

# SOCIO-ECONOMIC RESEARCH

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## WILLINGNESS TO WORK BY PROFESSION (BASED ON SURVEY OF TEACHER EDUCATION GRADUATES)



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*The education sector is accumulating a critical mass of intellectual resources to meet the challenges of ensuring the country's sovereignty under the conditions of unprecedented sanctions pressure from the West. At the same time, it still has a number of structural problems that emerged during the period of reforming the education system (this is the aging of teaching staff, insufficient staffing of general education organizations, and the growth of the teaching load due to the increase in class sizes, etc.). The problem of employment of graduates of professional education in accordance with their qualifications has also become more acute. According to Rosstat data, the share of teachers who find jobs in their specialty is about 80%, which is noticeably lower than in other socially important spheres. The purpose of the study is to assess the motives for choosing a profession and the readiness of graduates of pedagogical training areas of universities and pedagogical colleges for professional activity in their specialty. The information base of the study is the data of Rosstat, as well as the results of the pilot survey of graduates of higher and secondary vocational education organizations of the Vologda Oblast, studying in pedagogical specialties. The authors identified the motives for choosing a profession, and assessed the graduates' readiness to find a job within their specialty. They identified the reasons for reluctance to work at school, including low wages, fear of working in a teaching staff and lack of professional vocation. The method of cluster analysis was used to identify groups of graduates depending on their readiness*

*to work at school and the presence of disappointment in the profession during training. Two groups are of the greatest interest. The first group are the graduates “ready for school work”, having positive characteristics practically by all the criteria (choice of work according to vocation, desire to work with children, etc.). The second group are the graduates “not ready for school work” characterized by a loyal attitude to the teaching profession. The authors believe that it is possible to change these graduates’ career plans into choosing employment in their field if additionally work with them and guide. The practical significance of the research results lies in the fact that they can be used in the development of measures in the field of vocational orientation in general educational organizations.*

*Profession, willingness to work by profession, teacher training graduates, motives for choosing a profession, vocation.*

## Introduction

The high pace of development of modern social space determines the increase of requirements and expectations from the education system, where the creation of conditions for ensuring global competitiveness of Russian education with regard to the social order comes to the forefront<sup>1</sup>. The education system traditionally faces a number of problems. The first is teaching staff aging. According to the Ministry of Education of the Russian Federation, 55% of teachers have 20 and more years of pedagogical experience<sup>2</sup> (in 2000 their share was 37%<sup>3</sup>), the share of young teachers with up to three years of experience is 9%. Second, the number of students per teacher increased from 13 students in 2013/2014 academic year to 19 students in 2021/2022 academic year<sup>4</sup>. Third, the staffing problem is growing: staffing of general education organizations in 2021/2022 academic year was 97%<sup>5</sup>.

The latter is directly related to the problem of employment of vocational teacher

education graduates in accordance with their qualifications. According to Rosstat data, the share of teachers employed in their specialty is 83%, which is noticeably lower than in other socially important areas (for example, in the field of “health sciences and preventive medicine” it is 100%)<sup>6</sup>. At the same time, the data given by experts<sup>7</sup> are even lower – 15–20%.

Researchers believe that “the problem of employability, which was initially a problem on the demand side (labor market) and was solved by programs to increase employment, has grown into a problem arising on the supply side (education market)” (Maltseva, 2021). According to Rosstat, the share of 2019–2021 graduates who worked not in their specialty is 28% of university graduates, 42% of college graduates and 45% of skilled workers<sup>8</sup>. According to hh.ru portal, in 2023 only 47% of Russian citizens were working or looking for a job in their specialty<sup>9</sup>.

<sup>1</sup> Passport of the Education National Project. Available at: [https://minobrnauki.gov.ru/files/NP\\_Obrazovanie.htm](https://minobrnauki.gov.ru/files/NP_Obrazovanie.htm) (accessed: June 10, 2023).

<sup>2</sup> Information on the form of federal statistical observation No. OO-1 “Information on the organization, which carries out educational activities under educational programs of primary general, basic general, secondary general education” at the beginning of the 2022/23 academic year. Available at: <https://docs.edu.gov.ru/#activity>

<sup>3</sup> Education in the Russian Federation – 2010 (2010): Stat. collection. Moscow: State University Higher School of Economics.

