

Chapter 9

From the “Best-in-the World” Soviet School to a Modern Globally Competitive School System



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Abstract The dramatic story of moving from knowledge-based to competence-based education is the main focus of the chapter. This transition was very difficult because many people believed that the Soviet schools were best-in-the-world, because teachers and parents were not ready to change the schools. The paradigm change in Russian education has still heterogenic impact on schools, assessment system, education policy, curricula.

9.1 Introduction: Quarter Century of Major Transformations

The case of education reform in Russia (just as in all other post-socialist countries) is very complex and difficult to analyze insofar as it combines planned educational policies with the spontaneous adaptation of the system to the tectonic social and economic transformations of post-socialist societies (Silova and Palandjian 2018). The post-Soviet transformation of Russian education since 1991 should be considered in the context of social, political, cultural and economic change. At each stage of this transformation, the following aspects of these contextual changes should be kept in mind (Ben-Peretz 2008; Silova and Palandjian 2018):

- Political – from a totalitarian one-party regime to democratic governance and rule of law; new federal-regional relationships
- Social – from forced equality to growing inequality

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- Cultural – from government censorship and atheism to a pluralistic culture and the active role of the Church
- Economic – from a planned economy to the free market

There is a general consensus that the transformation of education policy in post-Soviet Russia went through three major stages:

- 1991: Disappearance of Soviet ideological and centralized administrative control; borrowing curricular ideas and teaching approaches from the West; experimentation (Birzea 1994)
- 2000: Nationwide construction of new institutional mechanisms in education, including per-capita financing, public engagement, quality assurance (including a national school leaving exam), modernization of school infrastructure, and greater student choice
- 2012: Achieving global competitiveness in education while assuring the equality of educational opportunities by raising the status of teachers (including significant salary increases), continuing to develop quality control mechanisms, and introducing new curricular standards
- 2016: Conservative turn. Since this time, the new leadership of the Ministry of Education has striven to return national curriculum policy to the Soviet model. Using the idea of a “common education space for all schools,” it initiated the revision of federal education standards to reduce the curricular autonomy of schools and teachers

There is a significant body of studies on the post-Soviet education transformation of 1991–2000. This period is often called the “policy of no policy” – it was a time of adaptation rather than targeted reform. Every region and almost every municipality elaborated its own education policy and strategy, often without any link to the federal government. As a rule, these policies were driven by factors external to education – primarily economic, social and technological changes. In this chapter, we shall consider the period from 2000 on.

Many researchers have studied financial and organizational reforms (The World Bank 2019; Cerych 1997). Therefore, we shall focus here on changes in teaching- and learning-related areas (curriculum, assessment, textbooks, technology, teacher training) within the education system. The specific focus of our analysis leads us to the conclusion that the reforms paid little attention to the true nature of teaching and learning and therefore did not fulfill their transformative potential.

Our analysis is based on personal experience,¹ data from various sources, an analysis of literature, and 12 interviews with former and current education policy-makers in Russia.

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9.2 Post-Socialist Education System as the Result of Path Dependence, Modernization and Global Integration

This chapter includes a discussion of the specific context of the transformation, which makes the Russian case very particular. One of the largest education systems in the world had to modernize itself, move away from a socialist institutional organization, and enter the global education scene. The approach of this chapter is based on the simultaneous analysis of three processes:

- Transformation (abandonment or strengthening) of the post-Soviet educational legacy that derives from socialist education
- Modernization (introduction of new elements and processes) of education, reflecting changes in the economic, political and social context within the country
- Changes in education that reflect global processes in which Russia is participating

These processes could contradict or reinforce each other at different times. In addition, each had its own logic and interest groups.

9.2.1 *Soviet Legacy*

The early Soviet school was characterized by three distinct features: forced equalization and a preference for previously disadvantaged groups; communist ideological education (upbringing) in the absence of traditional religion-based values; and an innovative curriculum that aimed to connect school and “real life” (labor). The Bolsheviks initially rejected the “old school rules” inherited from Continental European traditions.

Attempts to assure a broader and more equal access to education led not only to structural changes and organizational expansion but also to very important policies on curriculum and teaching. First, the idea of cultural capital (even the Bolsheviks were not familiar with this term) served as a basis for the policy of early childhood development within the extensive public system of pre-school education. This system helped children from formerly underprivileged groups to prepare for school. Secondly, the idea of equality led to the practice of uniform requirements for student knowledge and teacher qualifications. Thirdly, the equalization policy included affirmative action and special curriculum options to support girls, children from rural families, and children from poor families (Bereday 1960).

These approaches evolved during the Soviet era, existing until its very end. The rigid uniformity manifested itself in the compulsory detailed curriculum that was followed by every Soviet school. Daily tasks, exams and textbooks were universally enforced in 11 time zones. Attempts to increase the variability of curricula in high school resulted in 1% of high-school students attending schools with in-depth curricula in math, science or foreign language (Bereday and Pennar 1976).

