



EDUCATION: THE PROBLEMS AND MEANS OF MODERNIZATION

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G. F. Shafranov-Kutsev's concept of modernizing vocational education as a fundament for deeper studies of the students of the Middle Urals

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Abstract. The authors commemorate the anniversary of the famous Russian sociologist Gennady F. Shafranov-Kutsev in this article, studying his concept of modernization of vocational education (precisely, its essence, modernization directions, features, problems, contradictions, and prospects). Using this concept, the authors plan to deepen the methodology and interpretation of the students' monitoring results in the Sverdlovsk Region (1995-2016). The object of study remained the same at all monitoring stages—the third year university students in the Sverdlovsk Region. During the monitoring and forming the sample, an essential feature was the students' major field of study: engineering, natural sciences, humanities, and social economics. The sample size reflected the overall growth in the students' number: $N_{1995} = 851$; $N_{1999} = 994$; $N_{2003} = 954$; $N_{2007} = 1,210$; $N_{2009} = 1,495$; $N_{2012} = 1,802$; $N_{2016} = 1,827$. The monitoring material and methods have already been published, discussing the details of analysis and identifying the main trends. This article focuses on mapping the monitoring results to G. F. Shafranov-Kutsev's modernization concept and Tyumen researchers' results of particular interest is the problem of students' admission into universities, quality of education, formation of innovative potential of future specialists, and the conditions for its actualization. The authors conclude with a proposal for

a more in-depth study of the contribution of Ural and Siberian sociologists to the development of the national sociology of education and youth.

Keywords: modernization of professional education; features, problems, contradictions and prospects of modernization of the higher education system; G. F. Shafranov-Kutsev; students; monitoring.

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INTRODUCTION

The monitoring program *Social and Cultural Development of Students in the Sverdlovsk Region* (1995-2016) was constantly improved and deepened, and the monitoring tools, while remaining stable, were enriched and updated. One of the most significant updates is that the problems of students' adaptation at the university, the quality of education, and the students' attitude to study were included in the research. By stage VI of the monitoring (2012), the research had actualized the problem of the students' attitude to the modernization of higher education. The authors of the monitoring team had their own concept of this modernization, methodologically substantiated in the works by G. B. Korableva [2-4] on the dialectics of educational institutions and professions, implemented in the doctoral dissertation by D. Yu. Narkhov [5-6].

However, the integrative approach to research required that the authors should avoid confining themselves to one-handed vision of the problems and prospects for the modernization of higher education. The concept by G. F. Shafranov-Kutsev gave another vision thereof.

The reasons for taking this concept under consideration were plenty. First of all, the authors have had a long-term creative cooperation. The formation of the Ural Federal District, which united our regions, made it even more intense, thanks to the Ural sociological readings, the Koganovsky readings, the Tyumen sociological forum and other joint scientific and practical conferences. One of the authors received G. F. Shafranov-Kutsev's generalizing monograph [11] with the inscription: "To Yuri Rudolfovich with the kindest regards. Social boys, do not shoot the pianist, he plays as well as he can!" And the team (as he called them "social boys" in a friendly manner) highly appreciated his modesty and, most importantly, the skill of the "pianist".

The concept's attraction lies in the essential profound understanding of the "modernization of professional education" (its advanced development; continuity of education; design of innovative development; variation, regionalization and extended network) [11, p. 26-33].

The concept's attraction lies in proving the importance of constant sociological study, monitoring the social mindset in connection with the processes of modernization, the requirement to correlate the proposed model of modernization with the



culture, interests, capabilities and abilities of the citizens. The character of the research was aligned with G. F. Shafranov-Kutsev's inherent understanding of the role of students as one of the main driver groups (engines) for the modernization of the Russian society. Moreover, the real—youth—composition of the student network is emphasized, it is defined as “youth concentrated in institutions of professional education”. In fact, this reinforced the main focus of our monitoring: in today's Russia, dreams of a sharp increase in the share of “silver” (third age) students remain dreams, and student sociology will remain a branch of the sociology of youth for a long time.

The concept's attraction lies in the core idea: innovative renewal of the country and the society is impossible without modern advanced professional education [11, p. 5-6].