<sup>4</sup> Bondarenko N.V., Varlamova T.A., Gokhberg L.M. et al. (2023). Indicators of education – 2023: Stat. collection. National Research University “Higher School of Economics”. Moscow: National Research University Higher School of Economics.

<sup>5</sup> Ibidem. P. 284.

<sup>6</sup> Compliance of the work of employed graduates of 2019–2021 graduation with the specialty obtained in the educational organization of higher education. Available at: [https://rosstat.gov.ru/labour\\_force](https://rosstat.gov.ru/labour_force) (accessed July 25, 2023).

<sup>7</sup> Only 15–20% of pedagogical university graduates reach schools in Russia. REGNUM IA. Available at: <https://regnum.ru/news/economy/3351765.html> (accessed: May 10, 2023).

<sup>8</sup> Results of sample observation of employment of graduates with secondary vocational and higher education in 2021. Available at: [https://rosstat.gov.ru/itog\\_inspect](https://rosstat.gov.ru/itog_inspect) (accessed: June 25, 2023).

<sup>9</sup> Less than half of Russian residents work by profession. Available at: <https://rg.ru/2023/04/11/diplomnaia-rabota.html> (accessed: July 25, 2023).

The results of monitoring studies show that employment outside the specialty creates many risks: a lower level of labor satisfaction, losses in wages, less correspondence of work to the vocation, aptitudes and abilities (Kolossova et al., 2020; Balganova et al., 2023; Leonidova, 2023). In modern realities, job satisfaction should be considered not only as the first-priority vector for improving the quality of working life of the employed population, but also as a factor that motivates to work, including in the specialty (Belekhova, 2023).

The relevance of addressing the problem of teacher training graduates' employment is confirmed by the data of the updated Consolidated Forecast of Employment of the Population and the need of the Vologda Region economy in labor resources<sup>10</sup>. The document defines the general social order for personnel training in secondary and higher professional educational institutions up to 2030. According to the calculations, specialists are required today in almost all spheres, especially where digital technologies are introduced. It was noted that the top-10 list includes "education and pedagogical sciences" among other areas of higher education training.

The employment of graduates of pedagogical training in their specialty depends largely on their motivation in choosing a profession and their readiness to work at school. Unpreparedness of graduates to work in the profession, particularly in pedagogical profile, can have a whole set of hidden negative consequences for society. The education system does not receive trained personnel, and the regional economy does not receive motivated and productive workers. Identification of the reasons for this will help to work out the directions of their elimination in the future and evaluate the success of the measures taken. In this regard, the aim of the research is to study the motives for choosing the pedagogical profession and the readiness of graduates of pedagogical universities for professional activity in educational organizations.

### **Theoretical aspects of professional readiness**

At present, competition in the labor market urges professional organizations to satisfy market demand for specialists of a certain level and quality of training, including in the field of education, prepared to work in constantly changing conditions. The tasks of pedagogical professional organizations are not only to improve the quality of training of future teachers, but also to orient them to work in the profession, aiming at training a motivated specialist who has gained not only knowledge, but also experience in pedagogical activity.

The issues of training future teachers and their position in the labor market have long been studied by both foreign and domestic researchers. The authors' conclusions often coincide at the intersection of the study of the functional features of the institutional environment and the role of socio-cultural factors and educational aspects (Vlaskina, Kuznetsova, 2011; Kasparzhak, 2013; Golovchin, Solovyova, 2018; Nurieva, Kiselev, 2020; Karaulov, 2021; Golovchin, 2022; Leonidova, 2022; Leonidova, 2023).

In foreign countries, the main problem facing pedagogical systems is the shortage of personnel due to demographic aging, attrition from the working age cohorts, and the need for continuous renewal of personnel (Schleiher, 2013). To address this problem, there are comprehensive support measures that vary from country to country. For example, in Germany, teachers are equal to civil servants with corresponding privileges (Pisareva, 2016). In the UK, there is a program to train the next generation of teachers, which encourages students to want to work with children while teaching (Sutcher et al., 2019). In China, to address teacher staffing problems, serious attention has been paid to improving the social status of teachers: salaries at least equal to those of civil servants, housing, free medical care and other benefits (Panova, Mengzhu, 2020).

