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**FEDERAL STATE EDUCATION STANDARD (FSES) OF HIGH
SCHOOL: PROBLEMS AND PRACTICAL IMPLEMENTATION**

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Abstract

This article deals with the issues of education standardization and reveals the problems of renovation of education standards of Russian high school and possible ways of practical implementation. The separation of the latest national education standards from the heavy regulations of the education contents is based on the variability idea. At the same time, the exclusively framework nature of FSES prevents it from being used as a regulatory document of direct influence, which creates the problems of implementation of the standard into the educational practice; it is also a source of difficulties during the realization of new approaches. The authors present the research of activity of secondary comprehensive school teachers in regard to transferring to new standards and the analysis of ways of FSES of general secondary education (FSES) implementation used during the activity of the teachers. The performed research allowed revealing some of the directions of improvement and renovation of FSES of general secondary education, including the implementation of the represented matter into the basic contents of school education. The article deals with the directions of improving the education quality by processing the approaches to the renovation of its contents and requirements to the results of secondary education at Russian schools. The results of researching the potential of the standard as a modern reference point of development of national educational systems determining the purposes, key principles and approaches which are the basis of designing the education contents, organizing the educational activity and selecting pedagogical technologies are represented.

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1. Introduction

In the near future the Russian schools will have to transfer to the Federal State Education Standards of the general secondary education (FSES of GSE). This process is not going to be easy, because the document considers many innovations, one of which is the selection of the subjects by the students. It is not about the additional courses included in the educational process, but about the traditional subjects studied at high school by all the students. The elective subjects are to be added to those which are obligatory in accordance with the document. There are eight such subjects included in the standard. In fact, each of the seven so-called subject areas includes an obligatory subject, and these areas are very unbalances. For example, the Russian Language and Literature subject area includes both these subjects which are obligatory, so only the level (basic or advanced) of studying them can be selected. And the educational area of Social Studies includes six subjects (the obligatory one is history), while the Nature Studies area includes five subjects (astronomy being obligatory). If such approach is used, some of the students are going to stop studying part of the subjects at basic school. This is a new situation which is obviously complicated for our school. The system of multiple choice (of subjects, levels of studying, profile and additional courses) creates certain difficulties for the students and educational organizations.

The transfer to the education in accordance with the Federal State Education Standard is performed in accordance with the all-Russian schedule. Currently the Russian schools perform the educational activity on the basis of FSES of elementary general education and basic general education. The transfer to the new standard at the general secondary education level at all the educational organizations is to take place after 2020 (Federal State educational standards of preschool education, 2013). But in some subjects of the Russian Federation the educational organizations are transferred to the standard ahead of schedule and are the pilot sites (including Moscow oblast, Republic of Tatarstan, Khabarovsk krai, etc.).

2. Problem Statement

Despite the declared readiness for the transfer, the educational institutions and teachers encounter organizational, methodical and motivational difficulties during the transfer to education in accordance with the new standards. The provided results may be used to introduce changes, which are to be determined to the improvement of regulatory basis, to the document.

3. Research Questions

The performed researched allowed revealing several directions of improvement and renovation of FSES of general secondary education. Which problems of introduction of the educational standard (Federal State Education Standard of the Basic General Education) are the most important? What changes are to be introduced to the current FSES of GSE?

4. Purpose of the Study

The goal of research was revealing the difficulties and risks arising due to the transfer to FSES of GSE (by the example of pilot schools). Special attention was paid to the attitude of the teachers to the suggested innovations.

5. Research Methods

5.1. Polling teachers

The polling of subject teachers was performed in a range of regions which became the empirical basis of researching the problems related to the implementation of FSES. The respondents included the group of teachers not working in the pilot site regime; their answers were considered independently from the rest. 315 teachers in total took part in the poll.

The questionnaire included a range of questions.

1. Does your educational institution take part in the pilot implementation of FSES of GSE?

2. Which changes were introduced to the school curriculum after the implementation of FSES of GSE?

- introduction of various levels of subject studying (basic/advanced)
- students freely selecting the subjects due to their education profile
- availability of elective courses for the students
- organization of the separate educational course 'Individual Project' with its introduction to the curriculum

3. What elective courses are proposed to the students at your educational institution?

4. Which changes in the lesson holding actually take place after the implementation of FSES of GSE?

- identification of lesson aim by the students
- identification of lesson topic by the students
- using digital technologies during the various stages of the lessons (apart from multimedia presentations)

- using diagnostic tasks of estimation of completeness of universal educational activities

- using the group form of class organizations in accordance with the systematic activity approach

5. Which problems of implementation of FSES of GSE do you consider to be the most important?

Write in numbers from 1 to 5 depending on the importance of the problems of implementation of FSES of GSE.