The concept's attraction lies in the intolerance to any “unforeseen errors and miscalculations” in the documents defining reforms in the education system; in criticizing “haste and hustle” in their implementation, when the urgent problems and the proposed approaches to their solution are discussed neither with the society nor with professional pedagogical community. The authors were especially impressed by G. F. Shafranov-Kutsev's negative attitude to the “mechanical copying of foreign approaches and models”, to discarding “the positive aspects of the national education system” [11, p. 7, 9].

The concept's attraction lies in a deep sociological analysis of the current situation (supported by many years of managerial experience). According to G. F. Shafranov-Kutsev's fair opinion, this analysis should avoid “modernization euphoria”. Its purpose is to distinguish between a real and genuine renewal and a false innovative trial and error method in modernizing education. [11, p. 13].

The concept's attraction lies in understanding the most acute (“burning”) problems in the development of professional education (distraction from the needs of the economy, poor quality of training, inefficient use of the available material and financial resources). Meanwhile, the concept offers a balanced approach to solving these problems. A typical example is the attitude to the existing proportions of various levels of professional/vocational education (basic—secondary—higher), reflected in the priority orientation of schoolchildren (their parents, and most teachers)—“University! University! University!” But, stressing the negative effect of this situation on the training of skilled workers and mid-level specialists, G. F. Shafranov-Kutsev unequivocally spoke out against any ill-considered changes in these proportions, against overestimating the current technological structure, and against underestimating the promising transition to higher technological structures. Any attempts to preserve the Russian scientific and technological backwardness (including those within the structure of professional/vocational education, the list of degrees in vocational training) are viewed as a distortion of the essence of modernization [11, p. 13].

The points mentioned above allowed us to correct the research tasks and add a new one—to reveal whether students feel like students and whether they are real actors in the modernization of higher education, how they evaluate the various

aspects and directions. Accordingly, the monitoring toolkit was supplemented. The result interpretation of the new stages of monitoring got more advanced than the data interpretation by the Tyumen counterparts.

RESULTS AND DISCUSSION

It is clear that in terms of its focus and content G. F. Shafranov-Kutsev's concept of the modernization of professional education was much broader and deeper than the augmented issues of our monitoring. It covered the renewal of all components of the education system (educational content; educational technologies, widely used information technologies, in particular; organizational forms of educational institutions; state and public administration of the education system, etc.). The most important thing is to respond to new challenges of the time, to take foreign experience into critical account, to focus on the balance of interests and a close cooperation of all actors in the process of modernization of professional education. The description of these actors is accompanied by a proper analysis of the interaction between the state, civil society and an individual, which is especially important [11, p. 11]. G. F. Shafranov-Kutsev succeeded in overcoming the one-sidedness of both sociocentric and anthropocentric approaches, and developed an integrative approach in understanding the problems of modernizing professional education (this reflects the main trend in the development of the modern Russian sociology).

Highly appreciating G. F. Shafranov-Kutsev's contribution to supporting the general theory of modernizing education, it should be noted that our goal was much narrower—we sought to look at these problems through the prism of the interests of only one of the educational communities—students. Consequently, not claiming the given analysis of this concept comprehensive (which is still due to a proper study), there should be highlighted those issues that allowed the researchers to supplement the social and cultural portrait of Sverdlovsk students.

First, the pre-university stage, secondary, and high school, should be looked at. It is the modernization of the school that Tyumen colleagues considered basic and fundamental in modernizing the entire education system (this opinion is shared). The most important thing in it was to switch from teaching knowledge, skills, abilities and behaviour to bringing up an independent, competitive, and energetic person with a set of universal competences [14, p. 652]. But the results of their sociological analysis of the real situation revealed the fact that, unfortunately, even today, schoolchildren's development has not become a priority in terms of creativity, critical thinking, and independence; many teachers are not ready to identify, discover and develop creative abilities of their students [14, p. 653].

This critical assessment became the initial point for identifying the role of the reason "I have the best abilities in this particular area" in choosing a university and a profession (see [1]), and for understanding how the respondents assessed their critical thinking, within the framework of monitoring. The former aspect was considered at all stages of monitoring, the latter—only at stage VII (2016).

The monitoring materials can seem ambiguous. The number of those respondents who named their ability and skills as the motive in choosing a university and a



profession decreased by half over the years of monitoring. At stage I (1995), this motive was given by every third respondent, at stage VII (2016)—by every sixth respondent [1, p. 351].

At the same time, at stage VII, the students' self-assessment method revealed the development of various aspects of critical thinking.

