International Qualifications Assessment Service (IQAS) Government of Alberta

COUNTRY EDUCATION PROFILE

The Former USSR and the Russian Federation

Prepared by: International Qualifications Assessment Service (IQAS)

Contact Information:

International Qualifications Assessment Service (IQAS)
9th Floor, 108 Street Building, 9942 - 108 Street, Edmonton, Alberta, Canada T5K 2J5
Phone: 1 (780) 427-2655 Fax: 1 (780) 422-9734

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COUNTRY OVERVIEW

Land

The Russian Federation or Russia (Российская Федерация or Россия; *Rossijskaya Federatziya* or *Rossiya*) is a country that covers Eastern Europe and Northern Asia. With an area of 17,075,200 square kilometres, it is the largest country in the world, covering almost twice the territory of the next largest country, Canada. It has the world's eighth largest population of 142,893,540 (July 2006 estimate).

Geography and Climate

Most of the land consists of broad plain with low hills west of Ural mountains; vast coniferous forest and tundra in Siberia; uplands and mountains along southern border regions. Mount Elbrus, located in the western Caucasus mountains near the border of Georgia, is Europe's highest peak (5,642 m). Russia is the coldest country in the world (the mid-annual temperature is -5.5°C), although the variety of climates within Russia makes such comparison somewhat misleading. Russian climate ranges from steppe climate in the south to humid continental in much of European Russia and from subarctic in Siberia to tundra climate in the polar north. Winters vary from cool along Black Sea coast to frigid in Siberia and summers vary from warm in the steppes to cool along Arctic coast.

Russia shares land borders with the following countries: Norway, Finland, Estonia, Latvia, Lithuania, Poland, Belarus, Ukraine, Georgia, Azerbaijan, Kazakhstan, China, Mongolia and North Korea. It is also close to the United States, Canada, Armenia, Iran, Turkey, and Japan across stretches of water.



People and Language

The Russian Federation is home to as many as 160 different ethnic groups and indigenous peoples. Nearly all of these groups live together in their respective regions; Russians are the only people significantly represented in every region of the country.

Table 1. Ethnic Composition of Russian Federation (2002 Census)

Ethnicity	%
Russian	79.8
Tatar	3.8
Ukrainian	2
Bashkir	1.2
Chuvash	1.1
Chechen	0.9
Armenian	0.8
Avars, Azerbaijanis, Belarusians, Buryats, Chinese, Evenks, Georgians,	10.3
Germans, Greeks, Ingushes, Inuit, Jews, Kalmyks, Karelians, Kazakhs, Koreans,	
Maris, Mordvins, Nenetses, Ossetians, Poles, Tuvans, Udmurts, Uzbeks, Yakuts,	
etc	

The Russian language is the most widespread of the Slavic languages. It is the only official language, but the individual republics have often made their native language co-official next to Russian. Cyrillic alphabet is the only official script, which means that these languages must be written in Cyrillic in official texts. Russia is a highly literate society (99.6%, 2003 estimate).

Table 2. Letters of the Russian Cyrillic Alphabet and Latin Transcription

A A	Б	B Ve	Γ Ge	Д De	E Ye	Ë Yo	Ж Zhe	3 Ze	И	Й Short I
K	Л	M	H	0	П	P	C	T	y	Ф
Ka	El	Em	En		Ре	Er	Es	Te	U	Ef
X	Ц	Ч	III	Щ	Ъ	Ы	B	Э	Ю	Я
Kha	Tse	Che	Sha	Shcha	Hard sign	Yery	Soft sign	E	Yu	Үа

Table 3. Russian Transliteration Table

Russian	English	Russian	English	Russian	English
A a	A a	Кк	K k	Хх	Нh
Бб	Вb	Лл	L 1	Цц	Tz tz
Вв	V v	Мм	M m	Чч	Ch ch
Γг	G g	Нн	N n	Шш	Sh sh
Дд	D d	Оо	Оо	Щщ	Shch
					shch
E e	Еe	Пп	Pр	ъъ	1
Ëë	Yo yo	Pр	R r	Ыы	Υy
жж	Zh zh	C c	S s	Ьь	'
3 3	Ζz	Тт	T t	εE	Еe
Ии	Ιi	Уу	U u	Юю	Yu yu
Йй	Jј	Фф	F f	Яя	Ya ya

History

Vikings

The Vikings also known as *Rus* came to Russia in the 9th century AD through the trade routes from Sweden down the Russian rivers. They founded the great cities of Staraja Ladoga, Kiev and Novgorod. The Rus seem to have kept mainly to the regions along the rivers - their relations with the Slavs being mostly confined to exacting tribute and raiding for slaves. Among their neighbours was the empire of the Khazars, stretching around the Black Sea from the Danube to the Caspian. The Khazars were a Turkic race who had been converted to Judaism in the 8th century AD, and according to some sources were the overlords of the Rus. According to the Russian Primary Chronicle, compiled in Kiev in the early 12th century, the Slavs invited the Swedish chieftain Rurik and his two brothers to rule them in 862 AD.

Tsars

Founded in the 12th century, the Principality of Muscovy, was able to emerge from over 200 years of Tatar-Mongol domination (13th-15th centuries) and to gradually conquer and absorb surrounding principalities. In the early 17th century, a new Romanov Dynasty of Russian Tsars continued this policy of expansion across Siberia to the Pacific. Tsar Peter the Great (ruled 1682-1725) extended Russian territory to the Baltic Sea and the country was renamed the Russian Empire. During the 19th century, Russia made more territorial acquisitions in Europe and Asia.

Communism

Repeated defeats of the Russian army in World War I led to widespread rioting in the major cities of the Russian Empire and to the overthrow in 1917 of the imperial household. The Communists under Vladimir Lenin seized power soon after and formed the USSR (Union of Soviet Socialist Republics). Joseph Stalin (1928-53) strengthened

communist rule and Russian dominance of the Soviet Union at a cost of tens of millions of lives. The Soviet economy and society stagnated in the following decades until General Secretary of the Communist Party Mikhail Gorbachev (1985-91) introduced *glasnost* (openness) and *perestroika* (restructuring) in an attempt to modernize Communism.

Post-Communism

Gorbachev's initiatives inadvertently released forces that by December 1991 splintered the USSR into Russia and 14 other independent republics. Since then, Russia has struggled in its efforts to build a democratic political system and market economy to replace the strict social, political, and economic controls of the Communist period. While some progress has been made on the economic front, recent years have seen a recentralization of power under Vladimir Putin and the erosion of young democratic institutions

Table 4. The Former and Current Names of the Former USSR Republics.

Former Name	Current Name
Armenian Soviet Socialist Republic	Republic of Armenia
Azerbaijani Soviet Socialist Republic	Republic of Azerbaijan
Byelorussian Soviet Socialist Republic	Republic of Belarus
Estonian Soviet Socialist Republic	Republic of Estonia
Georgian Soviet Socialist Republic	Republic of Georgia
Kazakh Soviet Socialist Republic	Republic of Kazakhstan
Kirghiz Soviet Socialist Republic	Kyrgyz Republic
Latvian Soviet Socialist Republic	Republic of Latvia
Lithuanian Soviet Socialist Republic	Republic of Lithuania
Moldavian Soviet Socialist Republic	Republic of Moldova
Russian Soviet Federative Socialist Republic	Russian Federation
Tajik Soviet Socialist Republic	Republic of Tajikistan
Turkmen Soviet Socialist Republic	Turkmenistan
Ukrainian Soviet Socialist Republic	Ukraine
Uzbek Soviet Socialist Republic	Republic of Uzbekistan

Administration

The Russian Federation consists of many different federal jurisdictions, making a total of 88 constituent components. There are 21 republics within the federation that enjoy a high degree of autonomy on most issues and these correspond to some of Russia's ethnic minorities. The remaining territory consists of 48 oblast (provinces) and seven krai (territories), as well as nine autonomous okrug (autonomous districts), and one autonomous oblast. Beyond these there are two federal cities (Moscow and St. Petersburg). Recently, seven extensive federal districts have been added as a new layer between the above subdivisions and the national level. The national capital is Moscow. The President (Vladimir Putin, from May 7, 2000 to present) is the chief of state, and the Premier (Mikhail Fradkov, from March 5, 2004 to present) is the head of government. The national flag of the Russian Federation is a rectangle of three equal horizontal stripes: the uppermost is white, the middle is blue and the bottom is red. Official flag of the Soviet Union consisted of a plain red flag, with a hammer crossed with a sickle and a red star in the upper hoist.

