Abstract

Nowadays, there is a need of large Russian enterprises, organizations of small and medium-sized businesses for qualified workers. This trend is determined by the need of the labor market, which exists in the conditions of transition of the Russian economy from the commodity exports to the production and refining activities. However, the prestige of blue-collar professions is declining among young people. Schoolchildren have distorted ideas about the content and nature of productive labor and the conditions of its implementation at modern industrial enterprises. As a result, modern Russian schoolchildren are indifferent to blue-collar professions during career guidance. Their plans are most often associated with the mastery of prestigious professions in the field of management, economic and legal segments. Therefore, it is necessary to develop new mechanisms for the career guidance of schoolchildren in order to meet the needs of the Russian economy in blue-collar workers. These mechanisms should be based on respect for the blue-collar professions, productive labor and workers.

The research is based on theoretical and conceptual provisions that reveal the nature of values and psychological patterns of human orientation in the world of values. The emphasis is on forming comprehensive ideas about the values of blue-collar professions, the ability to find attractive meanings in productive work. As a result, schoolchildren’s knowledge of modern blue-collar professions is significantly increased. Career guidance technology of blue-collar professions for schoolchildren is described. It uses key resources of schoolchildren’s living space and covers the whole period of school education. It is assumed that schoolchildren will get acquainted with various groups of professions (construction, service, mining, metallurgy, agriculture, forestry), as well as possible options for building a professional career. The world of values of blue-collar professions is exposed to the following scenario: personal qualities and requirements, types of activities, professional status in society, responsibility, difficulties and risks, level of education, social protection, and educational organizations for a profession. Involvement of schoolchildren in socially significant types of labor activities and acquisition of labor experience are practiced starting from the first grade. The technology also provides of active use of business resources, the media, and parents of schoolchildren to promote and improve the image of blue-collar professions.

Career guidance technology of blue-collar professions for schoolchildren was tested at School No. 94 (Chelyabinsk, Russian Federation). School forestry was established on the basis of the school. Therefore, the implementation of the technology was carried out with a focus on the blue-collar professions in the field of forestry. The authors of the article received data about the increase in the number of school leavers who continued their studies in secondary professional education institutions. More than a third of them have connected their future activities with forestry professions. The technology has proved to be highly effective and can be recommended for wide use in schools, primarily in industrial regions of the Russian Federation.

Keywords: blue-collar professions, productive labor, schoolchildren, values, professional career, labor activity, forestry, school forestry.

1 INTRODUCTION

Increased attention to the blue-collar professions and a systematic policy to improve the quality of training for workers is becoming a characteristic feature of many industrial regions of the Russian Federation. This is determined by the direction of the Russian economy from the commodity exports activities to the production and refining activities, as well as the desire to actively develop their own production and to employ qualified workers. Over recent years, the Russian Federation has adopted a number of important government documents declaring the need to provide the most responsible
sectors of the Russian economy with highly qualified personnel, including in the field of blue collar professions.

However, we also notice a decline in the prestige of blue collar professions among young people, the indifferent attitude of schoolchildren towards blue collar professions and their choice as a lifelong activity. Our research has shown that the working professions are not attractive in the youth environment. And the exercise of "working functions" and, moreover, productive work is considered to be irrelevant. Moreover, the mentality of individual representatives of Russian teenagers understands the carriers of blue collar professions as unsuccessful people. However, the awareness of schoolchildren about the salaries of workers is not true at 94% of cases. Only 0.9% of schoolchildren from large cities of the Russian Federation and 4.3% of schoolchildren from small towns and rural areas who participated in the survey consider blue-collar professions to be prestigious. Besides, it was found out that the absolute majority of the subjects put high social status, wealth and successful professional career first. We have also established that the modern youth's perception of blue collar professions is usually distorted by the drawings about "beautiful life", which has become a habitual phenomenon for cinema and television. As a result, working professions remain on the periphery of professional choice of modern Russian schoolchildren. Their plans are most often associated with the mastery of prestigious professions, in particular, in the management, economic and legal segments.