It was unexpected that the students' subjective assessments were relatively high. But to explain such surprises is one of the most important tasks for sociologists in interpreting the data. One of the possible explanations was that the Tyumen researchers interviewed schoolchildren, but we interviewed third-year students (this was one of the selection criteria). And their answers were affected by university education, and the recently increased attention to this characteristic feature of a creative person. Secondly, the assessments were subjective. Even if we assume that those self-evaluations were too high, it will become clear that the ability to think critically is becoming increasingly important for future specialists. In addition, the question was put clearly. The respondents were asked to assess how well various aspects of the ability were developed. The respondents also named poorly developed aspects of critical thinking, for example, "the ability to effectively interact with people when searching for new solutions", which is thought very important to note [8, p. 565]. The students' answers made it possible to draw more general conclusions: even taking into account the shortcomings of "real democracy", the socialization of today's youth brings positive results. In this regard, the description given by N. Zorkaya to the modern youth: "not rebels, but opportunists" [1] reveals new characteristics: although students, as the most intellectually developed youth, are critical of many aspects of real life, they still want to be heard, even having adapted to these aspects [1, p. 565].

In many ways, G. F. Shafranov-Kutsev's opinion is close to the conclusions of our monitoring. He thinks higher education has transformed into a social imperative, when a university more often attracts applicants by its social status rather than taught knowledge or degree. It is remarkable that the Tyumen sociologists base these conclusions on a study of high school graduates' plans of [12, p. 13].

We fixed this trend (deprofessionalization) after analyzing the motives for students to choose a university [1, p. 351]. Interest in the profession, remaining a prior motive, ceased to be exceptional. In general in 2016 this motive was chosen by two out of every five students, whereas it was 18% among all other options. A high interest in the profession as a motive for choosing a university was still named only by "humanitarians" and "naturalists" (such as future architects, doctors, lawyers). "Economists" and, especially, "technicians" named this motive almost twice less often (!) [1, p. 353].

Extremely significant for us was the conclusion of Tyumen sociologists that universities now have a smaller number of well-prepared applicants. The reason is a mass enrolment of school graduates with poor pre-university training. This has negative consequences. Many university professors are forced to reduce the requirements for students. It results in a lower level of their professional training [11, p. 170]. The results of our monitoring showed the same important trend (which is

very dangerous, but, unfortunately, typical!). In fact, it contradicts the main goal of modernization—improving the quality of professional training.

The respondents' self-assessments are typical [1, p. 291-292]. The Unified State Examination (USE) initially led to the identification of four groups of students (Table 1).

As can be seen, the smallest group is applicants with highest scores (over 90 for each subject). Together with “good scores” (74-90 for each subject), they comprised a little over a third among those who entered universities in 2012. However, in 2016 they comprised a little less than a third. “Satisfactory scores” comprised the overwhelming majority (every second applicant?!) on both stage VI and stage VII. As for the proportion of applicants with lowest scores (under 60 for each subject), it even grew in 2016—every fifth (in 2012—every seventh).

The monitoring revealed (or, better to say, confirmed the observation of Russian sociologists of education) the important trend—the foundation for social inequality in education is beginning to be laid at earlier stages of school (and even preschool) education. The structure of the “best pupils” and “good pupils” is typical: among the former, the ratio between graduates of gymnasiums and vocational classes and graduates of general education schools was 25:10, among the latter it was 12:10. It should be noted that this result coincides with the research of the Tyumen sociologists dedicated to studying the Tyumen university (elite) gymnasium and justifying possible ways of attracting gifted school graduates to universities.

A different aspect of this problem was reflected in the structure of the “best pupils” and “good pupils” in the territorial approach. It was surprising to find that the proportion of former residents of small towns and medium-sized cities turned out to be higher than their average share (for former residents of large cities, the situation is reverse). But this can be explained. In these settlements, parents are less willing to give their children a contracted training. There are also gender differences (Fig. 1).