Figure 2. The National Flags of the Russian Federation and the Former USSR



The national emblem of Russia is a rectangular red heraldic shield. At the bottom, it has rounded corners and a pointed middle. The shield is adorned with a golden double-headed eagle spreading its wings upward. The eagle is crowned with two small crowns and, above them, a large crown, all three joined together by a ribbon. Until the collapse of the Soviet Union in 1991, the national emblem was the hammer and sickle and the Red Star over a globe, and two wreaths of wheat covered by the USSR State motto in the official languages of the Soviet Republics. Each Soviet Socialist Republic (SSR) and Autonomous Soviet Socialist Republic (ASSR) had its national emblem, largely inspired by that of the Union. The national emblems of Russia and the former USSR appear on all educational certificates of Russia and the former USSR, respectively.

Figure 3. The National Emblems of the Russian Federation and the Former USSR





Economy

After the collapse of the Soviet Union, Russia saw its comparatively developed centrally planned economy contract severely as it was trying to develop a market economy and achieve more consistent economic growth. The economic development of the country has been extremely uneven. The huge capital region of Moscow is a bustling, affluent metropolis living on the cutting edge of technology. It contributes one-third of the country's GDP (Gross Domestic Product) while having only a tenth of its population. The rest of the country, especially its indigenous and rural communities in Asia, lags significantly behind. Market integration is nonetheless making itself felt in some other sizeable cities such as Saint Petersburg and Ekaterinburg, and recently also in the adjacent rural areas. Russia's GDP increased by 7.2% in 2004 and 6.4% in 2005.

Russian-Canadian Relations

One of the most important spheres of the Russian-Canadian relations is trade and economic cooperation. Russian exports to Canada consist of minerals, food and agricultural products, ferrous metals, chemicals, textiles, and wood. Russia imports from Canada machinery and transport equipment, foodstuffs, chemicals and medicines. Regional ties are actively developing. Substantial interest in such cooperation is demonstrated by Ontario, Quebec, Manitoba, Alberta and Northwest Territories in Canada, and Moscow, St.Petersburg, Republic of Tatarstan, Republic of Bashkortostan, Republic of Sakha (Yakutia), Jamalo-Nenets and Khanti-Mansiisk Autonomous regions, Samara, Perm and Tyumen regions in Russia.

Russian Immigration to Canada

Majority of recent immigrants from Russia are highly skilled professionals, who choose to settle in large urban centres such as Montreal, Toronto, Vancouver, Calgary and Edmonton. On average, over 15 thousand people come to Canada from Russia and other countries of the former USSR each year. According to the 1996 Canadian Census, a total of 272,325 persons responded that they were fully (46,885) or partially (225,450) of Russian background.

HISTORICAL EDUCATION OVERVIEW

Education in the Former USSR

Elimination of Illiteracy

The Russian census of 1897 suggested that only 22% percent of the population were literate, while the rate for women was even lower, at about 12%. By 1920 the literacy rate had increased to 54% overall, although it was still extremely low among some ethnic groups. The eradication of illiteracy became the primary task in the new policy of *likbez* (ликвидация безграмотности, likvidatziya bezgramotnosti). The new system included universal compulsory education for children and special literacy schools for adults. The most active phase of *likbez* lasted until 1939, raising the literacy rate to 87.4 percent. By the 1960 the USSR was claiming almost 100% literacy.

Educational Philosophy

The Soviet system maintained some traditions from tsarist times, for example the five-point grading scale, formal and regimented classroom environments, and standard school uniforms (dark dresses with white collars for girls, white shirts and black pants for boys). Some education scholars find a distinct Russian/Soviet school culture of conformity tracing its roots to Orthodox Church dogmas. At all times, Russian students were told what the answer was, not why the answer was what it was. Teacher authority reigned supreme and dissent was not tolerated.

The underlying philosophy of Soviet education was that the teacher's job was to transmit standardized material to the students, and the students' job was to memorize it. Soviet education was inflexible and was dominated by Marxist-Leninist ideology. Socialist ethics stressed the primacy of the collective over the interests of the individual. Therefore, for both teachers and students, creativity and individualism suffered.

Centralization

Soviet education was a highly centralized government-run system with uniform curriculum. Its advantages were access for all citizens, high academic standards and guaranteed post-education employment. The Soviet Union recognized that the foundation of their system depended upon complete dedication of the people to the state, military training, and specialized education in the fields of engineering, natural and social sciences. The hard sciences developed especially fast in the USSR after 1945 to meet the cold war demands for high-tech weapons. System centralization meant that school organization, course content, grading system and number of credit hours was the same in each school throughout the Union. Each region had its local educational authority, with a number of school administrators and inspectors monitoring curriculum, academic standards and teaching methods.

Pre-School and School Education

The Soviet pre-school education consisted of nurseries (for children between the ages of 6 months and 3 years) and kindergartens (for children between the ages of three and six). General schools provided primary, lower and upper secondary education. Since 1981, 10 years (11 years in the Baltic republics) of upper secondary education was compulsory in the USSR.

Table 5. Soviet System of School Education

Education Level	Grade	Age	Living Credential	Leaving Credential (Russian and transliteration
Primary	1-3 (1-4)	6-9 (6-10)	N/A	N/A
Lower Secondary	4-8 (5-9)	9-14 (10-15)	Certificate of Incomplete Secondary Education	Аттестат об основном общем образовании, Attestat ob Osnovnom Obshchem Obrazovanii
Upper Secondary	9-10 (10-11)	14-16 (15-17)	Certificate of Completion of Secondary Education	Аттестат о среднем (полном) общем образовании, Attestat o Srednem (Polnom) Obshchem Obrazovanii

Soviet primary and secondary schools remain the example of high achievement. In the 1970s, according to some sources, the common situation was that an American or German university student would fail to meet the standards of a Soviet secondary school physics program. Soviet pupils studied 6 days a week on a curriculum heavily biased towards math and hard sciences. They would take up to 6 required classes a day and, in many cases, stay on till evening in the homework preparation programs.

Special Schools

There were two main types of special schools: those for the intellectually handicapped and those for the intellectually gifted. In the second category, a special school gave greater emphasis to a particular subject much earlier in the school system. Special schools usually covered both the primary and secondary levels, and concentrated on mathematics and physics, foreign languages, ballet, music or sport. Mathematics/physics special schools were generally affiliated with a university and their students were recruited through special competitions called Olympiads. On completion of their school education students usually proceeded to the affiliated university, or were offered non-competitive entry to many institutions of higher education. Such special schools noted for their academic excellence, were highly selective and admission to them was much sought after.