Soviet education was extremely politicized from the very beginning. Every teacher and parent learned Lenin's famous maxim: "School without politics is nothing but lie and hypocrisy." Therefore, political and ideological education was part of the Russian education system. The Marxist theory of education rejected religion as an element of human moral and social development and did not consider the family to be an important partner in children's upbringing. The public school was considered the only actor in this process. Political indoctrination included teaching ideologically biased school subjects (history, social studies, literature, geography and science) and mandatory extracurricular activities in communist youth organizations (Long 1984; Judge 1975). The system exerted ideological control over every aspect of school life, including political rituals. It is important to note that this politicized education also attempted to inculcate morality and social skills and assist in career development. Soviet authorities established a unique system of publicly funded after-school education, including sport clubs, art and music lessons, etc. More than 70% of students participated in different activities within this system (Holmes et al. 1995).

During the post-Revolutionary period of the 1920s (Kerr 1997), the People's Commissariat for Education developed a strategy aimed at promoting a comprehensive labor-centered educational model. This largely resonated with the imperative of creating a new socialist generation as an indispensable foundation for building a totally new society. This policy was also associated with substantive changes in educational design and the instructional framework itself. For example, students were expected to participate primarily in practice-oriented project-based learning rather than conventional "drill and repetition" activities. Accordingly, the teacher was also assigned the new role of a facilitator who tried to motivate and engage children in this kind of schooling. As a result, new institutions for experimental education began to be established in large numbers across the Soviet Union at the time. In Moscow alone, there were eight schools that entered into close cooperation with the U.S. psychologist and innovative educator John Dewey and his followers. On the whole, the pedagogical principles of comprehensive, labor-centered learning and development experienced a marked upswing in the USSR during the 1920s. As John Dewey himself noted when reflecting on early Soviet Russia, the country's post-Revolutionary schooling came to favor pedagogical novelty and experimentation of various kinds, which would definitely not have been possible in Russia's imperial past. It should be noted that this new pedagogical framework put special emphasis on such aspects as interacting with students' families, promoting after-school study (after-school activities, summer camps, etc.), and introducing new models of collective work and study (Dewey 1928).

Despite the fact that ideological propaganda and the forced inculcation of communist values became deeply entrenched in Soviet education, it must be recognized that the creative legacy accumulated by Russian pedagogy during the 1920s – primarily the experience of project-based schooling – proved useful and beneficial. We should mention the inception of Lev Vygotsky's cultural-historical approach in this context, as the essential groundwork and first practical applications of this framework date to the 1920s. However, as the country entered the industrial era of the

1930s, the momentum of pedagogical creativity and experimentation dwindled, and Soviet education largely returned to more rigid models. The connection with “real life” was achieved not through project methods but through a detailed curriculum with a strong emphasis on science, mathematics, and engineering and the early separation of students into academic and vocational/technical tracks. These changes were accompanied by a major expansion of the higher education system that influenced the expectations of students and families.

In the late 1950s and 1960s, after the end of Joseph Stalin’s regime, attempts were made to reform the “industrial school model” yet proved unsuccessful. A group of psychologists and philosophers proposed an “activity-based approach” grounded in Vygotsky’s ideas of the social situation of the zone of proximal development. It was directly connected with the concept of high-level generic skills (one of the manifestos of this approach was “Schools must teach children to think”) (Ilyenkov 1964). The Academy of Pedagogical Sciences established a number of experimental schools in different parts of the Soviet Union. Teachers got new textbooks, and numerous training and retraining courses were developed. This approach got attention worldwide (Simon and Dougherty 2014).

Still, the innovations in curricula and teaching that were introduced in the 1960s and 1970s came to play a significant and sustained role in the overall development of Soviet schooling. A good example is the practice that emerged among school teachers of complementing their standard daily lesson plans with tasks aimed at developing students’ critical thinking skills and personal traits. Furthermore, supervisors began to monitor how such skills were developed both in the classroom and during extracurricular activities offered at each school. Students at different levels of education were expected to display a solid knowledge of ethical principles and codes of conduct. They were encouraged to prepare personal growth plans and work persistently and independently to become honest, responsible, considerate and hardworking Soviet citizens (Dunstan and Suddaby 1992).

9.2.2 Early Post-Soviet Period: Innovation and Adaptation

The period between the late 1980s and the late 1990s witnessed a mass revival of interest in educational innovation in three areas: the rejection of the Soviet legacy; the modernization of curricula and the reform of the system to respond to the changing needs of Russian society; and opening education to globalization (Collier 2011; Bolotov and Lenskaya 1997). We should note that this interest was an even stronger driving force of change than government policy. The only real policy at that time was to give more freedom to different stakeholders.

During this period, there appeared a large number of experimental schools where a new generation of innovative educators adopted and built upon the ideas of developmental learning in order to nurture different student qualities and abilities similar to what we call “21st-century skills” today. Among the novel frameworks that enjoyed the greatest popularity among teaching professionals during this period

were “humanistic pedagogy” and the ideas of “collective learning.” This led to the creation of a nationwide movement of innovative teachers and educators, whose “Manifesto for the Pedagogy of Cooperation” summarized their common goals and the key curricular and instructional approaches of innovative schooling. This document stressed such pivotal principles as promoting cooperation between teachers, students and parents; all-around personal and professional development; and self-governance (Eklof and Dneprov 1993). As the national teacher community started to participate in global educational networking, a growing number of overseas educators began to come to Russian universities, teacher associations, and other organizations to talk about international innovative experiences in learning and development. This led to the growing popularity in Russian schools of pedagogical ideas and approaches advanced by Maria Montessori, Rudolf Steiner, and Célestin Freinet, among others.