New mechanisms for the professional orientation of schoolchildren are required, in terms of meeting the needs of the Russian economy in the workforce of blue-collar professions. Their implementation is conceived in the concept of ensuring a new quality of career guidance of schoolchildren to blue-collar professions. This implies not only the choice of blue-collar professions by schoolchildren, but also the formation of a respectful attitude to these professions, productive work and people, expanding the understanding of the real possibilities of blue-collar professions in the development of the essential forces of man.

The authors of the article consider that the process of popularization of blue-collar professions among children should be prolonged. It should start in the first grade and continue through the entire period of school education. The career guidance to the blue-collar professions is based on the schoolchildren' understanding and acceptance of the values of such professions and respect for people who are engaged in direct productive work. An important place in the system of career guidance of schoolchildren to blue-collar professions is occupied by their aspiration to master the "working" functions for the implementation of household needs and self-service. The considerable potential for this is in the possibility of increasing the labor force participation of schoolchildren, using school and family resources for this purpose.

As a result, the task of career guidance of schoolchildren to blue-collar professions is relevant from the point of view of improvement of the quality of personnel provision of industrial enterprises. It also has an important role to play in overcoming the indifferent attitude towards blue-collar professions in the youth environment. Means of career guidance accumulated in special technology can be used in a wide range of professional guidance practices in many schools located in regions with a predominant industrial or agricultural focus.

2 LITERATURE REVIEW

Pedagogical science has a large number of theoretical and applied developments, which can be used to build a system of career guidance of schoolchildren to blue-collar professions. In this regard, it is worth mentioning first of all the scientific publications revealing the socio-psychological factors of career guidance of young people and schoolchildren (M.A. Bendyukov [1], I.E. Brusheenkov [2], S.N. Chistyakova [3]).

The particular value to us is the research carried out by specialists of the Belgorod scientific school (E.I. Erosheenova, I.F. Isaev, N.I. Isaeva, V.N. Kormakova, E.N. Krolevetskaya), who study the peculiarities of the process of self-determination of high school schoolchildren in the field of blue-collar professions [4], [5], [6].

A number of studies focus on the conditions and factors that guide schoolchildren to agricultural occupations. In this context, the publications of R.G. Kiladze [7], V.I. Petrukhin [8], I.M. Filippov [9] can be considered useful.
Theoretical generalizations made in the format of definition of psychological and pedagogical factors of choice of technical and high-tech blue-collar professions (V.V. Belousova [10], V.I. Kryukova [11]) are useful.

The research conducted in the context of career guidance and professional choice of metallurgical professions by schoolchildren had a certain influence on the choice of strategy of career guidance of blue-collar professions for schoolchildren (A.A. Listvin [12], N.A. Silkina [13]), shipbuilding professions (V.N. Antipenko [14]), man-technician professions (A.I. Tsukanov [15]), construction professions (L.P. Goloschekina [16]), service sector professions (V.A. Yashchenko [17]), space industry professions (E.V. Popova [18]), engineering professions (V.B. Gundyrev [19], N.V. Kotova [20]).

The studies show that there is a strong interest among scientists and practitioners in the various aspects of career guidance for schoolchildren. The significant range of conceptual ideas and theoretical generalizations has been accumulated, in interpreting this process. However, working professions as a socio-cultural phenomenon and a form of labor activity have not been the subject of special scientific research in pedagogy until now. The selection of working professions in recent studies has been researched in relation to high school schoolchildren or on the basis of individual school subjects and does not cover the full range of opportunities offered by an educational, practice-oriented and family-oriented environment. In addition, the question of the career guidance of schoolchildren to blue-collar professions in axiological interpretation remains poorly studied.

3 METHODOLOGY

The research is based on conceptual provisions that reveal the nature of values and psychological patterns of career guidance of schoolchildren in the world of values. The use of an axiological approach makes it possible to discover the diversity of values in the phenomenon of "blue-collar professions", which brings an unconditional cultural context to it. As a result, it can be argued that working professions are an essential attribute of modern culture, which has gone a long way in its development. Interpretation of the phenomenon of "blue-collar professions" from the cultural point of view makes the solution of the problem of career guidance to blue-collar professions feasible. The reason for this is that the entire arsenal of pedagogical tools available to the school teacher can be used effectively.