Vocational Education

In general, there were two types of secondary vocational education available to students in the former USSR:

- 1) Lower Vocational Education (Qualified worker). This type of education was offered through vocational schools (профессионально-техническое училище, professional no-tehnicheskoe uchilishche)
- 2) Higher Vocational Education (e.g., title of technician or nurse). This type of education was offered through technical or professional colleges (техникум, *tehnikum* or училище, uchilishche).

Both types of vocational education could be accessed either after the completion of lower secondary education (grades 8 or 9) or after the completion of upper secondary education (grades 10 or 11). The length of the study varied depending upon the mode of entry.

Higher Education

Types of Institutions

Higher education (высшее образование, *vyssheye obrazovaniye*) included degree-level facilities: universities, "institutes," higher technical colleges and military schools and academies. In the USSR, only classical universities had the status of "universities". There were only a few of them, mostly in the large regional centers. Other institutes of higher education held the status of "institutes." "Institute" in the sense of a school, refers to a specialized school of higher education, mostly technical, which is usually subordinate to the ministry associated with their field of study. The largest "institutes" were medical, pedagogical (for the training of school teachers), construction and various transport (automotive and road, railroad, civil aviation) institutes. Some institutes were present in every *oblast* capital while others were unique and situated in big cities.

Credentials

The Soviet system of university education consisted of two distinct phases. The first phase was typically five years in length and resulted in the degree of "Specialist" (Специалист, *Spetzialist*). The second phase included two levels: Candidate of Sciences (Кандидат Наук, *Kandidat Nauk*) and Doctor of Sciences (Доктор Наук, *Doktor Nauk*).

Table 6. Soviet System of Higher Education

Education Level	Leaving Credential	Leaving Credential (Russian and transliteration	Typical Length of Study (years)
first degree program	Diploma of	Диплом Специалиста,	5
	"Specialist"	Diplom Spetzialista	
graduate program	Diploma of	Диплом Кандидата	3
	Candidate of	Hayк, Diplom Kandidata	
	Sciences	Nauk	
advanced graduate	Diploma of Doctor	Диплом Доктора Наук,	5
program	of Sciences	Diplom Doktora Nauk	

Language of Instruction

School education was conducted in Russian, even in those areas in which it was not the mother tongue of the majority of the population. Local languages were studied only as a supplementary course.

Reforms in the 1980s

Educational reform programs in the 1980s called for new curricula, textbooks, and teaching methods. The aim of these programs was to create a "new school" that would better equip Soviet citizens to deal with the modern, technological world. However, in the 1980s facilities generally were inadequate, overcrowding was common, and equipment and materials were in short supply. The schools and universities failed to supply adequately skilled labour to almost every sector of the economy, and overgrown bureaucracy further compromised education's contribution to society. Young Russians became increasingly cynical about the Marxist-Leninist philosophy and lack of self-expression and individual responsibility. In the final years of the Soviet Union, funding was inadequate for the large-scale establishment of "new schools" and requirements of ideological purity continued to smother the new pedagogical creativity.

Education in the Russian Federation after 1991

Reforms in Educational Philosophy and Decentralization

The dissolution of the Soviet Union and the transition toward democracy had a profound effect on national education policy. In 1992 a reform philosophy was set forth in the Law on Education. The fundamental principle of that law was the removal of state control from education policy. In regions with non-Russian populations, that meant that educational institutions could base their curricula and teaching methods on national and historical traditions. In all regions, enactment of the law meant significant autonomy for local authorities to choose education strategies most appropriate to the time and place. Post-Soviet education reform also stressed teaching objectively. It aimed at discarding all

forms of the narrow, institutional views that had dominated the previous era. Also, it aimed at preparing young people to deal with all aspects of the society they would encounter by presenting a broader interpretation of the world.

A new vision of education paid more attention to the arts, humanities, and social sciences. The 1992 Law on Education stressed the humanistic nature of education, common values, freedom of human development, and citizenship. Curriculum changes were laid out in the Basic Curriculum of the General Secondary School; the overall curriculum reform program was to be put in place over a five-year period ending in 1998. In the mid-1990s, many public schools designed special curricula, some returning to the classical studies prevalent in the early 1900s. Local development of curricula and materials became legal in 1992, but financial constraints often limited such new development. The Soviet era left educators with a strong bias toward standardized instruction and rote memorization. A major factor encouraging local initiative was the disarray of federal education agencies, which often leave regional authorities to their own devices. Nevertheless, only about one-third of primary and secondary schools have taken advantage of the opportunity to develop their own curricula. Many authorities have been unwilling to make such large-scale decisions independently.

Post-Soviet educational philosophy seeks to integrate education with the production and economic processes. The new vision of continuous lifelong learning in the Russian Federation aims to convert the education process from an economic burden to an engine of economic progress. Especially important in this program is the reorientation of vocational training to complement the economic reforms of the 1990s. They include new systems of education for farmers and various types of on-the-job training for adults.

Structure of Russian Education

The Russian education system was originally inherited intact from the Soviet Union. Subsequent developments led to few significant changes at the secondary and higher education levels.

School Education

At present, Russia has an 11-grade system of school education. It is compulsory up to the 9th grade. Children begin school at age 6 or 7 and study for 4 years to complete their primary education. After their first four years, they study for another 5 years to complete their lower secondary education. The Certificate of Incomplete Secondary Education (Аттестат об основном общем образовании, Attestat ob Osnovnom Obshchem Obrazovanii) is awarded after the first 9 years of schooling. Graduates of this level may continue their education for another two years at a senior high school to complete their upper secondary education. Or they may enter vocational schools or colleges. Those who have chosen senior high school study for another two years. Secondary education leads to the award of Certificate of Completion of Secondary Education (Аттестат о среднем (полном) общем образовании, Attestat o Srednem (РоІпот) Obshchem Obrazovanii). The attestat is awarded directly by individual schools. Students receive between 32-38 hours of weekly instruction. The curriculum includes

compulsory subjects like physics, math, literature, etc. In addition, students may choose from several elective subjects which individual schools offer.

There are four main **types of secondary schools** in Russia. In addition to Soviet-type general secondary and special schools, there are gymnasiums and lyceums focusing on humanities and sciences, respectively. Most lyceums and gymnasiums are located in large cities, like Moscow and St Petersburg with few in smaller cities. Most are private (non state) organizations, which commonly charge tuition. In addition to tuition costs, many lyceums and gymnasiums also distinguish themselves from other state funded schools by being very selective in their acceptance process. At present, they make up 8% of the total number of all schools in Russia.

Table 7. Russian System of School Education

Education Level	Grade	Age	Living Credential	Leaving Credential (Russian and transliteration
Primary	1-4	6-10	N/A	N/A
Lower Secondary	5-9	10-15	Certificate of Incomplete Secondary Education	Аттестат об основном общем образовании, Attestat ob Osnovnom Obshchem Obrazovanii
Upper Secondary	10-11	15-17	Certificate of Completion of Secondary Education	Аттестат о среднем (полном) общем образовании, Attestat o Srednem (Polnom) Obshchem Obrazovanii

Private Schools

In 1992 the new education law legalized private schools and home schooling. As public schools debated what to do with their new academic freedom, private schools and preschools became centers of innovation. They were rediscovering pre-Revolutionary pedagogy and freely borrowing teaching methods from Western Europe and the United States. Private schools emphasize learning English and other critical skills. Student-to-teacher ratios are very low, and teacher salaries average about US\$170 per month (about three times the average for a public school teacher). Tuition may be as much as US\$3,000 per year, but some private schools charge parents according to their means. Unlike public schools, all private schools must pay for rent, utilities, and textbooks, and many struggle to retain adequate building space. The law of 1992 also gave educators the right to choose their own textbooks and to determine other aspects of instruction. Private publishing, which did not exist during the Soviet period, has expanded rapidly, although new textbooks are still not widely available.