It should be noted that, during the period in question, educational innovations began to get more recognition and support from various public and state institutions in Russia. This was evidenced by multiple facts, including the increasing appointment of innovative teachers to major positions at different governmental levels, their growing interaction with professional development organizations and universities for sharing their views and disseminating novel practices in education development, and the growing focus of academia and policy agencies on exploring and discussing the ideas of innovative teachers (Eklof and Seregny 2005). During the same period, Russian central authorities vested regional bodies with the right to make and administer education development policies at their own discretion. As a rule, these policies varied significantly between regions, reflecting the different conceptions of and approaches to innovative education across Russia (Webber 2000; Johnson 1997).

With time, the public movement of educational innovators started to lose ground, however. This was due to several different reasons. First of all, despite the substantial experience accumulated by progressive teachers in Russia and their efforts to disseminate various novel practices, the institutional and regulatory foundations of the national education system remained basically intact and were unable to provide the necessary conditions for fostering innovative development. For example, statutory education standards retained their traditional content and structure, in which the conventional principles of drill, repetition and knowledge reproduction were emphasized (Kerr 1994). In addition, many of the proposed pedagogical innovations lacked the necessary financial support for being effectively implemented at a large scale. Secondly, no substantial changes had been made to the national system for teacher training and professional development. Nevertheless, despite these factors that precluded any systemic deployment of innovative practices in the educational sphere, positive changes took place during this period. They included increased levels of autonomy and flexibility in designing curricula and teaching at both regional and institutional levels (e.g., school- and regional-level components were introduced into curricula; schools were allowed to complement the mandatory core curriculum with extra disciplines to adapt the content of education to changing socioeconomic needs and stakeholder expectations; etc.) (Sutherland 1999; Jones 1994).

In the meantime, Russia sank into the prolonged and disastrous disarray of the 1990s. This included a series of painful trial-and-error economic reforms, the lack of a robust legal system, the misappropriation and redistribution of industrial assets, severe delays in salary payments, and an escalating crime rate. These events were further exacerbated by the 1998 sovereign default and its dramatic aftermath of hyperinflation and shrinking disposable incomes. These pernicious circumstances called for major remedies to rectify the deep economic downswing. This time was also characterized by drastic changes in every domain of social life, as the country transitioned to the new market-driven economy (Khrushcheva 2000).

As the 1990s drew to a close, the Russian education system was confronted with a series of severe problems and constraints at different levels, including curtailed public funding; deteriorating facilities and outdated equipment; a lack of qualified young teachers and the falling prestige of the teaching profession; and non-transparent and often corrupt systems for evaluating education quality. There was a pressing need for a new, systemic approach to national education (Reform of the System of Education 2002).

9.3 Return of the State to Policy Development and Implementation

The onset of systems transformations in the Russian education system dates back to December 2001, when the Russian government adopted the “Concept for Modernizing Russian Education through 2010.” This enactment was the first to include imperatives related to the so-called “competency-based approach” that called for the development of a holistic, up-to-date set of relevant skills and abilities in schools. However, even a cursory glance at the list of adopted measures shows that policymakers had no intention at that stage to amend the national education standards already in place. At the time, policy discussions were largely confined to such topics as shifting from a K–11 to a K–12 schooling model, simplifying curricula, expanding the list of elective courses, and increasing the number of hours of physical education. There was no explicit focus on the 21st-century skills agenda.

In the spring of 2004, only days before the incumbent Russian Minister of Education was dismissed as part of an ongoing administrative reform, the new state education standards were approved. They included provisions for “... shaping education in such a way as not only to provide students with certain bodies of specific disciplinary knowledge but also to ensure the comprehensive development of their personality traits and multifaceted cognitive and creative abilities.” In addition, references were made in this document to the objectives of inculcating up-to-date competencies and skills in children, echoing the provisions of the “Concept for Modernizing Russian Education through 2010” (Concept for Modernisation 2010): “General schooling must be able to inculcate a cohesive system of universal core literacies, skills and abilities, as well as to nurture in children a sound capacity to exercise adequate degrees of autonomy and self-direction, to take personal