<sup>10</sup> Consolidated forecast of population employment and the need of the Vologda Oblast economy in labor resources by types of economic activity in the Vologda Oblast for the mid-term and long-term period. Available at: <https://depzan.gov35.ru/vedomstvennaya-informatsiya/statistika/spros-i-predlozhenie-rabochey-sily> (accessed: July 27, 2023).

In the Russian scientific literature, the reluctance of graduates of pedagogical specialties to work in their specialty was once explained by the situation of “negative selection” (Kasparzhak, 2013), which is actively opposed by scientists at the moment (Lysenko, 2016; Nurieva, Kiselev, 2020), explaining that today only 45% of graduates in the structure of graduation in pedagogical specialties have the “Pedagogical Education” profile (Nurieva, Kiselev, 2020). At the same time, one cannot but agree with the opinion that higher pedagogical education remains in crisis. Pedagogical universities feel the shortage of students “due to the low pay and hard work of teachers”, actually have to take those who could not enter other universities with a passing score of 35 out of 100 (Savvateev, 2023).

Researchers consider “insufficient level of psychological readiness for pedagogical activity” as one of the reasons for the outflow of young specialist teachers from educational institutions (Podkolzina, 2019).

According to the scientists from N.M. Rimashenskaya Institute of Socio-Economic Population Problems of FCTAS RAS, “the main factors influencing students’ willingness to work in the industry are the availability of secondary employment and salary expectations” (Aleksandrova et al., 2022). Secondary employment of a student while studying in a relevant industry specialty assists learners in consolidating skills and ultimately provides higher levels of full-time employment for those who had paid employment during their studies (Chavan, Carter, 2018; Jackson, Collings, 2018; Jackson, 2018). Secondary employment offers the opportunity to enter the workforce more quickly after graduation (relative to other graduates), to progress more quickly in their careers, and to perform their work more competently (Pasovets, 2019).

An important role in the process of forming readiness to work in the field of study belongs to industrial practice, which has lost its mandatory status in modern professional organizations. At the same time, practice contributed to “consolidation of students’ theoretical knowledge and was a testing ground

for students’ aptitude for the desired specialty” (Gorshkov et al., 2023, p. 142). As shown by the results of the nationwide retrospective survey of 4,000 young specialists, conducted by the Institute of Sociology of the Federal Research Center of the Russian Academy of Sciences in 2021, the weakening of attention to practical training led to the fact that the skills acquired during practical training “were insufficient to competently start performing their job functions, or were not in demand” for 11% of graduates in the specialization “Education” (Gorshkov et al., 2023, p. 148). Nevertheless, in the formation of future teachers’ readiness to implement the socio-pedagogical function, educational and industrial practice, which integrates theoretical knowledge and its practical implementation in the conditions of an educational organization, remains a factor with great potential (Kudryashova et al., 2021).

The success of professional self-determination and readiness to work in a profession depend on “the formation of professional qualities – psychological and physical properties that meet the requirements of a particular profession and contribute to the successful mastery of it” (Pauli, 2021). Specialty employment is also “an important characteristic of career trajectories” because it “contributes to higher wages” (Kolossova et al., 2020) and “greater job satisfaction” (Epikhina, 2019).

Researchers distinguish four stages in the professional readiness formation: professional suitability, professional preparedness (availability of a certain body of knowledge), practical experience (qualification in the profession or professional competence), and personal motivation (Dureeva, 2018). Motivation serves as “an internal driving force of the trainee’s professional development, a source of self-development and self-realization in professional pedagogical activity” (Volodina, Filippov, 2021).

Most researchers, when considering the teacher’s readiness for professional activity, distinguish such characteristics as the state and quality of personality. The first corresponds to readiness as an action (active) state, which reflects the content of the accepted professional

task and the conditions of its fulfillment, the second corresponds to the intellectual sphere of a person, his/her volitional characteristics, motives of participation in the profession (Kudryashova et al., 2020).

The profession of a teacher is a profession of vocation. Russian studies show that commitment to the profession is “the strongest predictor” (Maslinsky, Ivanyushina, 2016), “system-forming quality”, “generic characteristic of Russian teachers” (Ovsyannikov, 1999). Studies in the Vologda Region of the Russian Federation and the Mogilev Region of the Republic of Belarus show that such socio-cultural factor as “work by vocation” is more widespread in the teacher’s environment than the average for all professions (72% vs 57%) (Russia and Belarus ..., 2019). It follows that the phenomenon of professional vocation should also be taken into account when assessing the readiness of teacher training graduates to work in their professional sphere.