The Unified State Exam

The Unified State Exam (USE) (Единый Государственный Экзамен (ЕГЭ), Edinyj Gosudarstvennyj Ekzamen (EGE)) was introduced in some regions of Russia as an experiment since 2004. The plan is to make it a standard graduation test in Russian general schools by 2009. It is currently administered at the end of the 11th grade. From 2009, it will also be administered for students leaving general school after the 9th grade. It consists of three parts: part A contains multiple-choice questions, part B is fill-in the blank; and Part C requires student to write the full solution (as in mathematics) or a composition (as in literature). An excellent score ranges from 65 (mathematics) to 90 (foreign language). The score of three subjects is added up into a total score. Each student taking the exam will have a Certificate of USE Results (Свидетельство о Результатах ЕГЭ, Svidetel'stvo o Rezul'tatah EGE). Submitted together with attestat, the USE score will replace entrance exams for students applying to a university. Students who take the USE will have a chance to apply to several universities.

Vocational Education

Russian vocational education has the same structure as that of the USSR with some changes in the names of institutions. In general, there are two types of secondary vocational education available to Russian students:

- 1.) Lower Vocational Education (Qualified worker). This type of education is offered through vocational schools (профессионально-техническое училище, professional no-tehnicheskoe uchilishche)
- 2.) Higher Vocational Education (e.g., title of technician or nurse). This type of education is offered through technical or professional colleges (техникум, *tehnikum* or училище, uchilishche), colleges (коллеж, *kollezh*) and lyceums (лицей, *litzej*).

Both types of vocational education can be accessed either after the completion of lower secondary education (grades 8 or 9) or after the completion of upper secondary education (grades 10 or 11). The length of the study varies depending upon the mode of entry.

Higher Education

In the new Russia, the system of higher education has undergone a more drastic transformation than the primary and secondary systems. Responsibility has moved from the central government to agencies in local and sub-national jurisdictions. Under the new system, each university can determine its own admissions policy and the content of its academic programs. They also have their own financial resources and statutes of operation.

After Russia joined the Bologna process, many higher education institutions split the old five-year program of "Specialist" into the four-year Bachelor (Бакалавр, *Bakalavr*) and the two-year Master (Магистр, *Magistr*) programs. However, this change was not uniform within and across institutions. Some departments and institutions made the change, others kept the program of "Specialist" in place. The introduction of the Ph.D. program is also discussed but this has not been implemented yet.

In 2002, there were 1041 institutions of higher education in Russia including universities, institutes and academies (610 state institutions, 280 private institutions with state accreditation and 151 private institutions without state accreditation). Universities conduct fundamental and applied research in many fields, while academies and institutes focus on one particular field. An academy differs from a university by a narrower spectrum of specialties connected with a particular industry, for example, Academy of Railway Transport, Agriculture Academy, or Academy of Economics. To hold the status of a university or an academy it is obligatory to be a leading scientific and methodological center in the field of your specialization. Institutes mainly offer applied professional training. An institute also can be established as a department of a university or an academy with the aim to conduct independent educational or scientific activities.

With greater autonomy, many institutes of higher education elevated their statuses from "institutes" to "academies" and "universities". During 1991-1996, the number of universities increased 6 times and academies - more than 30 times. To raise their status from institutes to universities and academies, many institutes open new departments in economics, law, business administration and management. It has to be mentioned that private institutions of higher education usually have the status of institute. There are only 6 non-state universities and 4 non-state academies in Russia as of 2006.

Table 8. Russian System of Higher Education

Education Level	Leaving Credential	Leaving Credential (Russian and transliteration	Typical Length of Study (years)
undergraduate program (Bachelor)	Diploma of Bachelor	Диплом Бакалавра, Diplom Bakalavra	4
graduate program (Master)	Diploma of Master	Диплом Магистра, Diplom Magistra	2
first degree program	Diploma of "Specialist"	Диплом Специалиста, Diplom Spetzialista	5
graduate program	Diploma of Candidate of Sciences	Диплом Кандидата Наук, Diplom Kandidata Nauk	3
advanced graduate program	Diploma of Doctor of Sciences	Диплом Доктора Наук, Diplom Doktora Nauk	5

Business Education

In the new Russian Federation, business education has expanded dramatically because of the increased demand for competent managers and commerce graduates. Experts believe that Russia's business education programs will play an important role in transforming social attitudes toward the market economy and establishing a new economic infrastructure. The primary goal of the new programs is to create familiarity with the principles of the market economy while casting aside Marxist economic ideology. In the first two years after the Soviet Union dissolved, more than 1,000 business schools and training centers, both state and private, were established.

Language of Instruction

The principal language of instruction is Russian for all levels of education. The 1990s saw a greatly increased emphasis on conducting education in the national languages of the national republics and minority communities. In the Russian Federation, schools for these minority groups are referred to as national schools.

Funding and Infrastructure Issues

In the former Soviet Union, education at all levels was free. The downside of that system was that institutions had to be funded entirely from the federal and regional budgets. Consequently, after the collapse of the Soviet Union, institutions found themselves unable to provide adequate teachers' salaries, student scholarships, and to maintain their facilities. To address the financial issue, many state institutions started to open their doors to tuition students, who paid for their education. The number of these students has been growing steadily since then. In 2002, 44 % of state institutions' freshmen paid their tuition. Many private higher education institutions have emerged, mostly in the fields of economics, business/management, and law. In 2004, of all first-year students, 35% were paying for their own education in state institutions and 20% were enrolled in private universities.

Russia inherited a system of very large, overcrowded schools with a decaying infrastructure. By the late 1980s, 21 percent of students were attending schools with no central heating, and 30 percent were learning in buildings with no running water. In 1992 Russia had nearly 67,000 primary and secondary schools, which provided an average perpupil space of 2.6 square meters, one-third the official standard. About one-quarter of schools housed 900 or more students. In 1993 Russia closed about 20,000 of its schools because of physical inadequacy, and an estimated one-third of the national school capacity was in need of large-scale repair. In 1994 one of every two students attended a school operating on two or three shifts. Rural schools, which make up about 75 percent of the national total, were in especially bad condition. Disparities in conditions have widened since 1991, as schools have become increasingly reliant on local support from public and private sponsors. Many schools have specialized, either to attract sponsors or to meet the needs of current sponsors, and reformers have sought to refocus the curriculum around the needs of students. Public institutions of higher education, once heavily supported by the state, have had to cover a much larger share of their operating costs. To attract support from potential sponsors, regional authorities upgraded more than

100 teacher-training colleges to universities or academies, which are more prestigious. As a result, new teacher-training institutes were created to ensure that Russia trains an adequate number of future educators.

SCHOOL EDUCATION

Overview of School Education in the Former USSR and the Russian Federation

School Education Stages in the Former USSR and the Russian Federation

School education (школьное образование, *shkol'noe obrazovanie*) in the former USSR and the Russian Federation is also known as general education (общее образование, *obshchee obrazovanie*). It is divided into three stages:

- primary general education also known as elementary education (начальное образование, *nachal'noe obrazovanie*),
- lower secondary education known as basic general education (основное общее образование, *osnovnoe obshchee obrazovanie*), and
- upper secondary education known as secondary complete general education (среднее полное общее образование, *srednee polnoe obshchee obrazovanie*).