responsibility, etc., i.e., those competencies that reflect modern standards for the content and quality of education.” However, the new standards also did not try to list or describe any of the specific competencies and skills to which they referred, only setting out basic learning outcomes for every curriculum subject to be evaluated throughout the general schooling ladder in elementary, middle and high school. It should be noted that the wording of some learning outcomes already implies the pragmatically oriented, goal-centered educational focus adopted in this document. For example: “[students must be able:] to adequately comprehend live speech by adults and peers, children’s radio broadcasts, audio recordings of different types, etc.; to work with a dictionary; to produce short coherent texts on topics relevant to their age, both orally and in writing; to display the mastery of generally accepted Russian conversational patterns as relevant to different contexts of basic daily communication...” While these attempts to harmonize the regulatory framework with the imperatives of competency-based training for “real life” represented a real step forward in state education policy, the document nevertheless failed to relate any subject-specific learning and development (L&D) outcomes to the framework of universal core competencies and skills of the 21st century. Similarly, the 2004 secondary education standards still mostly focused on simply establishing “basic core curricula” or detailed lists of study topics for every subject and stage of the education ladder. Thus, if we take a look at any 2004 standard, whether in literature, history, or physics, we will only find detailed itemized lists of specific thematic areas and questions to be addressed during the course (e.g., book titles, historical events, natural phenomena). This hardly dovetails with modern effective curriculum and instructional design (Silova 2009).

However, in late 2004 the national government took steps to update learning and development in education policy by adopting the “Priority Development Areas for the Russian Education System.” Subsequently, a comprehensive action plan for implementing the provisions was elaborated in the spring of 2005. These measures represented a more transparent policy intention to systematically revise the education standards in place in order to enable a more up-to-date framework based on well-defined L&D objectives and outcomes. It was proposed at this stage that conventional lists of study topics by subject area should be eliminated from education standards altogether. However, such innovative shifts took place in a rather slow and uneven fashion, as the Russian government had not yet understood how to transition to 21st-century competency-based pedagogical principles (Concept for National Standards 2005).

In 2005, the priority national project “Education” initiated by Russian President Vladimir Putin established a system of grants to support the country’s best teachers and innovative schools. This suggested the state had decided to stake the successful implementation of further education reforms on the practical experience and vision of a national corps of progressive teachers.

On September 13, 2007, during the discussion of the priority national project “Education” at the Federation Council, the Russian President called for measures to be taken to design and deploy “... a new model of education that would effectively address the target of the sustained innovative development of the national economy

and that would, in particular, be based on totally new statutory education standards as its regulatory core, creating the conditions for students to acquire adequate knowledge and the relevant skills allowing them to put this knowledge to effective practical use.” The presidential appeal prompted the policy framework to accord more attention to the conceptual domain of 21st-century skills, while also heralding yet another turnaround in the standardization of national education.

The year 2008 witnessed a series of legislative amendments and the revision of Russian national education standards. An important novelty was the inclusion in the standards of so-called “meta-discipline learning outcomes” deriving from a more or less explicit competency-centered learning and development model. Structurally, the approach of the new standards to framing learning outcomes closely resonated with the groundwork of the 21st-century skills agenda: both distinguished between the following three groups of outcomes: subject outcomes (functional literacy, knowledge and understanding), meta-discipline outcomes (competencies), and personal outcomes (values and mindsets) (Silova 2010).

In 2009–2010, the new Russian federal education standards (FES) were drafted and pilot-tested with the participation of multiple stakeholders at different levels, including policy officials, experts from the Russian Academy of Education, providers of upskilling/reskilling programs, and universities. In the course of FES development, project team members engaged in fieldwork across Russian regions, where they held seminars on FES documents and feedback sessions. Public reactions and proposals were then forwarded for further discussion to the FES Council at the Russian Ministry of Education and Science. However, a major shortcoming of this method was the fact that the aforementioned corps of national education progressives represented by the most resourceful teachers at innovative schools was hardly involved at all in public discussions on the proposed FES. The failure of the agencies implementing the FES project to organize the drafting and pilot-testing process in a cohesive and transparent manner made it impossible for many representatives of the innovative teaching community to contribute to the project in a meaningful way. For example, venues for FES discussions were mostly chosen by local state authorities at their sole discretion, often without due consideration for the interests and requirements of other stakeholders; little reference was made to innovative school experiences when explaining and validating the new FES; and expert councils for the project were created at the federal level only. University professors and specialists in individual disciplines had the strongest voice in these councils, while teachers and parents were not properly represented. As a result, the standards were written in a very formal and academic language that alienated teachers (Silova 2011).

Nevertheless, the aforementioned shortcomings and inconsistencies notwithstanding, the Russian Education and Science Ministry completed in 2010–2012 the drafting and approval of the new FES package for K–11 education with separate regulations for each stage of learning and development, including preschool and elementary, middle, and high school. All of the FES followed the educational paradigm of 21st-century skills, as they specified not only learning outcomes for individual disciplines but also included expected meta-subject competencies and personality development outcomes for students at every stage of learning and development.

It should be noted that, during the transition to the new FES framework, Russian school teachers were left to their own resources to decide on how the new imperative of inculcating 21st-century skills should be actualized in their classrooms. To enable a smoother transition to the new FES, a number of continuing education opportunities were offered to teachers across Russia, including methodological seminars, best-practice workshops, and upskilling courses. It was also decided to develop model study programs based on the new FES as practical guidelines for individual teachers and schools in elaborating their own curricula and class schedules in accordance with the FES (in 2010–2014, such model programs were developed for every stage of K–11 education).

