. Significant differences in school and university also exist in the functions of a teacher and a teacher. At school, the educational process mainly takes place with the direct participation of the teacher, including the issuance of homework, independent work and then checking its implementation. The university methodology presupposes the guidance of the teacher in the process of self-education. The process of studying at a university has some differences from a similar process in secondary school. One of them is the discrepancy between the didactic situation [6], namely,

that the way of presenting educational material and the way of checking its assimilation is changing at the university.

V.A Slastenin notes that the first academic year at a university is "a special stage in the socio-psychological adaptation of students to new conditions of life and activity" [8]. He emphasizes that the organization of educational and cognitive activity of first-year students has a strong influence on the nature and motivation of learning. This circumstance is also pointed out by A. I. Shcherbakov: "... well-organized educational and cognitive work in the first year creates favorable subjective conditions not only for the formation of the ability to study at a university, but also for the development of independence in planning and organizing work, creative thinking and readiness to the constant improvement of their knowledge and self-education" [1]. Psychologists MK Tutushkina, GA Andreeva found that students adapt to the university through cognitive and communicative activities [9,19]. A higher level of academic performance is achieved by those students who are able to realistically assess their capabilities, independently separate the main from the secondary and focus their efforts on carefully fulfilling the basic requirements of teachers, developing an appropriate individual style of cognitive activity. Experience shows that for the majority of yesterday's schoolchildren, the process of becoming them as students goes through great difficulties. Many teachers point out that a significant part of freshmen do their assignments on time, with great delay. At the same time, the quality of work is often only satisfactory. "The current level of knowledge of junior students of the university is far from the "average" ideal," notes V.L.Stefanyuk . ND Nikandrov believes that less than 10% of students prepare for lectures on a regular basis, 30% from time to time, and more than 60% do not prepare at all [10,18]. "Most freshmen have poorly formed general educational skills (work with notes and books, time budget planning, self-government, etc.), practical skills are insufficient," states GI Serikov [11]. GF Krylov [12,17] comes to the conclusion that at school, at vocational training and at the university, there is virtually no developed set of measures for the formation of a productive style in the self-organization of educational work. Comparison of the factors influencing academic performance showed that the leading factor of academic performance both in software and at the university is the formation of skills in educational and cognitive activities. Another difference between school and university education is associated with the schedule of organizing classes. At school, the school year is usually divided into quarters separated by holidays. At the university, the academic year consists of two main semesters, ending with an examination session. At school, teachers weekly and even daily check the students' knowledge, their homework, conduct tests, etc. The teacher does not let the student out of sight, and the student feels constant control over himself. At a university, a lecturer may not know all of his students for a whole semester, have no idea about how they have mastered the course they are reading. True, if there are seminars or practical classes on this subject, assistants help the lecturer to supervise the independent work of students and monitor the results. But even in this case, the student is given a very large independence. Unfortunately, not all students are accustomed to using it correctly [16]. This is explained by the fact that in secondary school students are cared for by parents, class teachers, and teachers until graduation. There is a strict regulation of tasks for students for every day in all subjects of the curriculum. At school, the student does not have to think about drawing up an independent study program. It is recorded in his diary. He can only do it carefully, limiting himself mainly to work with a textbook. At the university, from the very first days of

## *Topical Issues Of Creating A Unified Educational Space Through The System Of Pre-Universal Training For High Schools*

classes, students are given complete independence in planning academic work, leisure, etc. In higher education, the student himself must draw up a program of independent studies and systematically implement it. For each course, he is offered a large list of educational literature, which he must work through in order to master the material well. In secondary school, there is a stable textbook for each subject, which regulates a strictly defined amount of knowledge acquired per year. The university has stable textbooks in only a few subjects, they are rarely published, which means they quickly become outdated. On one subject or another, you have to use several textbooks, teaching aids and even magazine articles. Moreover, educational literature is not always available in a library or a teaching room in sufficient quantities. As a result, the systematic work with educational material becomes an important problem for the student. Consequently, the task arises to teach applicants to take notes of educational material, to correctly record lectures. The main thing in the university is not only in mastering the factual material (especially since it is too extensive), but also in the assimilation of the methodology for the development of students' cognitive independence, in the independent acquisition of knowledge, in the ability to find what is needed, practically perceive and creatively work out what is being studied. Prospective students need to learn how to properly plan their time. Many freshmen, having not learned how to distribute it rationally at school or at preparatory courses and departments of the university, in the absence of control from parents and teachers, having received full independence at the university, start the study of educational material, do not hand over tasks for independent work on time, as a result of which some of them are forced to leave the university. The task is to teach young people the skills of independence at the stage of preparing them for study at the university, namely on PC and software. This contingent should be taught to study at the university. Despite the importance of this problem, it has not yet acquired sufficient relevance in the practice of higher education, and the search for effective forms of its implementation is not being carried out. In the course of long-term observation, we found that most of the teachers employed on the PC and in the first years, in their pedagogical and methodological search, little or do not take into account the specifics of the first year of study in higher education [13,16]. It should be noted that the school and the university differ in the composition of the teachers. In secondary school, the teaching and upbringing process is conducted by teachers with a special pedagogical education, in higher schools - by scientists, qualified specialists, but, as a rule, without special pedagogical training. This undoubtedly leaves a significant imprint on the course of adaptation of freshmen to university conditions of study. To correct this shortcoming in the organization of teaching and educational work, it is necessary to attract as much as possible to work on PC and software of universities, along with university teachers, school teachers. The next feature of the educational process at the university is its professional orientation.