Table 9. School Education Stages in the Former USSR and Russian Federation

	Leaving	Leaving	In the	Former	In the l	
Education	Credential	Credential	USSR		Federation	
Level	(Russian and Transliteration)	(English Translation)	(prior to 1991) Grade Age		(since 1991) Grade Age	
Primary	N/A	N/A	1-3 or 1-4	6-9 or 6-10	1-4	6-10
Lower Secondary	Аттестат об основном общем образовании, Attestat ob Osnovnom Obshchem Obrazovanii	Certificate of Incomplete Secondary Education	4-8 or 5-9	9-14 or 10-15	5-9	10-15
Upper Secondary	Аттестат о среднем (полном) общем образовании, Attestat o Srednem (Polnom) Obshchem Obrazovanii	Certificate of Completion of Secondary Education	9-10 or 10-11	14-16 or 15-17	10-11	15-17

Overall Length of Combined Primary and Secondary Education in the Former USSR and the Russian Federation

In the former USSR complete school education lasted between 10 and 11 years. When school education lasted 10 years it included three years of primary education, five years of lower secondary, and two years of upper secondary education. When it lasted 11

years it included four years of primary education, five years of lower secondary, and two years of upper secondary education. Within the 11 –year school system grades 1 to 9 were compulsory. When the change from 10 to 11 years occurred the extra year was added to primary education.

One notable exception as evident from the following table were the Baltic states. The overall length of school education in the Baltic states alternated between 11 and 12 years.

Table 10. Duration of Complete School Education in the Former USSR Republics and the Current Russian Federation

	Duration of Complete School Education, in Years					
Year	Former USSR	The Russian	Former Baltic	Baltic States ⁴		
	Republics ¹ ,	Federation	Republics ³	(since 1991)		
	except Former	(since 1991)	(prior to 1991)			
	Baltic					
	Republics ²					
	(prior to 1991)					
1929 - 1958	10	-	11	-		
1958 - 1964	11	-	12	-		
1964 - 1989	10	-	11	-		
1989 - 1991	11 ⁵	-	12	-		
1991 -	-	11	-	12		

School Education Credentials in the Former USSR and the Russian Federation

The Certificate of Incomplete Secondary Education (Аттестат об основном общем образовании, Attestat ob Osnovnom Obshchem Obrazovanii, or Аттестат о неполном среднем общем образовании, Attestat o Nepolnom Srednem Obshchem Obrazovanii) is awarded after the completion of lower secondary education and the successful passing of final examinations (also called the State final attestation). The certificate entitles its holder to be admitted either to upper secondary education or to vocational education.

The Certificate of Completion of Secondary Education (Аттестат о среднем (полном) общем образовании, Attestat o Srednem (Polnom) Obshchem Obrazovanii), or, before 1993, the Certificate of Secondary Education (Аттестат о среднем образовании, Attestat o Srednem Obrazovanii), is also commonly known as the Certificate of Maturity (Аттестат зрелости, Attestat Zrelosti). The certificate is awarded after the completion of the upper secondary programme and the successful passing of the

¹ Includes the former Russian Soviet Federative Socialist Republic

² Former Baltic Republics include the former Estonian Soviet Socialist Republic, the former Latvian Soviet Socialist Republic, and the former Lithuanian Soviet Socialist Republic.

³ See footnote 2.

⁴ Baltic states include Estonia, Latvia, and Lithuania.

⁵ 10 years in some republics

State final attestation (final examinations). It entitles its holder to pursue vocational education or higher education.

In both the former USSR and Russian Federation, regardless of whether the length of studies had been 10, 11, or 12 years, students sat for the same standardized examinations to obtain the Certificate of Completion of Secondary Education and for the same entrance examinations at the institutions of higher learning.

Grading Scale in the Former USSR and the Russian Federation

The following grading scale has been used at all levels of school education.

Table 11. Grading Scale in School and Higher Education in the Former USSR and the Russian Federation

Scale	Grade Description
5	Excellent (Отлично, Otlichno)
4	Good (Хорошо, Horosho)
3	Satisfactory (Удовлетворительно, <i>Udovletvoritel'no</i>)
2	Fail (Неудовлетворительно, Neudovletvoritel'no)

The lowest passing grade is '3'. Students must pass each course in order to enroll in the next grade or to graduate. The grade '1' also exists, but is used very rarely.

A plus (+) or a minus (-) may be added to a grade. For example, a '4+' is higher than a '4' and lower than a '5-'. A '5+' is very rare. These intermediate grades may be awarded throughout the period of study but typically not as a final grade.

Administration of School Education in the Former USSR and the Russian Federation

School Education in the Former USSR and the Russian Federation was administered and supervised by the federal Ministry of Education which has undergone several name changes as listed below.

Former USSR (prior to 1991): Ministry of People's Education (Министерство Народного Образования, *Ministerstvo Narodnogo Obrazovaniya*)

<u>Russian Federation 1991 – 1996:</u> Ministry of Education (Министерство Образования, *Ministerstvo Obrazovaniya*)

Russian Federation 1996 – 1999: Ministry of General and Professional Education of the Russian Federation (Министерство Общего и Профессионального Образования, *Ministerstvo Obshchego i Professional'nogo Obrazovaniya*)

<u>Russian Federation 1999 – present:</u> Ministry of Education and Science (Министерство Образования и Науки, *Ministerstvo Obrazovaniya i Nauki*), also called by its short version, the Ministry of Education (Министерство Образования, *Ministerstvo Obrazovaniya*)

The federal Ministry of Education is in charge of development and implementation of state policy in preschool, general, and vocational education. The following main functions come under the terms of reference of the federal administration:

- Establishment of procedures for creation, reorganization, and dissolution of educational institutions
- Creation, reorganization, and dissolution of educational institutions under federal control
- Establishment of procedures for different forms of quality control (licensing, attestation, and state accreditation of educational institutions) and their implementation
- Recognition of educational credentials obtained abroad
- Establishment of procedures for attestation and evaluation of teaching staff
- Funding of state educational institutions

In addition to the federal Ministry of Education there are state bodies for education in the constituent parts of the Russian Federation (republics, provinces, territories, districts and other regions) as well as local/municipal administrative bodies (in cities, city districts, and towns). They are responsible for development of education as stipulated by federal administration. In addition, they have administrative responsibilities over the educational institutions which they set up. They carry different names, usually Departments of Education (Отделы Образования, *Otdely Obrazovaniya*) of corresponding local administrations, or local Ministries of Education.

Types of Schools in the Former USSR and the Russian Federation

In the current system of school education there are four major types of schools. As seen from the table below, in the Russian Federation two new types of schools were introduced: the gymnasium and the lyceum.

Table 12. Types of Schools in the Russian Federation and the Former USSRⁱ

Types of	урев от Schools III the Ku Школа (Shkola)	Focus of	Percent	Stages of	Common in
School in the		Studies	of All	School	the Former
Russian			Schools	Education	USSR
Federation			in 2004	Offered	
General secondary school	Общеобразовательная средняя школа (Obshcheobrazovatelnaya srednyaya shkola)	General	80%	Primary, lower secondary and upper secondary ⁶	Yes
General school offering intensive studies in certain subjects	Общеобразовательная школа с уклоном (Obshcheobrazovatelnaya shkola s uklonom)	A specific field of studies, usually reflected in the name of the school	15%	Primary, and/or lower secondary and/or upper secondary	Yes, called special or specialized schools (специальная школа, spetzial'naya shkola)
Gymnasium	Гимназия (Gimnaziya)	Humanities	2%	Primary, and/or lower secondary and/or upper secondary	No
Lyceum	Лицей (Litzej)	Scientific and technical subjects	3%	Primary, and/or lower secondary and/or upper secondary	No

General secondary schools offer school education from grade 1 to 11. Unlike schools in Alberta, schools in Russia are identified by their location and a number, and very rarely use other names. For example, General secondary school #7 of the city of Moscow.