At the same time, it was assumed that the secondary schools themselves would be able to reconfigure and harmonize their systems for monitoring and evaluating the conformity of learning outcomes to the new imperatives of competency-centered learning and development. The centralized state assessment of student performance under the new FES framework was only planned for 2020 and 2022 (given that the first-graders of 2011, which was the first year of schooling under the new FES, would take their K–9 and K–11 state exams in 2020 and 2022, respectively).

9.4 Reform and New Understanding of Learning Outcomes

As we mentioned above, the curricular standards included three groups of outcomes: subject outcomes (discipline-specific; functional literacy, knowledge and understanding), meta-subject (meta-discipline) outcomes (competencies), and personal outcomes (values and mindsets). The first two groups covered cognitive development, while the third group addressed social and emotional development.

The following examples illustrate the differences between these groups.

For example, subject outcomes in mathematics were described as follows:

1. Use of basic knowledge in mathematics for describing and explaining surrounding objects, processes, and phenomena and evaluating their quantitative and spatial relationships
2. Mastering the fundamentals of logical and algorithmic thinking for spatial imagination and mathematical recording, measurement, and calculation and executing algorithms
3. Ability to operate with numbers orally and in writing, ability to perform textual tasks and use algorithms, develop simple algorithms, research, recognize and draw geometrical figures, work with tables, graphs, diagrams, chains and aggregates, and present, analyze and interpret data

These descriptions show a certain degree of orientation on the application of theoretical knowledge to practical situations, even though the statements are too general and do not help teachers to plan their work. In later versions of the standards, the descriptions became more detailed and specific. Still, they continued to be oriented on subject knowledge and had little to do with 21st-century skills.

Here are some examples of metacognitive learning outcomes:

1. Developing the ability to select and pursue educational aims and objectives, finding the proper means for their implementation
2. Developing the ability to solve creative and research problems
3. Developing the ability to plan, control and evaluate learning activities from the standpoint of the task and the conditions of its implementation and to find the most effective means to attain the result

As these descriptions of outcomes show, many were related to 21st-century skills, even if most of them were formulated as processes rather than outcomes. Moreover, the authors of the standards failed to explain how metacognitive outcomes were to be addressed in school subjects. Some teachers believed these outcomes should not be targeted in their work because they were not formally assessed.

Below are some descriptions of personal learning outcomes:

1. Developing Russian civic identity, taking pride in one’s motherland, the Russian people and Russian history, recognizing one’s ethnic and national identity; developing the values of multinational Russian society; developing humanistic democratic values
2. Developing a respect for the opinions of others and the history and culture of other ethnic groups
3. Taking personal responsibility for one’s actions, based on values, norms, and social justice and freedom
4. Developing cooperation skills with adults and peers in different social situations and the ability to avoid conflicts and resolve disputes

This language was not clear for teachers. Moreover, it was not entirely clear how these results could be attained in school. At the same time, the standards stated that personal outcomes were not assessed.

The authors of the standards tried to present the aims and objectives of the standards in language which would be comprehensible to ordinary citizens. To this end, they introduced a special section called “primary school student profile.” It indicated that primary school graduates

- Love their people, region and motherland
- Respect and accept values of family and society
- Actively learn about the environment
- Learn and organize their own activities
- Act independently and take responsibility for their actions
- Have a friendly attitude, listen to and understand their interlocutors, and are able to present their views and opinions
- Follow the rules of a safe and healthy way of life

As the above statements show, the authors of the standards tried to assuage society by emphasizing the absence of risks in the reforms. They focused on the most popular and traditional mindsets: patriotism, goodwill, a healthy life style, and family values. As a result, they presented the abilities to think critically, cooperate, solve

problems, and communicate effectively in a less clear way. They tried to balance the new learning outcomes with a “know everything” approach (Muckle 2003).

The resulting curriculum included some elements contributing to the development of 21st-century skills. However, the content and procedures of the assessment system changed very little, which became the main hindrance to the development of these skills.

Some aspects of the reforms supported the development of 21st-century skills, while others were neutral. We will briefly describe these two groups of elements.

The first group of elements contributing to the development of 21st-century skills included

1. Per capita financing and school autonomy. It was expected that the uniform distribution of financial resources among schools in proportion to the number of students would stimulate the renewal of the content of education and that financial freedom would give teachers greater autonomy in developing their own curricular programs. In turn, teachers would be more responsible and independent in selecting the methods of attaining new learning outcomes, including meta-discipline and personal outcomes. Many schools reflected these outcomes in their curriculum. The budgets of schools began to depend on the number of students. As a result, some schools tried to develop new courses to attract more students.
2. Teacher development programs were selected on the basis of teacher needs. Previously, only special teacher in-service training institutions had provided teacher training programs, yet their programs were of low quality. Now, these institutions had to compete with universities and other non-commercial organizations, as individual teachers independently sought professional development opportunities to get acquainted with the new standards. The number of in-service training courses aimed at the development of 21st-century skills has grown since 2012.
3. The appearance of internet in schools allowed teachers to look for new materials, meet new colleagues, and participate in different professional networks online. New communities of practitioners stimulated teachers to search for new teaching solutions. Many teaching materials supporting the development of 21st-century skills were adapted from foreign resources and non-commercial organizations.
4. The new curriculum allowed schools to offer more elective courses to students. This innovation played a dual role in the development of 21st-century skills. Some schools gave students more opportunities to select their study tracks, teaching them to make conscious choices, solve problems, and cooperate. Schools transformed traditional courses and subjects and gave students a new choice of courses. These changes were connected with the 21st-century skills approach.