It can be noticed that the most negative changes over the years of monitoring affected male students. In 2012 there were almost as many students with “excellent grades” among them (7%) as among female students (6%). In 2016, amid a general decline in this group, they were 1.5 times less. In particular, negative changes were seen in the groups of students with “good grades” (the share of male students decreased, the share of female students increased slightly) and “satisfactory grades” (where reverse trends are traced). The growing feminization of higher education (even technical education) seems to be doubtful as soon as the number of male

Table 1. Students' self-assessments of their entry exam results, 2012-2016, %

Year	Assessment grades			
	Excellent (271 and over)	Good (221-270)	Satisfactory (181-220)	Low (less 180)
2012	7	30	49	14
2016	3	28	48	21

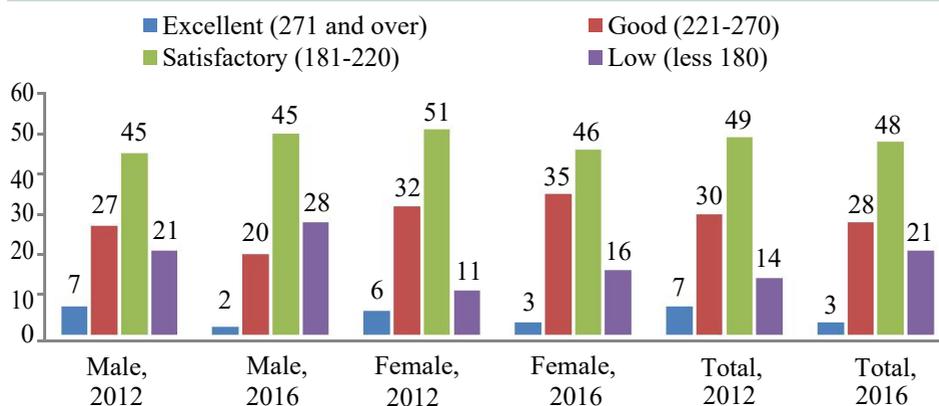


students in a group of applicants with a very low level of pre-university training was twice bigger than the number of female students, at both stages of monitoring. If applied to technical colleges, the general trend “applicants with “satisfactory scores” went to university” gets a new shade of implication “applicants with “satisfactory scores” went to university to be engineers”.

This trend has already highlighted a serious issue of how the change in the composition of students (every second with “satisfactory scores”) will affect the students’ life plans, their interest in studying, and in their prospect profession. In the final stages of monitoring, the problem of motivation for high-quality studies and, in the future, for professional activity became more acute. It should be stressed that the number of students at technical colleges who initially were guided only by the desire to have a certificate of higher education, increased. At the same time, they did not care much about the degree and the nature of their prospect profession. For example, every third student of the Ural Forestry University named this motive in 2012, and almost every second student did so in 2016 [1, p. 363].

The situation is complicated in the regional context (this aspect has been deeply studied in a number of works by G. F. Shafranov-Kutsev [7, 8, 10, etc.]). He is right to have pointed out the “methodological error” of many Russian reformers who ignore specific regional conditions in which each university operates, seeking to impose a single (unified) approach to modernization [9, p. 17]. G. F. Shafranov-Kutsev criticizes the growing distortions in the development of the Russian system of higher education, and in particular the situation when elite education, financial and intellectual resources are “over concentrated” in the capital cities and megalopolises. He is particularly concerned about the consequence (here it is the position of a sociologist) — there is an excessive concentration of “young, well-trained people, whose abilities are not always fully utilized” [12, p. 14]. It should be emphasized that the point is about the “excessive” concentration (after all, this situation has evolved historically), about the need to level the opportunities of different regions. Meanwhile, in the conditions of the “demographic hole”, the capi-

Fig. 1. Distribution of students’ self-assessments of their USE results depending on their gender and in general, 2012-2016, %



tal universities “intercept” school graduates with higher scores from the provinces, and the “provincial” universities solve their problems according to the “residual” principle. As a result, even in Yekaterinburg universities, insufficient pre-university training (formally recorded in low and satisfactory scores of the Unified State Exam) does not significantly affect the plans of high school graduates.

The monitoring proved this situation sustainable. Four out of five students go to the university they wanted and choose the degree they wanted (Table 2).

Unfortunately, when addressing this question to third year students, we clearly underestimated the diversity assumed by the recent admission rules, when you can apply for a maximum of five universities, for three degrees in each.

So, the priorities of school graduates are quite stable. It is not only sociologists who record the imbalance (the priority of socio-economic and humanitarian education over technical one) (See table 3). It can be justified by a painful but accelerated development of market relations, and a landslide deindustrialization in the 1990s, and a fundamental change in the prestige of many professions. Both life plans of young people and their educational strategies have changed significantly.