In Russian psychology, readiness for professional activity is considered from the perspective of personal (actualizes the manifestation of individual qualities of personality in their integrity) and functional approaches. From the functional approach, readiness for professional activity is studied as “pre-start activation of mental functions, the ability to mobilize the necessary physical and mental resources for the implementation of activity” (Podkolzina, 2019).

From the perspective of the phenomenological approach, one of the factors that “stimulate the teacher’s way of thinking and behavior is the phenomenon of pedagogical dynasty” (Ivanovskaya, 2015), continuity of professional qualities, and genetic predisposition. Followers of family traditions in the field of professional choice, labor causes a sense of joy, a sense of their own usefulness and co-participation.

From the economic point of view, the employment of graduates of pedagogical vocational education by vocation “is an indicator

of the effectiveness of existing methods and tools of management of the education system and budget spending”, “one of the criteria of social openness of society, promoting professional and social mobility of young people” (Bulatova, 2017), and also carries economic effects (higher wages, labor satisfaction, high level of realization of qualitative properties of the workforce) (Leonidova, Kabakova, 2022).

Thus, readiness for professional activity is presented as a set of many factors that ensure successful transition from school education to professional education, and from professional education to professional activity. These factors include the emotional state of graduates on the eve of taking an important step in their lives, their adaptation capabilities, perception of the realities of the future place of work, and other external and internal conditions.

### **Information base and research methodology**

The results of the study are based on the data of the pilot sociological survey of students-graduates of higher and secondary professional organizations of the Vologda Region, studying in the directions of pedagogical education:

- 1) bachelor’s degree 44.03.05 (higher education). Pedagogical education (with two training profiles);
- 2) master’s degree 44.04.01 (higher education). Pedagogical education;
- 3) qualification 44.02.02 (vocational secondary education). Teaching in primary classes;
- 4) qualification 44.02.03 (vocational secondary education). Pedagogy of additional education.

The field phase of the study was conducted in May – June 2023. To participate in the survey, students were selected by the method of stream sampling<sup>11</sup>. The number of the general population of graduates of higher and secondary professional organizations of the Vologda Region, studying in the areas of teacher education, is 508 people<sup>12</sup>. The final sample (n = 131) was represented by graduates of five

<sup>11</sup> Streaming sampling is an internet-based approach to sample design where respondents are randomly selected for a single survey or included in a panel of repeated surveys. In a streaming sample, potential respondents are most often people who visit websites where there is an invitation to participate in the survey.

<sup>12</sup> Form No. VPO-1 “Information about the organization carrying out educational activities under educational programs of higher education – bachelor’s degree programs, specialist’s degree programs, master’s degree programs”.

**Table 1. Distribution of answers to the question  
“What is the reason for your decision to enter pedagogical specialty?”, % of respondents**

Answer option	Percentage of answers
Desire to communicate with children	29.0
It's my vocation, I like this profession	24.4
Lack of opportunities to enroll in another specialty	13.0
Influence of teacher's personal example	10.7
The desire of parents, relatives	6.1
It is easier to enroll in this specialty	3.1
The desire to expand the circle of communication with interesting people)	3.1
The desire to join the company of friends	2.3
I have no predisposition to other professions	0.8
The desire to improve social status (to use the profession as a social elevator)	0.8
The desire to earn money	0.0
I find it difficult to answer	3.8

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VolRC RAS).

teacher training colleges located in the districts of the region, and graduates of teacher training programs of two state universities (Cherepovets and Vologda), which are important for the education sector of the region.

The questionnaire was conducted by the method of online survey, for participation in which students had to follow the link posted on the page of the professional organization in the social network “VKontakte”.

The sample structure is 95% represented by female students. This shift is characteristic of the education sector (89% of teachers of organizations providing educational activities under educational programs of primary, basic and secondary general education are women<sup>15</sup>).