Aspects of the reform that hindered the introduction of the new standards included:

1. Expanding the curriculum by introducing new subjects, such as “fundamentals of religious cultures” and astronomy. While a lot of resources were invested to introduce these subjects, their content was based primarily on memorization. The same was true of the renewed concepts of teaching history and literature. They were also oriented at the memorization of information and historical facts and reading books from the recommended list.
2. Russia was still developing its quality control system. Despite the growing number of monitoring and review measures, the instruments remained focused on knowledge control, hindering the orientation of teachers at the development of 21st-century skills.

9.5 Reform Implementation

The implementation stages reflect the stages of the reform.

2001–2004. This stage was more about reform design and discussion rather than reform implementation. Implementation was limited to experimental schools, pilot municipalities and pilot regions. Many schools experimented with their new curricular freedom. They introduced new courses and project-based lessons. Many local publishers also took advantage of the relatively flexible requirements for textbooks and experimented with new contents and formats of learning materials. However, these innovative practices were not supported by analysis and evaluation. Good practices could not be disseminated without such evaluation and horizontal cooperation between teachers and schools. The regional and federal governments did nothing to support and diffuse the best practices.

Some innovations such as the national school leaving/university entrance exam (Unified State Exam) and per capita financing were pilot-tested in several regions prior to their mass introduction nationwide.

2004–2005. During these 2 years, the Russian government established a new system to implement its education policy agenda, including a totally new Russian Ministry of Education and Science along with a Federal Agency for Education, a Federal Agency for Science, and a Federal Service for Education Quality Monitoring. The underlying idea was that a closer integration of the domains of education and research would enable more meaningful, high-payoff reforms that would be better tailored to address all the top-priority development areas. However, the changes at the federal level did not transform the very nature of top-down reform. Nor did they have any significant impact at the regional, municipal and school levels. They increased top-down control in reform implementation without promoting the energy and initiative of lower levels.

2005–2011. The project approach of reform implementation was pilot-tested during this period. In the fall of 2005, the Russian President launched the strategic national project “Education,” accompanied by a series of similar nationwide initiatives in healthcare, construction and agriculture. The “Education” project framework envisaged the following the key measures:

- Paying personal awards of RUB 100,000 annually to the 10,000 best Russian teachers
- Allocating grants of RUB 1 million annually to 1000 innovative schools
- Regular top-up payments to homeroom teachers (reflecting their extra duties of class supervision, the organization of learning and development extracurricular activities, etc.)
- One-off modernization projects addressing specific aspects of education in individual regions (any financial surpluses achieved through such structural reforms were typically used to fund teacher pay raises in the regions)

This period showed that the centralized system of policy implementation could work only with relatively simple project objectives. This partially explains why the government could not really implement the curriculum reform.

2011–2016. The adoption of the new federal law “On Education” was the central element of reform implementation during this period. The new law provided a favorable regulatory framework for the mass-implementation of new education policies piloted in previous years. It also included the universal implementation of new progressive federal education standards. The mass-deployment of FES also envisaged that the regions themselves would play a major role in facilitating effective teacher transition to the new standards; however, much of this work was impeded by its uneven and intermittent implementation.

2016–2018. During this period, the Russian Ministry of Education and Science underwent a series of administrative changes which, in turn, led to a readjustment of the overall action plan and key priorities in implementing the agenda of 21st-century skills and competencies in the Russian education sphere. Specifically, the newly appointed ministerial executives cast doubt on whether previous policy steps in upgrading the national education standards had in fact been reasonable and justified. Acting under the premise that “the formation of adequate bodies of knowledge should always precede – and serve as a basis for – the process of inculcating individual skills and competencies in students,” the newly formed Ministry initiated yet another massive revision of federal education standards, spawning a vigorous debate in society. One of the reasons for such doubt was disappointment of significant part of society with the fact that students don’t remember key facts of Russian history and cultural heritage. In the spring of 2018, the Russian government reorganized the Ministry of Education and Science, creating two separate bodies in charge of secondary education (the Russian Ministry of Education) and tertiary education and science (the Russian Ministry of Science and Higher Education), respectively. In conclusion, we should stress that the dilemma of whether Russian education should more actively effectuate a transition to a competency-centered framework or, on the contrary, prioritize traditional disciplinary knowledge in national schooling has been receiving increasing attention in Russia recently.