A. N. Leont'ev [14] understands directionality as a "leading line of life", ED Bozhovich [1] as an individual's aspiration to a certain occupation, based on a strong and stable interest in it. This position is shared by VA Slastenin, in whose opinion, "directionality is a hierarchical system of steadily forming motives of the personality" [1,15]. The professional orientation is a kind of framework around which the properties and qualities of the personality of the future specialist are arranged. It presupposes an understanding and internal acceptance of its goals and objectives, related interests, ideals, attitudes, beliefs and, in the general system of training specialists, performs a connecting, coordinating,

activating function, contributes to self-education. Another significant difference between the educational process in higher and secondary schools is that the nature of the teacher-student (teacher-student) interaction is changing. The essence of this change lies in the fact that the student is more the subject of this process than the student. At the beginning of his studies at the university, the student acts more as an object of the educational process. The increase in the volume and significance of independent work, the transition from educational and cognitive activities of a reproductive nature to its productive types, the emergence of interest in educational and research activities contribute to the formation of the student as a subject of the educational process. Thus, the analysis performed allows us to conclude that the problems of preparing applicants for further education at a university are due to contradictions between: increased requirements for applicants and an unsatisfactory level of training of school graduates; the desire of young people to get a higher education and their inability to independently organize the process of preparing for the exam; methods of control of knowledge at school and new technologies for testing knowledge, skills and abilities of applicants and university students; traditional methods, forms of organization of the educational process at school and new goals facing higher education; imperfection of the system of entrance examinations and the need to select applicants who are able to successfully master university subjects; the needs of society for people with developed abilities and the lack of a method for identifying them. Summarizing the above, we can conclude that the main difference between the school system of education and the university one is that they teach at school, and at the university they teach to learn; the student is the object, and the student is the subject of pedagogical activity; the educational process at school is aimed at educating everyone, and the requirement of the university is to select the best. These differences give rise to contradictions, the main one of which is that, on the one hand, universities need a well-trained contingent of future students who are able to quickly adapt to university conditions and have a high level of competence and motivation, and on the other hand, in the system of pre-university education conditions to form such a contingent have not been created. The problem is that at present there are no educational institutions and effective pedagogical technologies in the country for preparing young people for the upcoming study at a university, identifying and developing their abilities and qualities necessary for successful professional activity. As will be shown below, the system of pre-university education that exists to date in the form of preparatory departments, various courses is ineffective, since it has a one-sided focus, preparing the applicant for admission to the university of his choice. In addition, these organizational forms of training applicants are not a system, since they do not have the necessary features characteristic of the system. With the introduction of a unified state exam and the modernization of higher education, the task of preparing for exams will become less urgent, but the problem of identifying in applicants the abilities and qualities necessary for successful study at a university, and later for professional activity, will increase sharply.

### **CONCLUSIONS**

The way out of this contradiction, the solution of the problems facing the entire education system, we see in the creation of a system of pre-university training of applicants (SDPA) on the basis of universities, for example, in the form of a faculty of pre-university training (FDP) with its goals, tasks and functions. It should provide preparation for study at the university of the following contingent of applicants:

## Topical Issues Of Creating A Unified Educational Space Through The System Of Pre-Universal Training For High Schools

demobilized from the army and industrial workers, graduates of evening and rural schools, senior students of secondary schools, lyceums, gymnasiums, colleges, as well as those who have previously graduated from secondary educational institutions such as ten-year schools, technical schools, vocational schools. The system of pre-university training of applicants should become an organic part of the regional system of continuing education. It is designed to bridge the real gap between secondary and higher education, ensure continuity and continuity in the education of young people, and form a single educational space.

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