- Absence of measures of metadisciplinary results
- Incompleteness of the set of regulatory documents accompanying the implementation of FSES
- Insufficiency of the internal motivation of the teacher during the implementation of FSES of GSE
- Difficulties of advanced studies organization

- Difficulties in regard to school supporting the individual route (organization of the student selecting the elective subjects which are not in the list of obligatory subjects)

Name other problems of implementation of FSES of GSE.

6. Do you think that the current textbooks completely correspond FSES of GSE?

7. What changes, in your opinion, are to be introduced to the current FSES of GSE?

5.2. Analysis of national and foreign sources in regard to the problems of school education standardization

The regulatory documents of a range of countries, as well as a wide selection of publications in regard to the quoted problem, were studied. Special attention was paid to the forms of presentation of the educational contents in the regulatory documents, balance of obligatory and elective subjects and special features of revealing and estimation of educational results.

6. Findings

6.1. Poll results

1. Most of the respondents (77%) noticed that the studying of subjects of various levels was implemented at their schools. At the same time a significant part of the respondents called the difficulties of organization of advanced level studying among the difficulties of implementation of FSES. For example, the frequency of selecting the 1 to 5 positions (depending on the relevance of the problem) showed the following results (Table 1).

Table 01. The frequency of selecting the 1 to 5 positions (depending on the relevance of the problem) by respondents

1	2	3	4	5
12.3%	15.2%	19.2%	21.1%	32%

Teachers suppose that there are no corresponding textbooks, high-quality programs and material and technical base. This data allows making a conclusion that the dividing of difficulty levels is quite formal.

2. About 55% of the respondents pointed out that the high school students do not have an opportunity to freely elect the subjects due to their education profile. We suppose that this number is understated. As the experience shows, the set of subjects within the corresponding profile is determined by the educational organization conforming, first of all, with the qualification of teaching staff.

The poll showed that in most pilot schools (73%) the students are offered quite a wide range of additional courses.

Table 02. Choice of additional courses

Comparison criterion	Elective courses determined to development and addition to the subjects	Elective courses duplicating the subjects
Total percentage	57.6%	40%
Examples	Financial awareness Experimental physics	Practical social studies Complex issues of social studies

Intellectual culture of the Moscow region Robotic science Journalism School TV Chess Pedagogics and psychology Ethics and psychology of family life Photography courses Health culture Studying the Constitution of the Russian Federation Logics Aerobics Global art culture Solving creative tasks Human and society Choreography Painting Ecology Citizen of the 21 st century Fundamentals of political science Business and economics History of law development We in the world of economics Economics of modern world Fundamentals of medical knowledge Olympiad economics Persons in history	Law Physics Algebra Practical mathematics Chemical reactions
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FSES confirms the possibility of election of the education courses by the students. The elective subjects are to ensure the education profile (for instance, social-economic, physical-mathematic, etc.). The elective courses offered by each school for the last two years of studying are determined to the development of teenager personality, increase the studying motivation and increase the insight of certain topics. Metadisciplinary skills can also be mastered here. The analysis showed that not all the respondents differentiate the elective subjects and elective courses. Therefore, the list of elective courses included subjects, like Law and Physics. Some respondents also mentioned the courses of “training for the Uniform State Examination”. At the same time the poll showed that ensuring of education individualization on the basis of subject selection causes difficulties during the actual organization of the education process. The respondent most often give this difficulty the highest mark due to the 1 to 5 scale (30.7%). The frequency of the position selection depending on the relevance is shown in the table 3.

Table 03. The frequency of selecting the 1 to 5 positions (depending on the relevance of the problem) by respondents

1	2	3	4	5
13.5%	16.7%	21%	23.2%	30.7%

4. Separate educational course “Individual Project”, in accordance with the statements of the respondents, was introduced in around a half of pilot schools.

Organizationally FSES considered introduction of the new type of educational activity (educational course) to the structure of the educational process – the individual project. This provision of the standard looks arguable enough. The analysis of school curriculums and answers of the respondents shows that the administration solves the task of fulfilling this requirement of the standard in different ways. For example, 54% of the respondents mentioned that the individual project was introduced into the curriculum. The studying of running this course shows that there is no methodic system ensuring its introduction. Teachers not always understand the special features of the project organization, their estimation system and place in the educational process. This innovation remains incomprehensible for the students and their parents. The analysis of pedagogical activity of introduction of the individual projects into the educational process shows that different subject teachers organize this activity. In some cases the conditions for selecting the project topic, selection of materials and presentation of the results of the project activity are created. But the implementation of the individual project to the curriculum cases the following questions: what should students do during such weekly lessons? Should the academic load be increased due to such courses? Can any teacher be the project curator? We suppose that the requirements to the individual project are to be specified; it may be associated to subjects as an intensification of research activity of students. During the poll the teachers pointed out a range of difficulties related to the implementation of FSES of GSE which can be related to the individual project as well. Perhaps it could become one of the internal tests of the students or the part of examination at the level of the educational institution. At the same time the respondents considered the children and teachers not being ready to the transfer to the system suggested by the standard to be one of the central difficulties. One of the suggestions is renovation of the position of free homeroom teacher. We suppose that such teacher would be able to undertake the functions of coordination of the individual project, considering the corresponding training.