9.6 Reform Politics and Main Results

On the whole, one can see a consistent logic in how the Russian government proceeded to reform the sphere of national secondary general education. A holistic conception of a general action plan was first elaborated and then followed by all-around public discussions and the gradual implementation of its individual elements. Looking back at how education reform was implemented in Russia, one can identify the following key factors and considerations facilitating these innovative processes:

- It was assumed from the very outset that the reform process would be primarily driven by the country’s educational progressives. A lot of resources were invested in refining and pilot-testing the proposed learning and development innovations. The strategic national project “Education” provided a grant support framework for the best teachers, innovative schools and regional education reform initiatives, promoting the accumulation of a sound social asset of educational leaders and justifying the imperative to shift to competency-centered pedagogy. Moreover, a number of models of innovative schooling and individual innovations in educational design and instruction have become widely acknowledged and received increasing popular support.
- Russia became actively involved in a range of global education competitions and evaluation initiatives, including WorldSkills, PISA, TIMSS, PIRLS, and ICILS. Moreover, a number of national and subnational programs in education monitoring and testing were introduced in elementary and secondary schools. Evidence drawn from such assessments and benchmarking frameworks served to substantiate the goals and socioeconomic rationale of upgrading the standards of Russian schooling, as researchers finally got access to reliable cross-national data that could serve as a basis for substantiated judgments on the validity and appropriateness of specific learning and development approaches, models, and policy action.
- An example of the positive impact of education policy is the growing PISA math scores of Russian schoolchildren. In 2000, Russia’s score was much lower than the OECD average. In 2003, Russia’s results declined. In 2006, the mean OECD score fell, while Russia improved its performance, narrowing the gap. In the next 2012 wave, Russia’s performance grew substantially. Finally, in 2015 Russia’s score surpassed the OECD average for the first time. We should note that, although the mean score of OECD countries fell in 2015 in comparison with the 2012 wave, the 2015 results of Russian schoolchildren were comparable with OECD mean scores in 2006, 2009 and 2012.
- Beginning in the late 2000s, improvements started to be felt in the regulatory domain of Russian education as greater levels of transparency, trust, and accountability were achieved with the onset of massive public discussions of different proposed policies (in particular, through the institution of public councils, crowd-sourcing techniques, etc.). Authorities organizing such public events were appointed on a regional basis across Russia, and the main results of public

discussions began to be disclosed and disseminated through seminars, web sessions, and stakeholder conferences. For example, over 100,000 people took part in discussions about the structure and content of model subject programs under the new competency-centered FES. Ongoing close public focus on the proposed regulatory initiatives in education has facilitated robust critique and multifaceted stakeholder feedback, leading policymakers to revise and expand their initial policy recommendations.

Alongside these positive factors, the reform process has had a number of major shortcomings and limitations:

- A major drawback of the reform of Russian schooling was the fact that most of the work on drafting the new FES and related methodological guidelines was performed by institutes of the Russian Academy of Education – a highly reputable academic organization that, nonetheless, failed to engage a sufficient number of education practitioners in the process. As a result, the language of the FES documents was overloaded with technical terminology barely comprehensible to many teachers. Furthermore, the abstruse and intimidating academic language of the new FES framework prevented non-specialists from making a more meaningful contribution to discussions and proposed amendments to the FES. At the same time, few business stakeholders participated in the reform process, making it impossible to bridge the widening gap between the quality of schooling and labor expectations.
- The global financial crisis of 2008 heavily affected the Russian economic landscape, leading the government to cut spending on modernizing education for several years. A number of major innovative initiatives had to be downscaled or scrapped altogether as a result. Consequently, the funding of education reforms in Russia became misbalanced. For example, while significant funding was allocated to less important areas (e.g., the new elementary school curricular program “Fundamentals of Religious Culture and Secular Ethics” was launched in 2010–2011, incurring much greater costs than the new FES), such crucial initiatives as purchasing modern equipment, training teachers, and holding stakeholder conferences and seminars remained vastly underfinanced.
- While transitioning to the learning and development framework of 21st-century skills, Russian education authorities pursued reform ambitions in a wide range of other areas, including devising new models of cooperation between businesses and professional education organizations, boosting university research, and developing new approaches to the guardianship of orphaned children and children’s summer recreation and healthcare. Confronted with these multiple priorities, the Russian Ministry of Education and Science simply lacked the resources required to develop the reform agenda in secondary schooling more thoroughly.
- The number of public organizations and other stakeholders favoring a return to the conventional knowledge-centered paradigm patterned after the fundamental model of Soviet schooling has increased considerably in recent years, impeding a more streamlined transition to 21st-century pedagogy.

The ongoing reforms have not been accompanied by any rigorous evaluation of their impact. However, local and international studies provide evidence that the overall quality of school education has improved, inequality has been reduced, and general public satisfaction with education has increased. Further studies are needed to evaluate the impact of these changes more deeply.