General schools offering intensive studies in certain subjects provide advanced education in a specific field such as mathematics, physics, a foreign language, etc. If the school is affiliated with an institution of higher education the affiliation is usually reflected in the name of the school.

Private schools offering programs similar in content to those offered by one of the above mentioned institutions (usually, gymnasiums and lyceums) started operating in

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⁶ Very few general schools offer primary and lower secondary education only.

Russia in 1993. They have many different names. The private schools that are licensed and accredited may award certificates, consistent with the State format, which are recognized for entry to institutions of higher education.

Other types of institutions may offer vocational education at the upper secondary level. They are described in the chapter on Technical/Vocational Education.

Education at state schools of various types is officially free. However, parents pay for textbooks, supplies, and any uniforms. Private schools charge tuition fees.

School Year in the Former USSR and the Russian Federation

In the **former USSR**, the school year ran from September 1 until the end of May for grades other than final grades or until June for final grades. Students attended school six days per week (Monday through Saturday) for the nine months in each grade. Final examinations were held in May or June.

In the **Russian Federation**, the majority of schools operate on a five-day week with a few still operating on a six-day week. The academic year generally lasts from September to May or June. Final school examinations are held in June.

The school year in both the USSR and the Russian Federation is divided into four quarters (typically for grades up to grade 8) or two semesters (for higher grades). The school day is divided into three to seven classes (the higher the grade the more classes per day). At the end of each quarter or semester a student is assigned a grade in each subject.

Pre-School Education

Pre-School Education in the Former USSR

In the Soviet Union, children between the age of six months and six years could attend pre-school which was free and common but not compulsory. The soviet pre-school education consisted of nurseries (for children between the ages of six months and three years) and kindergartens (for children between the ages of three and six years). Teaching staff were required to hold upper vocational (*uchilishche*-level) pedagogical education, which included upper secondary education. ii

In addition, parents may have enrolled their children into the so-called grade 0 at a primary school. Grade 0 was customarily held each Saturday for several months before grade 1. Students learned basic reading, writing, and arithmetic skills.

During the period of time when primary education programs were of three years duration (a 10-year school system) the students typically received pre-school education with primary school disciplines. The few who did not receive pre-school education had to catch up.

Pre-School Education in the Russian Federation

In the Russian Federation children between the age one and six years may attend pre-school. As in the former USSR pre-school is not compulsory in Russia. However,

today it is no longer free but largely based on the payment of tuition fees. Due to economic and financial circumstances enrolments and the number of pre-school institutions have declined since 1992

Since 1995 there has been diversification of pre-school institutions, some became private. Institutions similar to the Soviet-era nurseries and kindergartens coexist along with the new type of pre-schools. Regardless of the type of school most of pre-schools are now fee paying.

The educational programs focus on a child's physical and mental development, arts, emotional well being, and physical health. Teaching staff are required to hold upper vocational (*uchilishche*-level) pedagogical education, which includes upper secondary education.

Primary Education

Primary Education in the Former USSR

Before 1989 primary schooling required three years. Students commenced this stage typically at the age of seven. During the transition to a four-year primary system (when the school system changed from 10 to 11 years of schooling), some schools chose to continue the 10-year system by omitting year 4. Students would progress from year 3 directly into year 5 (the first grade of lower secondary education in the new system). The curriculum, however, was the same for both systems.

The primary curriculum emphasized the skills of reading, writing and arithmetic, as well as speaking, arts, and physical education. Children also acquired general notions about nature, society, and labour. For the most part, students were taught all subjects by the same teacher. Teachers for this stage of school education were required to complete upper vocational (*uchilishche*-level) pedagogical education, which included upper secondary education.

Table 13. Common Curriculum for Soviet Primary Schools, 1989ⁱⁱⁱ

Subject	Hours of Instruction per Grade					
Subject	1	2	3	4	Total	
Russian Language	306	340	408	374	1428	
Mathematics	136	170	170	204	680	
Environment	34	34	1	ı	68	
Nature	-	-	34	34	68	
Music	34	34	34	34	136	
Graphic Art	34	34	34	34	136	
Physical Education	68	68	68	68	272	
Labour	68	68	68	68	272	
Total	680	748	816	816	3060	

Formal examinations were held at the end of the final year of primary education. State written exams were conducted, in each mathematics and Russian. Oral exams were held in subjects chosen by the local school authorities, usually environment, nature, and physical education.

Primary Education in the Russian Federation

As of 2004/05, the only system is the 11-year school education system. Primary education lasts four years. However, as of 2004 about 10% of students had completed only three years of primary schooling as their pre-schooling included some primary school curriculum.

Primary schools admit children who turn seven in that calendar year. Parents choose whether they want their child to enter school at the age of six or seven.

The curriculum in primary schools includes Russian language and literature, mathematics, a foreign language, physical education, environment, music, arts, and labour.

Table 14. Common Curriculum for Russian 3-year Primary Schools, 2004^v

Subject	Hours of Instruction per Grade				
Subject	1	2	3	Total	
Russian Language and Literature	297	272	272	841	
Foreign Language	66	68	68	202	
Mathematics	165	170	170	505	
Environment	33	68	68	169	
Regional Option	ı	68	68	68	
Family Studies	-	08	00	68	
Labour	66	68	68	202	

Music	33	34	34	101
Fine Arts and Culture	33	34	34	101
Physical Education	66	68	68	202
Sports and Games	33	34	34	101
Individual Studies	66	34	68	168
Total	858	918	952	2728

Table 15. Common Curriculum for Russian 4-year Primary Schools, 2004vi

Subject	Hours of Instruction per Grade					
Subject	1	2	3	4	Total	
Russian Language and Literature	306	306	272	272	1156	
Foreign Language	68	68	68	68	272	
Mathematics	136	136	136	136	544	
Environment	34	34	68	68	204	
Regional Option	-	68	68	68	102	
Family Studies	-	08	08	08	102	
Labour	68	68	68	68	272	
Music	34	34	34	34	136	
Fine Arts and Culture	34	34	34	34	136	
Physical Education	68	68	68	68	272	
Sports and Games	34	34	34	34	136	
Individual Studies	-	34	102	102	238	
Total	782	884	952	952	3570	

The federal Ministry of Education sets the compulsory minimum educational content of the curriculum. Subjects include Russian language, literature, foreign language, mathematics, environment, music, visual arts, labour, and physical education. The regional administration and individual schools are permitted to develop up to 20% of this curriculum.

Table 16. Plan of Study for Russian Primary Schools (Grades 1-4). 2006vii

Subject	y for Russian Primary Schools (Grades Content	Total Hours	Permitted Program Customi- zation
Russian language (schools with Russian as the language of instruction)	Communication, phonetics and graphics, word composition, morphology, syntax and punctuation, lexica	675	10%
Russian language (schools not using Russian as the language of instruction ⁷)	Communication, phonetics and graphics, word composition, morphology, syntax and punctuation, lexica	439	10%
Russian literature (schools with Russian as the language of instruction)	Listening, reading, discussing, writing about literary works	472	10%
Russian literature (schools not using Russian as the language of instruction ⁸)	Listening, reading, discussing, writing about literary works	270	10%
Foreign language	Basic skills in a foreign language	204	10%
Mathematics	Non-negative integers, arithmetic, magnitudes, space, figures, measurement	540	10%
Environment	Society and environment, primary school student, nature, local community, the planet Earth	270	20%
Music	Folklore, song, dance, march, choral, instrumental, orchestra music, Russian anthem, folklore festivals, children music on TV, radio and theater	135	20%
Visual arts	Painting, sculpture, architecture, design, crafts, drawing, color, composition, volume, proportion	135	20%
Labour	General knowledge and skills, production technology, home labour, working on computer	203	10%
Physical education	Health and personal hygiene, physical development and training, sports	270	10%

⁷ In the Russian Federation, schools may conduct teaching of all subjects (except Russian language and Russian literature) in all grades in a local language. In the former USSR, subjects were mandatorily taught in Russian.