In the study, a cluster analysis was conducted based on the question about readiness to work in schools and assessment of their professional choice. First, four groups of graduates were identified: A – planning to work in the specialty; B – not planning to work in the specialty; C – regretting their choice; D – not regretting their choice in favor of pedagogical work. Then clusters were defined: AD – ready to work at school; AC – rather ready to work at

school; BD – rather not ready to work at school; BC – not ready to work at school.

The main hypothesis is that there is a group of graduates who can change their professional plans in the direction of employment in their specialty subject to additional career guidance work by the teaching staff of educational institutions and targeted support measures.

### Research results and their discussion

The largest share of graduates (60%) decided to continue their education either in college after 9th grade or in higher education after 11th grade. For 20% of the responding students, the profession of a teacher has been a dream since childhood. While only 7% of students admitted that they chose the profession of a teacher after failing to enter another specialty.

The reasons for choosing this profession include the desire to work with children (29%), professional calling (24%) and the lack of opportunity to enter another specialty (13%; *Table 1*).

The personal example of a teacher who influenced the choice of profession was mentioned by 10% of graduates. It is characteristic that none of the respondents

<sup>15</sup> Bondarenko N.V., Varlamova T.A., Gokhberg L.M. et al. (2023). Indicators of education – 2023: Statistical collection. National Research University Higher School of Economics. Moscow: National Research University Higher School of Economics.

connected the choice with the desire to earn money, i.e. the amount of earnings was not a determining criterion at the moment of making a decision on the choice of vocational training.

Among those who chose the motive of vocation, the majority of students of Vologda Pedagogical College (50%), and the students of Belozersk Industrial and Pedagogical College (54%) are the leaders in terms of the motive of communication with children. Students of Cherepovets State University gave the majority of votes for the position of “vocation” (32%), and students of Vologda State University – teacher’s personal example (20%).

Choosing a profession by vocation is a typical answer for those who decided to work in their specialty (now or in the distant future; *Table 2*).

Almost 68% of graduates who have a spiritual connection with their chosen specialty plan to find a job at school. Those who do not feel such a connection will look for a job in another sphere (41%).

Readiness for professional activity in accordance with the received education is connected with expectations from future work. Five leading positions were identified among the expectations in the answers of young people (*Table 3*):

- opportunity to transfer knowledge to the younger generation (44%);
- obtaining stable employment (43%);
- getting a prestigious profession (37%);
- the possibility of self-realization of creative (33%) and professional ambitions (27.5%).

**Table 2. Dependence of the decision to work in the specialty on the choice of profession by vocation, %**

Do you feel that you have chosen a profession with a vocation?	What will you do immediately after you receive your high school diploma?								Total
	I will continue to pursue a master’s degree in teaching, but will not work for the time being	I will continue to pursue a master’s degree in a non-teaching specialization	I will continue my master’s degree and work in my specialty	I’m going to work in my specialty	I’m going to work in a closely related specialty	I’m going to take a job outside of my specialty	I’m planning to start my own business	Difficult to answer	
Yes	5.4	2.7	10.8	67.6	2.7	4.1	0.0	6.8	100
No	4.5	4.5	4.5	13.6	22.7	40.9	0.0	9.1	100
Difficult to answer	2.9	2.9	8.6	42.9	14.3	8.6	17.1	17.1	100

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VolRC RAS).

**Table 3. Distribution of answers to the question “What do you expect from getting a pedagogical specialty?”, % of respondents**

Answer option	Percentage of answers
Opportunity to pass on knowledge to the younger generation	44.3
Opportunity to obtain stable employment	42.7
Opportunity to get a prestigious and respected profession	36.6
Opportunity for self-realization, creativity	32.8
Opportunity to fully realize oneself (one’s knowledge, experience, qualifications, abilities, etc.)	27.5
Opportunity to work with highly educated and interesting people	14.5
Opportunity to get a well-paid profession	12.2
Possibility to get housing and social benefits	10.7
Possibility to have a prestigious social status in the society	8.4
Opportunity to combine work with recreation	7.6
Possibility of employment under the Zemsky Uchitel program	4.6
Difficult to answer	4.6

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VolRC RAS).

It is characteristic that among college students the answer “the opportunity to get a prestigious and respected profession” prevails, while the opinions of university students diverged. Vologda graduates expect to “get stable employment” (53%), while Cherepovets graduates are determined to “pass on knowledge to the younger generation” (36%). It should be noted that respondents consider the profession of a teacher to be respected, stable and socially important. Those who expect high incomes and benefits in it were not so numerous (12% and 11%, respectively).