References

- Ben-Peretz, M. (2008). *The life cycle of reform in education: From the circumstances of birth to stages of decline*. London: Institute of Education-University of London.
- Bereday, G. (1960). *The changing soviet school*. Boston: Houghton Mifflin Company.
- Bereday, G., & Pennar, J. (1976). *The politics of soviet education*. Westport: Greenwood Press.
- Birzea, C. (1994). *Educational policies of the countries in transition*. Strasbourg: Council of Europe.
- Bolotov, V., & Lenskaya, E. (1997). *The reform of education in new Russia: A background report for the OECD review of Russian education. OECD Thematic Review of Tertiary Education*. Moscow: OECD.
- Cerych, L. (1997). Educational reforms in central and Eastern Europe: Processes and outcomes. *European Journal of Education*, 32(1), 75–97.
- Collier, S. (2011). *Post-soviet social: Neoliberalism, social modernity, biopolitics*. Princeton: Princeton University Press.
- Concept for Modernisation. (2010). Concept for Modernisation of Russian Education. Policy Statement by the Government of the Russian Federation. [Electronic] Available from www.mon.gov.ru. Accessed 10 June 2013, p 256.
- Concept for National Standards. (2005). Concept of Federal State Educational Standards for Secondary Education. Policy Document by the Government of the Russian Federation. [Electronic] Available from <http://standart.edu.ru/catalog.aspx?CatalogId=261>. Accessed 20 Sept 2008.
- Dewey, J. (1928). *Impressions from revolutionary world*. New York: New Republic.
- Dunstan, J. (1994). Clever children and curriculum reform: The progress of differentiation in Soviet and Russian state schooling. In A. Jones (Ed.), *Education and Society in the new Russia* (pp. 75–103). M.E. Sharpe: Armonk.
- Dunstan, J., & Suddaby, A. (1992). The progressive tradition in soviet schooling to 1988. In J. Dunstan (Ed.), *Soviet education under perestroika* (pp. 1–13). London: Routledge.
- Eklöf, B., & Dneprov, E. (1993). *Democracy in the Russian school: The reform movement in education since 1984*. Boulder: Westview Press.
- Eklöf, B., & Seregny, S. (2005). Teachers in Russia: State, community and profession. In B. Eklöf, L. Holmes, & V. Kaplan (Eds.), *Educational reform in Post-Soviet Russia* (pp. 197–220). London: Cass.
- Holmes, B., Read, G., & Voskresenskaya, N. (1995). *Russian education: Tradition and transition*. New York: Garland Publications.
- Ilyenkov, E. V. (1964). On the aesthetic nature of phantasy. *Issues of Aesthetics*, 6, 25–42. Moscow: Panorama annual.
- Johnson, M. (1997). Visionary hopes and technocratic fallacies in Russian education. *Comparative Education Review*, 41(2), 219–225.
- Jones, A. (Ed.). (1994). *Education and Society in the new Russia*. Armonk: M.E. Sharpe.
- Judge, J. (1975). Education in the USSR: Russian or Soviet? *Comparative Education*, 11(2), 127–136.
- Kerr, S. (1994). Diversification in Russian education. In A. Jones (Ed.), *Education and Society in the new Russia* (pp. 47–75). Armonk: M.E. Sharpe.

- Kerr, S. (1997). *Why Vygotsky? The role of theoretical psychology in Russian education reform*. [Electronic] Available from <http://webpages.charter.net/schmolze1/vygotsky/kerr.htm> Accessed 10 June 2013.
- Khrushcheva, N. (2000). *Cultural contradictions of post-communism: Why liberal reforms did not succeed in Russia*. New York: Council on Foreign Relations.
- Long, D. (1984). Soviet education and the development of communist ethics. *Phi Delta Kappan*, 65(7), 469–472.
- Muckle, J. (2003). Russian concept of patriotism and their reflection in the education system today. *Tertium comparationis*, 9(1), 7–14.
- Puzankov, D. Ensuring the Quality of Higher Education: Russia's Experience in the International Context. *Russian Education & Society*, 45(2), 69–88.
- Reform of the System of Education. (2002). What we are losing (2002). Transcript of a round table. *Russian Education & Society*, 44(5), 5–31.
- Silova, I. (2009). Varieties of educational transformation: The post-socialist states of central/Southeastern Europe and the former Soviet Union. In R. Cowen & R. Kazamias (Eds.), *International handbook of comparative education* (Vol. 22, pp. 295–331). Dordrecht: Springer.
- Silova, I. (2010). Rediscovering post-socialism in comparative education. In I. Silova (Ed.), *Post-socialism is not dead: (Re)-reading the global in comparative education* (pp. 1–24). Bingley: Emerald Group Publishing.
- Silova, I. (Ed.). (2011). *Post-socialism is not dead: (Re)-reading the global in comparative education*. Bingley: Emerald Group Publishing.
- Silova, I., & Palandjian, G. (2018). Soviet empire, childhood, and education. *Revista Española de Educación Comparada*, 31, 147–171. <https://doi.org/10.5944/reec.31.2018.21592>.
- Simon, M., & Dougherty, B. (2014). Elkonin and Davydov curriculum in mathematics education. In S. Lerman (Ed.), *Encyclopedia of mathematics education*. Dordrecht: Springer.
- Sutherland, J. (1999). *Schooling in the new Russia: Innovation and change, 1984–95*. New York: St. Martin's Press.
- The World Bank. (2019). *Annual report. Strengthening the organization* [Electronic]. Available from <https://www.worldbank.org/en/about/annual-report/strengthening-the-organization>. Accessed 10 Aug 2019.
- Webber, S. (2000). *School, reform and Society in the new Russia*. New York: St. Martin's Press.

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