The emphasis is on forming comprehensive ideas about the values of blue-collar professions, the ability to find attractive meanings in productive work. As a result, students' knowledge of modern blue-collar professions, the role of such profession in their lives and ensuring its success is significantly increased. Consequently, the possibilities in interpretation and substantiation of ways of the solution of actual problems of modern school in a part of a substantiation of new mechanisms of career guidance of blue-collar professions for schoolchildren are expanded.

The blue-collar professions can be defined as a special type of human labor activity aimed at performing labor operations. There are characterized by the following features: a) the maintaining a significant proportion of physical effort; b) the active involvement in the production process; c) the presence of hired labor; d) the high level of subordination to the organizers of production [Figure 1].

![Figure 1. Prevention of aggressive behavior of schoolchildren in adverse social conditions](image)

We describe the semantic space of the phenomenon of "blue-collar professions" by identifying four groups of values: acmeological values, social values, personal values, and effective values [Figure 2]. Cognitive values reveal the internal capabilities of blue-collar professions in terms of their use for
human development in a specific area of production work. Social values reflect the direct impact of the quality of working life of blue-collar professions on the nature of their involvement in the system of social and labor relations. Personal values determine the semantic system of regulation and direction of behavior of blue-collar professions. Effective values reveal the nature of the work; symbolize the practical aspect of this type of labor activity.

The dynamic aspect of career guidance of blue-collar professions for schoolchildren is described by us through psychological mechanisms of adaptation, identification, interiorization and internalization. Adaptation is the starting point for the inclusion of children in the world of work values. Adaptation helps relieve the psychological tension of schoolchildren and ensures their comfort in working life. Identification allows schoolchildren to experience the values of blue-collar professions. It enables children to identify themselves as subjects of work in a particular occupation. Interiorization allows students to find the most important and attractive meanings in the values of the blue-collar profession. At this stage, schoolchildren make a choice of values for working professions. This is reflected in the nature and content of their activities at school and beyond. Sometimes the interiorization of values is manifested in the plans and intentions of children, which can be imaginative. Psychological mechanism of internalization is expressed in the formation of individual system of values of blue-collar professions among schoolchildren. Such an individual system of values defines the behavior of schoolchildren and stimulates their inclusion in the labor activity.

These psychological mechanisms take into account the age-specific characteristics of schoolchildren and are implemented sequentially at four stages: the first stage (grades 1-4), the second stage (grades 5-7), the third stage (grades 8-9), and the fourth stage (grades 10-11). This was reflected in the design of the career guidance technology of blue-collar professions for schoolchildren [Figure 3].

In the first stage, the pedagogical work with younger schoolchildren (grades 1-4) is arranged in such a way as to give children an initial idea of the professions in general, the nature of the work performed within these professions. It is important to develop the ability of junior schoolchildren to present familiar professions. The result of such work should be a fixed placement of children in the workplace; a positive attitude towards people engaged in productive work; a desire to participate in productive work.

The teaching material for junior schoolchildren includes information about 16 occupational groups. Each of these groups include 5-7 and, in some cases, more occupations. It may be the professions of construction, service, agricultural, financial, creative and other plans. The strategy of familiarity with occupational groups is determined by the professions of their parents and immediate family members.
At the second stage of technology implementation, attention is shifted to blue-collar professions, formation of fixed installations for these professions in the younger teenagers (5-7 grades). Schoolchildren are introduced to various career development options in a particular occupation. This is achieved by including the following attributes of blue-collar professions in the pedagogical work with adolescents: subject, purpose, means and working conditions; nature of mobility in work; nature of communication in work; responsibility in work; peculiarities of work, typical difficulties and risks; minimum level of education, etc.