8 See footnote 1.

Similarly to the former USSR, students are taught all subjects by the same teacher. Teachers for this stage of school education require upper vocational (*uchilishche*-level) pedagogical education, which includes upper secondary education. Formal examinations are held at the end of the fourth grade. They include compulsory written exams in both mathematics and Russian, plus three oral exams set by the local administrations and schools.

While the vast majority of children are enrolled at state primary schools, several hundred private schools have entered the market over the last few years. They educate approximately one percent of the total population of primary school students.

Lower Secondary Education

Lower Secondary Education in the Former USSR

Before the education reforms of 1989, lower secondary school consisted of grades 4 to 8, and after 1989 grades 5 to 9. It represented the second phase of compulsory education.

The curriculum was organized into subject classes, all of which were compulsory. The emphasis in the uniform state program was on science, mathematics and languages. Biology was introduced in grade 6, physics in grade 7, and chemistry in grade 8. Every subject was taught by a specialist teacher. Teachers for this stage of education were required to complete higher (university-level) pedagogical education with a specialization in a given subject.

Table 17. Common Curriculum for Soviet Lower Secondary Schools, 1989viii

Subject	Hours of Instruction per Grade					
	5	6	7	8	9	Total
Russian Language	245	210	140	108	76	779
Russian Literature	140	105	70	72	114	501
Mathematics	210	210	210	216	228	1074
History	70	70	70	72	114	396
Nature	35	-	ı	-	-	35
Geography	-	70	105	72	76	323
Biology	-	70	70	72	76	288
Physics	-	-	70	72	114	256
Chemistry	-	-	ı	108	95	203
Drawing	-	-	35	36	38	109
Foreign Language	140	105	70	72	38	425
Music	35	35	35	36	-	141
Graphic Art	35	35	35	36	-	141
Physical Education	70	70	70	72	76	358
Labour	70	70	70	108	114	432
Total	1050	1050	1050	1152	1197	5461

At the end of the final grade of lower secondary education students sat for formal examinations. Written exams were required in mathematics and Russian composition. As well, three oral exams were set by the Ministry of Education.

The **Certificate of Incomplete Secondary Education** was awarded after the completion of lower secondary education and successful passing of final examinations. Final exam results were generally not recorded separately but reflected in the final grades. The Certificate of Incomplete Secondary Education was required for entry to upper secondary education or vocational education.

Lower Secondary Education in the Russian Federation

In the Russian Federation, the lower secondary stage concludes compulsory education. However, only 90 percent of students currently transition from the primary level to the lower secondary level. Lower secondary education comprises grades 5 to 9 of the school system. From grade five onwards school subjects are taught by specialist teachers. Teachers must hold higher pedagogical education with a specialization in a given subject.

The curriculum at the lower secondary level is organized into subject classes some of which are compulsory and some are elective. Like the other levels of school education, educational programs at the lower secondary level must meet the Basic Curriculum set by the federal Ministry of Education. Natural and some social sciences (biology, physics, astronomy, chemistry, geography, history, civics) as well as individual projects are introduced into the curriculum in lower secondary school.

Table 18. Common Curriculum for Russian Lower Secondary Schools, 2004ix

Cubicat		Hou	rs of Inst	ruction p	er Grade	<u>, </u>
Subject	5	6	7	8	9	Total
Russian Language and Literature	272	272	238	204	204	1190
Foreign Language	102	102	102	102	102	510
Mathematics	170	170	204	170	170	884
Computer Science	68	-	-	-	-	68
Environment	34	-	-	-	-	34
Biology	-	68	68	68	68	272
Physics and Astronomy	-	-	68	68	68	204
Chemistry	-	-	-	68	68	136
Geography	-	68	68	68	-	204
History	68	68	68	68	68	340
Civil Science	34	34	34	34	34	170

Economics	-	-	-	-	68	68
Labour	68	68	68	34	34	272
Information Technology	-	-	-	34	34	68
Music	34	34	34	34	34	170
Fine Arts and Culture	34	34	34	34	34	170
Physical Education	68	68	68	68	68	340
Individual Project	68	68	68	68	68	340
Individual Studies	68	102	102	136	136	544
Total	1088	1156	1224	1258	1258	5984

Students completing the lower secondary cycle take final examinations (also called the State final attestation). The state final attestation includes compulsory written exams in both mathematics and Russian composition, plus three oral exams in optional subjects.

The successful completion of the final exams leads to the award of the **Certificate of Incomplete Secondary Education**. It concludes the compulsory stage of education. Final exam results are generally not recorded separately but reflected in the final grades. The certificate grants the holder access to further studies in either the upper secondary education stream or the vocational stream.

Upper Secondary Education

Upper Secondary Education in the Former USSR

Upper secondary education in most republics of the former USSR consisted of grades 9 and 10 or grades 10 and 11. A standard academically-oriented program was suitable to prepare students for entry to institutions of higher education offering various fields of study.

Upper secondary education could be integrated with vocational training at technical/vocational schools. Technical/vocational education including secondary level education at those institutions in the former USSR is covered in the chapter on Technical/Vocational Education.

The upper secondary curriculum was essentially academic in content. Students studied a large number of science and social science subjects. They included mathematics, Russian literature, history, geography, biology, physics, astronomy, chemistry, a foreign language, physical education and other subjects. Students studied more than ten subjects amounting to the average of 36-38 hours of weekly instruction in their final years of schooling.

Table 19. Common Curriculum for Soviet Upper Secondary Schools, 1989^x

Subject	Hours of Instruction per Grade				
Subject	10	11	Total		
Russian Literature	152	114	266		
Mathematics	171	152	323		
Computer science	38	76	114		
History	152	114	266		
Family Life	38	-	38		
Soviet Society	-	38	38		
Geography	57	-	57		
Biology	38	57	95		
Physics	152	152	304		
Astronomy	-	38	38		
Chemistry	76	76	152		
Foreign Language	38	38	76		
Physical Education	76	76	152		
Labour	152	152	304		
Military Training	76	76	152		
Total	1216	1159	2375		

The school subjects were taught by specialist teachers who were required to complete higher (university-level) pedagogical education with a specialization in a given subject. The specialist teachers might be the same ones as at the lower secondary level.

At the end of the last grade of upper secondary education students sat for standardized examinations, both oral and written, in various core subjects. The number of exams was at least five, with two compulsory written exams, one in mathematics and one in Russian composition. In the 1988-1990 period students were tested in mathematics (written), Russian (written), literature (oral), physics (oral), chemistry (oral).

If successful in all subjects students were awarded the **Certificate of Completion of Secondary Education**. Final grades were listed on the Certificate of Completion of Secondary Education itself. Final exam results were generally not recorded in the certificate but reflected in the final grades. Students who received the highest grade ('5' out of '5') in every subject were usually awarded a gold medal. Students who fell short by receiving '4' in only one subject usually received a silver medal. The certificate entitled its holder to apply for admission to an institution of higher education or vocational education.