Today, it is very common for students to work part-time during their studies. On the one hand, it gives an opportunity to penetrate deeper into the profession, provided that the part-time work is carried out in accordance with the education. On the other hand, it gives more financial freedom to the student. Studies show that the experience of employment during studies in the field relevant to the obtained profession has a favorable impact on the understanding of academic subjects and the improvement of academic performance (Chavan, Carter, 2018). Secondary employment of learners results in higher levels of full-time employment for those who had paid employment during their studies (Jackson, Collings, 2018; Jackson, 2018). In our study, 40% of graduates had work experience in educational organizations of preschool, school, supplementary type, etc. Another 30% had a

part-time job in another specialty and 30% did not have any part-time jobs.

The opportunity to communicate with children and the possibility of self-fulfillment were named by graduate students as the main values in the teaching profession (*Table 4*). Next in the list are updating knowledge (35%), availability of benefits (29%) and suitable working conditions (28%) with material wealth (20%). The answers favor the superiority of intangible values over material wealth, benefits, connections, etc.

Studying in a professional educational organization did not affect the deterioration of perceptions of it: 85% of respondents do not regret their choice. Probably, even those 15% who hold the opposite opinion and intend to change their educational or professional trajectory after graduation, noted that they chose the pedagogical specialty for a good reason and that the acquired knowledge will be useful for them in the future. Such data are demonstrated by the distribution of answers to the question “What was important for you to get as a result of studying?” (*Table 5*). Most of the graduates are interested in obtaining a high level of knowledge (60%), interesting (44%) and socially important (33%) profession. For graduates the following is important: the fact of getting a diploma (30%), useful acquaintances (25%).

Judging by the respondents’ answers, 46% of graduates assess the level of knowledge and

**Table 4. Distribution of answers to the question “What do you consider the most valuable for you in the teaching profession?”, % of respondents**

Answer option	Percentage of answers
Opportunity for self-actualization	51.1
Opportunity to communicate with children	51.1
Possibility of constant knowledge updating	35.1
Availability of social benefits (early retirement, possibility to receive preferential housing and subsidies for housing, etc.).	29.0
Working conditions, duration of vacation	28.2
Material prosperity	19.8
Prestige and respect in society	15.3
Benefit to the state and society	10.7
Useful ties	9.9
Difficult to answer	4.6

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VolRC RAS).

**Table 5. Distribution of answers to the question “What was important for you to get as a result of studying?”, % of respondents**

Answer option	Percentage of answers
High level of knowledge	59.5
Interesting profession	43.5
Socially important profession	32.8
Diploma of higher education	29.8
Make useful contacts, acquaintances	25.2
Prestigious profession	19.8
Highly paid profession	13
Deferment from the army	0.8
Difficult to answer	3.8

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VoIRC RAS).

**Table 6. Distribution of answers to the question “How would you assess your level of knowledge required for working in education?”, % of respondents**

Answer option	High	Medium	Low	Do not possess
Theory of pedagogical activity	45.8	50.4	3.8	0
Modern technologies of work with school-age children	54.2	41.2	3.8	0.8
Child-adolescent psychology	36.6	55.7	6.9	0.8
Modern approaches to assessment of educational achievements	42	48.9	8.4	0.8
Organization of project activities at school	35.1	55	9.2	0.8
Organization of extracurricular activities and additional education of children	51.1	34.4	11.5	3.1
Educational legislation	25.2	59.5	14.5	0.8
Labor legislation	29	58	13	0
Methodological work and document management at school	32.1	49.6	16	2.3
Management of educational organization	26	52.7	17.6	3.8
Computer literacy	64.9	32.8	2.3	0
Distance learning technologies	56.5	37.4	5.3	0.8
Technologies of communication in labor collective	52.7	40.5	6.1	0.8
Ethics of relations at school	68.7	27.5	3.1	0.8
Methodology of pedagogical research	46.6	44.3	6.1	3.1

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VoIRC RAS).

competencies necessary for work in education as average and 44% as high (Table 6). The best formed supraprofessional competencies of future teachers are communicative (53%), computer (65%), ethical (69%) and distance work skills (57%). The results obtained in the study are in line with the conclusions obtained in the course of research by the National Research University Higher School of Economics, which also signaled a low and highly differentiated level of competence formation among students in different areas of training.