The early 2010s revealed the negative consequences of this imbalance. The Ural Federal District suffered a huge lack of experts with higher education in engineering and technical areas, which was especially acute in the conditions of the regional re-industrialization. To overcome the consequences, certain measures have been taken, including the priority of state budgeting for degrees in engineering. The measure may be necessary. But again, G. F. Shafranov-Kutsev’s concept is appealing. It should be kept in mind that he worked as the rector of a rapidly developing university for many years. His concept offers a combination of concern about the prospects for higher education (hence it emphasizes the need for constant analysis

Table 2. Influence of Unified State Examination results on students’ choice of universities and career, 2012-2016, %

Year	Answers			
	No influence, I study in the university where I wanted.	I study in the university where I wanted, but a different degree.	I study the degree I wanted, but in a different university.	I had to choose a different university and a different degree.
2012	69	11	10	9
2016	65	12	11	12

Table 3. Share of students who passed Unified State Examination in Physics and Social Science in the Sverdlovsk Region, %

Subject	Year					
	2011	2012	2013	2014	2015	2016
Social Science	38.7	56.7	56.3	58.9	58.5	59.5
Physics	20.3	26.9	24.3	26.7	28.3	30.6



of new trends in the Russian labour market) and attention to the path of young people starting their adult life (he assumes it illogic to prevent young people choosing a profession which is competitive in the labour market, even taking into account that there are many such experts already) [11, p. 146]. It becomes particularly clear that the sociological analysis of modernization is not only scientific, but also a humanistic one.

Therefore, it is obvious why we share the Tyumen colleagues' criticism of the Unified State Exam (USE) as the only (or, taking into account growing academic contests, almost the only) criterion for admission to the university, and support the proposal to give all (!) universities the right to hold qualification exams for their applicants [11, p. 170-171]. In addition, there is a very important point in this criticism (usually underestimated by those who limit the analysis of the USE only to "entering" a university, but one has to study there). It should be noted that the quality of education decreased, with the USE introduced. It should be emphasized that it resulted in one-sided education. High school students focus on studying only those subjects that allow them to enrol in a university after passing the USE [12, p. 14].

Finally, it should be stressed that G. F. Shafranov-Kutsev's concept of modernization emphasizes the role of higher education in shaping the innovative potential of young people. Comparing the interest in innovations among young workers with different levels of education, the Tyumen researchers recorded a significant trend (2013): two out of five respondents with higher education showed a high degree of interest in innovations. This is 2.3 times higher than those with incomplete secondary education, 1.5 times higher than those with high school education, 2 times higher than those with secondary education [15, p. 42. calculated by the authors].

The fact that a lot has been done in the system of higher education according to this modernization parameter, but much more needs to be done, can be proved by one of the monitoring results. The students were asked whether their opportunities to participate in research activities increased or not. The answers were quite vivid: 52% said "yes", 48% said "no". Lower assessment (two out of five respondents) was given to specific skills—to implement the results of their first scientific research; to participate (together with teachers) in the work of university innovative firms and small enterprises [1, p. 340]. But this is where the "point of reference" problem, which is very important for the interpretation of the sociological research results (including our monitoring), arises. Of course, "two out of five" is not even every second, but only some years ago only a few students were involved in such innovative research. And here are positive changes.

CONCLUSION

This happy note could finish the article mainly aimed at the problems and contradictions of the modernization of higher education. However, it would be wise to mention the original reason for the article. It was important to celebrate the jubilee of such a serious scientist as Gennady Filippovich Shafranov-Kutsev, especially for his friends and colleagues. It is essential that we should analyze Russian regional sociological ideas, concepts and theories more widely—this is a systematic,

everyday approach. And, keeping in mind the classic scientists (we just celebrated the 95th anniversaries of Zakhar Ilyich Fainburg and Lev Naumovich Kogan), we need to turn to modern sociologists and analyze their contribution to the development of Russian sociology. Indeed, it was only in the development of the program and tools of our monitoring when we widely used V. V. Melnik's synergetic approach, V. V. Gavriilyuk's theory of "provincial youth", and M. Akulich's "sociology of consent" ... Unfortunately, there are hardly any articles that would summarize their experience and the experience of many Tyumen colleagues. We must pay attention to another issue, which L. N. Kogan described, with his usual humour: "every assistant professor has his/her own theory". It is the ability to analyze and find the truth that qualifies researchers and editors of scientific journals. The present article seems to begin a comprehensive analysis of the concept developed by G. F. Shafranov-Kutsev and other sociologists of the Ural-Siberian region.

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