At this stage, professions are directly related to the operation of machinery or mechanisms are brought to the fore. The basis for this conclusion can be our long-term observations, as well as the characteristic features of age. In particular, schoolchildren at 5-7 grades are interested in the professions of urban transport and food line operators. Schoolchildren pay particular attention to professions related to the management of robotic technology. This is reflected in the organization of educational and practical activities of schoolchildren in 5-7 grades.

We recommend imitation and role-playing games: "Profession with the letter ...", "Self-portrait", "Man and profession", "Who is who", "Guess the profession", "Self-advertising", "Day of life ...", "Professional gait", etc. Meetings with representatives of various professions are practiced, which are held either in the classroom or on excursions at the district or city enterprises. It is important to involve children in the independent search for information. It is proposed to create a profession stand, where the information is updated on a weekly basis. Schoolchildren can participate in the creation of a file cabinet "Encyclopedia of professions", albums "We were on a tour". It is important for teenagers to carry out a selection of illustrations "In the world of professions", to collect materials for the exhibition of technical and artistic creativity of schoolchildren, to hold classroom hours for younger children.

Educators should help teenagers to improve their knowledge of themselves, their characteristics and opportunities. The idea that any profession can be mastered is central. The value of this position is that it guides teachers in motivating children to achieve their goals.

The third stage of the technology is implemented in 8-9 grades and is aimed at identifying professional and life plans of schoolchildren, forming their basic social attitudes in the profession, in particular, blue-collar professions. At this stage, schoolchildren develop their understanding of the blue-collar professions and their groups, especially those that are available in their city and in demand in local businesses. Schoolchildren continue to get acquainted with the world of values of blue-collar professions according to the following scenario: personal qualities and requirements of the profession, types of activities in the profession, professional status and position in society, responsibility and peculiarities of the profession, difficulties and risks of the profession, level of education and salary, social protection in the profession, educational organizations for getting the profession.

In order to implement the social order for qualified personnel from local industrial and agricultural enterprises, we include the following information about local enterprises in the content of pedagogical work with schoolchildren: history and traditions of the enterprise; products manufactured by the enterprise and their demand on the domestic and foreign markets; personnel management policy of the enterprise and ways to encourage employees; implementation of measures to organize recreation,
health care and support for young workers. In the same way, the content of pedagogical work with schoolchildren is enriched with regard to their acquaintance with educational institutions that provide training in blue-collar professions. This approach is justified from the point of view of children's understanding of the respectful attitude of the management of local enterprises towards the workforce, as well as the incentive influence on the choice of professions for teenagers.

The third stage of the technology is implemented in 10-11 grades and is aimed at forming an individual system of values of blue-collar professions in high school students. The emphasis is on activating the desire of high school students to develop a variety of practical training topics are offered: "My Skill and Ability", "My Career Ladder", "How to Make a Choice", "How to Succeed in the Profession?", "Preparation of Documents for Employment", "Rules of Conduct in the Labor Market", "Preparing for Interviews at Employment". such knowledge and skills, which are required for successful mastering of the proposed profession.

The design work of high school students is actively used. We proceed from the fact that the topics of the projects aroused emotional response among students and were interesting to them. For example, schoolchildren participate in the encyclopedia "Professions of our city", shoot videos about the blue-collar professions of their native city, design photo exhibitions "We have done a good job", covering a school event, staging artwork that glorifies the work of people.

Taking into account the needs of high school students in communication, the importance of educational activities and interest in the development of their abilities, we offer to create clubs of future specialists ("Club of future builders", "Club of future masters of agriculture", "Club of machine builders", "Club of future motorists", etc.).

At all stages of the technology implementation it is planned to involve schoolchildren in socially significant types of labor activity. Acquisition of work experience is practiced starting from the first grade. The technology also provides for the active use of business resources, the media, and parents of schoolchildren to promote and enhance the image of blue-collar professions.