This question is echoed by the question “Do you think that the knowledge acquired during training is sufficient for you to work?” 88% of respondents (45% answered “yes”, 43% – “rather yes”) said that the knowledge acquired in the educational institution is sufficient for work. Thus, it can be considered that in general, students consider their education to be quite successful. At the same time, only half of the graduates intend to work in their specialty (Table 7).

Taking into account the fact that about 10% of graduates plan to continue investing

**Table 7. Distribution of answers to the question  
“What will you do immediately after receiving a higher education diploma?”, % of respondents**

Answer option	Percentage of answers
I'm going to work in my specialty	51.9
I'm going to work in a different specialty	11.5
I will go to work in a close specialty	9.2
I will continue my master's degree and work in my specialty	9.2
I will continue my master's studies in a pedagogical specialty, but will not work yet	4.6
I will continue my master's degree in a non-pedagogical specialty	3.1
I plan to start my own business	0.8
Difficult to answer	9.9

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VoIRC RAS).

**Table 8. Distribution of answers to the question  
“If you do not plan to work in your specialty, for what reason?”, % of respondents**

Answer option	Percentage of answers
Life circumstances	3.1
Lack of conditions for professional and personal growth	1.5
Difficult nature of work	3.1
Low prestige of the profession in the society	3.1
Insufficient level of social guarantees and benefits	0.8
No predisposition to profession (vocation)	6.9
Low level of salary	12.2
Lack of confidence in own strengths and abilities	0.8
Unwillingness to work in a pedagogical team	3.8
Unwillingness to work with a complex child and adolescent contingent	4.6
Dissatisfaction with the process of specialty training	0
Dissatisfaction with the results of specialty training	0
Difficult to answer	4.6

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VoIRC RAS).

in their human capital and at the same time work in their profession, and about 5% will continue their studies in master's programs in pedagogy, the picture is quite good – about 66% of graduates can be attributed to those who will join the ranks of school teachers in the future. For reference, in medical schools the share of those employed in their specialty is 98%, in education it is 81%<sup>14</sup>.

Among the reasons that induce graduates to work outside their profession are low wages (12%), lack of professional vocation (7%),

unwillingness to work with difficult children and adolescents (5%), unwillingness to work in a teaching team (5%), etc. (Table 8). Among the answers about the spheres in which graduates plan to find a job besides pedagogical work, the following were mentioned: beauty sphere, IT, cargo transportation, trade, tourism and other jobs, mainly in the service sphere. Such results raise the question of improving vocational guidance work with the student contingent.

The factors that had a negative impact on the decision to take a job outside the profession

<sup>14</sup> Sample observation of employment of graduates with secondary vocational and higher education – 2021. Available at: [https://gks.ru/free\\_doc/new\\_site/population/trud/itog\\_trudoustr\\_2021/index.html](https://gks.ru/free_doc/new_site/population/trud/itog_trudoustr_2021/index.html)

include the fact that 53% of respondents have improved their perception of it during their studies (Figure).



**Fig. Distribution of answers to the question "Have your ideas about your future profession changed in the process of education?", % of respondents**

Source: data of the pilot survey of graduates of teacher training universities and pedagogical colleges of the Vologda Region, conducted in 2023 (VolRC RAS).

Among the reasons for the deterioration of perceptions of the future profession are mainly material problems, deterioration of public attitudes toward the profession and negative practical experience, as well as lack of vocation. These reasons are worth paying special attention to. In addition, they depend on the attention and role of the authorities in solving the problems of the teaching community.

The readiness of graduates to work in their specialty was assessed in this study from another point of view. Since not all students choose a profession consciously, it is quite possible that in the process of education they

may have a feeling of regret about the chosen career, disappointment in the profession, which can be one of the key factors in making a decision to work at school. In this regard, we conducted a cluster analysis using the following questionnaire questions: 1) "What will you do immediately after receiving a diploma of higher education?"; 2) "Do you regret your choice of profession?".