5. The respondents quoted the following positions among the problems of implementation of FSES of GSE (highest to lowest):

weak material and technical base

the participants of the educational process (students and parents) being not ready to transfer to the new FSES

high numbers per classes

low qualification of teachers

problems with textbooks

absence of high-quality methodical literature

low quality of qualification upgrading courses

6.2. The analysis of regulatory documents in regard to the sphere of education, national and foreign publications on the problems of education contents standardization and the revelation of its results showed the basic directions of topic research and allowed making a range of conclusions.

The exclusive opportunities for the students and teachers after the transfer to the new standard were enhanced in the national publications issued soon after the approval of FSES. They were associated

with the idea of education variability expressed in the document (Lazebnikova, Frantsuzova, Korosteleva, Kryuchkova, & Lobanov, 2019; Lazebnikova, Koval, & Troyan, 2018). Some publications provided interpretation of several provisions of the standard (Lazebnikova & Kuznecova, 2017; Metelkin, 2017). The new projects of “lessons in accordance with FSES” appeared as well, where the special features of running lessons such as independent identification of lesson aim and topic were accentuated (Babukina, 2014). It should be pointed out that these recommendations were reasonably criticized by the working teachers and school counselors. The attention of the researches was also attracted to the problem of risks of new standard implementation. It was pointed out that “it was more objective than substantial” (Kochetova & Holinova, 2014). The problems pointed out in the publications are the same with those revealed during our research: insufficient development of the programs of processing universal learning skills; motivation and being ready to establish new educational programs and using new pedagogic technologies not being form in case of most teachers; non-development of mechanisms of diagnostics and estimations of the metadisciplinary education results and disturbance of optimal balance between the traditions and innovations.

The foreign researches, including those caused by the school education reforms and requirement of improvement of progress indicators of students (during the international researches like TIMMS, PISA and PIRLS), paid specific attention to the increase of education quality and possibility of practical implementation in national education (21-st Century Learning Exemplar Program, 2019; Gnevek & Musichuk, 2015; The Bridge Effect, 2013, PISA-tutkimus ja Suomi, 2015). The scientific and teacher community developing the directions and approaches of renovation of contents and methods of education researched such problems as the increase of education quality and effectiveness of education systems by establishing key competences and skills, as well as the pluralisation of education (Jones, 2009; New Vision for Education WEF, 2016; Thurn, 2017).

In most European education systems the standardization is shown in the form of curriculums, which are the requirements to organization of educational process, education contents and level of training of the students established in framework regulatory documents, such as programs and education plans containing basic scientific and practical education tasks.

Various models of standardization formed in the foreign educational activity. For example, in Scandinavian standardization model (Sweden, Finland) the increase of education quality is represented by the system of stimulation of the students’ achievements developed by the state and implemented through the conclusion of educational contracts between the youth and schools (communities). The equality of chances is considered to be the equality of results; the students are not divided into groups or streams depending on their abilities and educational achievements, and the minimal result level is determined by the minimal standardized contents of the framework programs. The education individualization is combined with the requirements of quite high standard of education minimum being achieved by all the students and effective work with students who have low results.

The criticism of the estimation of results achieved by the students on the basis of using the standard tests is increased in some countries. Speaking particularly of British education model, some researchers mention the unjustified decrease of school subjects not verified by the national tests,

substitution of outsider students with low results, falsification of test results and formal approach to testing.

In many European standards the competences are represented on several levels: excellent/good, basic/satisfactory and unsatisfactory. The progress estimation at the highest stage also includes portfolio and ratings of the students of the middle and high school, including educational achievements, taking part in conferences, certification and overall rate of the graduate or a group of students not considering the individual input to the group achievements, allowing estimating the general education quality at school. This form of school work control "is determined to achieving openness and transparency, as well as the expansion of abilities of being compared with other educational institutions.

7. Conclusion

State Federal Education Standard in our country, as well as similar documents in foreign countries, is to provide the modern criteria of development of national educational systems, determine the purposes, key principles and approaches which are the basis of designing the education contents, educational activity organization and selection of pedagogic technologies. The latest national education standards separated from the heavy regulation of education contents and are based on the variability idea. At the same time At the same time, the exclusively framework nature of FSES prevents it from being used as a regulatory document of direct influence. This, as practice shows, creates the problems of implementation of the standard into the educational activity and is the source of difficulties for the teachers during the implementation of new approaches. The performed researched allowed revealing several directions of improvement and renovation of FSES of general secondary education. One of them is inclusion of the represented matter (in generalized forms and models) into the basic contents of the school education.

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