4 RESULTS

The career guidance technology of blue-collar professions for schoolchildren was tested at school No. 94 (Chelyabinsk, Russian Federation). For several years, the school has been running a school forestry system. The problem of personnel in the forest industry today is one of the most important in the personnel policy of the region. That is why we considered school forestry as a pedagogical platform for schoolchildren to develop systematic ideas about blue-collar professions in the field of forestry. In this regard, the effectiveness of the technology implementation was also related to the increase in the number of school leavers who chose to work in the field of forestry, forest protection and restoration as their business.

The technology was tested in the period from 2017 to 2019. The total number of schoolchildren included in the experimental sample was 150 people, including 1-4 grades - 56 schoolchildren, 5-7 grades - 42 schoolchildren, 8-9 grades - 28 schoolchildren, 10-11 grades - 24 high school students. The integral criterion for evaluating the effectiveness of the technology was the value focus of the schoolchildren on the blue-collar professions in the field of forestry.

To diagnose schoolchildren depending on the age category of children, tests were used to determine their aptitudes, maps of observations of educational and practical activities. In addition, the schoolchildren's portfolios and project works were analyzed. Social activity sheets of classes and individual children were studied. The following methods were also used to diagnose high school students: "Professional Readiness" method (author - A. P. Chernyavskaya); "Profession Formula" method (author - N. S. Pryazhnikov); professional aptitude questionnaire of L. Yovaishi (modification by G.V. Rezapkina).

Based on the results of the experimental study, it was determined:

1. The most effective pedagogical work to develop the value focus of schoolchildren on blue-collar professions is carried out from the first to the ninth grades.
2. Without targeted pedagogical work, children already in the third grade begin to change their attitude towards work and professions in a negative way.
3. By the ninth grade, the difference in the state of value focus of schoolchildren on blue-collar professions in the experimental and control groups becomes statistically significant.
After the ninth grade, the dynamics of schoolchildren's value focus on the blue-collar professions are slightly weakening.

In addition, the authors of the article received data on the increase in the number of graduates of school No. 94, who continued their education in secondary professional education institutions. More than a third of them have linked their future activities to forestry professions.

The technology has proved to be highly effective and can be recommended for wide use in schools, primarily in industrial regions of the Russian Federation.

5 DISCUSSION

The presented career guidance technology of blue-collar professions for schoolchildren possesses property of productivity, flexibility and reproducibility. It can be applied in the practice of schools, primarily in the constituent entities of the Russian Federation with a predominant industrial direction. The technology allows for adaptation to specific school conditions.

This technology has an important social and pedagogical effect. It is in line with the idea of schoolchildren adopting the values of the blue-collar professions, respecting the people engaged in productive work, and striving to master the "working" functions for domestic needs. It is also important that the proposed pedagogical tools allow to influence the overcoming of the trend associated with the decline in the prestige of blue-collar professions in the youth environment.

The proposed approach allows to expand the panorama of professions and spheres of application of human labor, which are the object of consideration of schoolchildren in career guidance work. The prospects for the implementation of career-oriented technology may be linked to an increase in the number of school graduates who have chosen to work in industrial production or agriculture as their business.

6 CONCLUSIONS

The main objective of career guidance is to expose the different facets of these professions. It is supposed not only to tell about the work functions of the employee, but also to show the place of his work, training conditions, to introduce the modern equipment and leisure of the specialist. When schoolchildren from primary school age get to know the world of professions in various forms through games, learning tasks, discussions, projects, they start not only to build their professional route in high school age, but also to treat people of work and their products of activity with respect. On this methodological basis, a technology has been developed career guidance schoolchildren to blue-collar professions, which defines the content, methods and techniques of career guidance work with children at various stages of secondary school education. The pedagogical work with schoolchildren is based on psychological mechanisms of adaptation, identification, interiorization and internalization. The technology involves schoolchildren gaining work experience throughout their school years. Business, mass media and parents of schoolchildren are actively used to promote the image of blue collar professions. The career guidance technology of blue-collar professions for schoolchildren was tested on the basis of the school implementing the school forestry model. The technology confirmed its effectiveness and is recommended for the design of career guidance strategies in schools of industrial regions of the Russian Federation.

REFERENCES