Four clusters were identified: AD – ready to work at school; AC – rather ready to work at school; BD – rather not ready to work at school; BC – not ready to work at school. Each cluster has certain characteristics depending on readiness to work at school and disillusionment with the profession (Table 9).

As a result of the clustering, a group of graduates was identified. This group is characterized by the fact that students who are part of it do not intend to combine their professional activities with work in educational organizations, but they also do not regret their decision (15%). The main motivation for more than a quarter (27.8%) of students in this group who enrolled in an educational professional institution was the desire to work with children. The influence of parents' wishes was also significant (22.2%). More than a third (38.9%) of the group felt a spiritual affinity with the teaching profession. Important learning goals for many of the students in this group included "obtaining a higher education diploma" (16.7%), "establishing useful connections and making new acquaintances" (11%) and "participating in interesting, prestigious work" (6%). Representatives of this group tend to be satisfied with the profession that they have

**Table 9. Cluster groups of students and their characteristics depending on their willingness to work at school and disappointment with the profession, %**

Group	Characteristics	%
1. ready to work at school (AD)	Do not regret their professional choice Plan to work at school	69.5
2. rather ready to work at school (AC)	Regret their professional choice Plan to work at school	0.0
3. rather not ready to work at school (BD)	Do not regret their professional choice Do not plan to work at school	15.3
4. not ready to work at school (BC)	Regret their professional choice Do not plan to work at school	15.3

Note: except for respondents who found it difficult to answer the question "What will you do immediately after receiving a higher education diploma?"

chosen after graduation. The majority of the participants (38.9%) indicated that they had a positive impression of the trainer's work during the training program, while a smaller number of the representatives from the BD group (6%) had a negative view of the profession due to their previous experience or insufficient knowledge about specific skills required for working in schools. Therefore, it is likely that if the teaching staff in educational institutions put in additional effort (e.g., through career guidance, informational sessions, and methodological training), these graduates may alter their professional plans and choose to work in their chosen field. Identifying such students could also help develop a range of measures to provide support for them in their early years of teaching careers (mentoring is a crucial factor in this process, and students should be familiar with this approach).

The AC cluster, whose representatives plan to work at school and yet regret their professional choice, is quite interesting. In the framework of the study this cluster was empty, which seems to us to be a positive phenomenon. We assume that there would be little benefit from such unmotivated graduates coming to school, so the work with this group, provided it is full, could consist in creating conditions for increasing motivation and making students realize the importance of their profession.

The most representative cluster is the group of those ready to work at school (AD). These graduates are motivated, they do not regret their professional choice and plan to work at school (69.5%). This group has the largest share of students who chose their profession in accordance with their vocation (72%), they consider themselves to be continuers of family traditions (59.7%), they are motivated to work with children (33%), they are those whose ideas about their profession have improved during their studies (65.9%), and they have been dreaming about this profession since childhood (29%).

## Conclusion

Thus, studying of the readiness of teacher training graduates of colleges and universities of the Vologda Region has demonstrated a fairly high level of interest in employment in their profession. More than half of the respondents (51%) gave an affirmative answer to the question about whether the graduates will look for jobs in their specialty, 85% of respondents do not regret the choice of teaching profession. At the same time, the group of students "ready to work at school", selected using the clustering method, made up more than two thirds of the respondents (69.5%).

The main reasons for employment outside the specialty are low wages, lack of vocation for this type of labor activity among some respondents, and other life circumstances. One should also keep in mind the unequal, often not the most significant shares of respondents who assessed the acquired knowledge and competencies as high.

In the context of the current and projected shortage of teaching staff (the regional education system needs 255 teachers, among which predominantly mathematicians, teachers of Russian language and literature, foreign language, biology, geography, chemistry) there is a search for effective tools to fill the sector with the required number of teachers. At the moment, the efforts of the state and regions to attract teachers to work in the profession are focused on a set of measures of socio-economic support. The study showed that one third of students are not familiar with the proposed measures (27.5%), but "if they knew about them, they would definitely consider taking advantage of them" Accordingly, information in orientation to the choice of work in the specialty should be an integral tool of vocational guidance activities.

This is also evidenced by the group of students who are hesitant in choosing a place of work, who decided not to choose educational organizations, but do not regret that they got a teaching profession. For this group, information about the expected vacancies in the education sector and the support measures taken to attract teaching staff becomes very important at this stage.

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