The comparison between the total hours of instruction in the former USSR and Alberta can be found in the table below. The total hours of instruction in Alberta (grades 1 to 12) and in the former USSR (grades 1 to 10 or 11) are very similar.

Table 20. Comparison of Total Hours of Instruction at USSR and Alberta Schoolsxi

Grades	Total Hours of Instruction	Total Hours of Instruction
	at USSR General Schools	at Alberta Schools
1-6	5,160	5,700
7-11 (7-12 in Alberta)	5,774	5,350
Total for grades 1-11 (1-12	10,934	11,050
in Alberta)		

Upper Secondary Education in the Russian Federation

Currently, upper secondary education comprises grades 10 and 11. This stage of schooling is not compulsory.

Schools offering vocational education may offer programs which combine vocational training and upper secondary education. Technical/vocational education including secondary level education at those institutions in the Russian Federation is covered in the chapter on Technical/Vocational Education.

As at the other stages of school education, upper secondary school curricula follow the Basic Curriculum of School Education of the Russian Federation. The subjects are similar to those in lower secondary schooling. They include Russian language and literature, mathematics, foreign language, biology, physics and astronomy, chemistry, history, social science, regional options, and individual studies, among others.

Table 21. Common Curriculum for Russian Upper Secondary Schools, 2004xii

Subject	Hours of Instruction per Grade				
Subject	10	11	Total		
Russian Language and Literature	170	136	306		
Foreign Language	102	102	204		
Mathematics	136	136	272		
Biology	68	102	170		
Physics and Astronomy	102	102	204		
Chemistry	68	68	136		
History	68	68	136		
Social Science	68	68	136		
Regional Option	34	34	68		
Family Studies	34	34	68		
Economics	68	68	136		
Labour	102	102	204		
Information	34	34	68		

Technology			
Fine Arts and Culture	34	34	68
Physical Education	68	68	136
Individual Project	68	68	136
Individual Studies	68	68	136
Total	1292	1292	2584

The optional and non-federal components of the curriculum are increasing (see also the next section on Profile education). In 2004, the local content developed by regions and individual schools comprised 12.4% of class time in five-day schools.

As in the former USSR, school subjects are taught by specialist teachers who are required to complete higher (university-level) pedagogical education with a specialization in a given subject. The specialist teachers may be the same ones as at the lower secondary level.

Final and annual examinations are a combination of one third oral and two thirds written exams. The number of disciplines in the final attestation is at least five: two federal compulsory written examinations (Russian composition and mathematics) and at least three examinations in fields selected by the student.

The **Certificate of Completion of Secondary Education** includes the results of the final examinations and a transcript listing the grades achieved by students in all the subjects taught. xiii

The comparison between total hours of instruction in the Russian Federation and Alberta can be found in the table below.

Table 22. Comparison of Total Hours of Instruction at Russian and Alberta Schools

Grades	Total Hours of Instruction	Total Hours of Instruction
	at Russian General Schools	at Alberta Schools
1-6	5,814	5,700
7-11 (7-12 in Alberta)	6,324	5,350
Total for grades 1-11 (1-12 in Alberta)	12,138	11,050

Even though the school week has changed from six days in the former USSR to five days in the Russian Federation, the total hours of instruction for all grades have increased by approximately 1,200 hours.

Basic Curriculum in the Russian Federation

A minimum (compulsory) content of education and workload of students required by the state is set in the Basic Curriculum for School Education. Actual school curricula may differ in the number of hours per subject and the number of years a subject is taught. The Ministry of Education of the Russian Federation sets 75% of the curriculum (the Basic Curriculum), while at least 10% of the curriculum is set by the regions and at least 10% by the schools of general education. Other institutions, such as the gymnasiums and lyceums, make individual adjustments to the general curriculum in accordance with the field of study focused on at the institution.

Table 23. Basic Curriculum for Russian School Education, Grades 1 to 11, 2000xiv

Subject		Hours of Instruction per Week per Grade									
	1	2	3	4	5	6	7	8	9	10	11
Russian language	3	3	3	3	3	3	3	3	3	-	-
Literature	4	4	4	4	8	8	6	5	5	4	4
Arts	2	2	2	2	2	2	2	2	-	-	-
Social Sciences	2	2	2	2	2	2	2	3	4	4	4
Natural Sciences	2	2	2	2	2	3	6	8	8	4	4
Mathematics	4	4	4	4	5	5	5	4	5	3	3
Physical Education	2	2	2	2	2	2	2	2	2	3	3
Labour	2	2	2	2	2	2	2	3	3	2	3
Total	19	19	19	19	26	27	28	30	30	20	20
Disciplines in Regional Options	1	3	5	5	3	3	4	2	3	12	12
Total Mandatory Load	20	22	24	24	29	30	32	32	33	32	32
Optional, Individual and Group Classes	2	3	3	3	3	3	3	3	3	6	6
Total	22	25	27	27	32	33	35	35	36	38	38
Weeks per Year	33	34	34	34	34	34	34	34	34	34	34

Table 24. Core Subject Groups in the Basic Curriculum, Grades 1 to 11xv

Table 24. Core Subject Groups in the Basic Curriculum, Grades 1 to 11				
Subject Group	Subjects			
1				
Humanities	Russian Language			
	Literature			
	Arts			
Social Sciences	Foreign Languages			
	Russian History			
	World History			
	Economic and Social Geography			
	Law			
	Political Science			
	Economics			
Natural Sciences	Biology			

	Physics
	Astronomy
	Chemistry
	Ecology
Mathematics	Algebra
	Geometry
Physical Education	Various Sports
Labour	Home Economics, Sewing, Cooking, Metal Work,
	Carpentry, etc.

Educational Reforms in the Russian Federation

Profile Education

In 2003 a new concept of what is known as 'profile education' was introduced in the upper secondary classes (grades 10 and 11) in general schools.^{xvi} Profile education involves the introduction of a number of study concentrations, or profiles.

Table 25. Profile Names and Subjects of Studies, 2006xvii

Table 25. Frome Names and Subjects of Studies, 2000			
Profile Name	Subjects of Intensive Studies		
Mathematics	Informatics, Mathematics, Physics		
Physics and Chemistry	Physics, Mathematics, Chemistry		
Chemistry	Mathematics, Chemistry		
Chemistry and Biology	Mathematics, Chemistry, Biology		
Biology and Geography	Mathematics, Geography, Biology		
Social Sciences and Economics	Mathematics, Geography, Civics,		
	Economics, Law		
Humanities	Civics, History, Russian Language,		
	Literature, Law		
Philology	Literature, Russian language, two foreign		
	languages		
Information Technology	Mathematics, Informatics		
Agricultural Science	Biology, Cattle Husbandry, Agronomy,		
	Agriculture Technology		
Industrial Science	Physics, Technology		
Fine Arts	Literature, Art		
Physical Education	Physical Education, Health/Life Skills		

Table 26. Hours of Instruction for Profile Education, 2004xviii

Subjects	Compulsory and Elective Subjects (2 years of study)		
	Basic Level	Profile	
Russian Language	70*	210	
Literature	210*	350	
Foreign Languages	210*	420	
Mathematics	280*	420	
History	140*	280	
Physical Education	140*	280	
Social Science	70*	210	
Economics	35*	140	
Law	35*	140	
Geography	70	210	
Physics	140*	350	
Chemistry	70*	210	
Biology	70	210	
Informatics	70	280	
Art	70	210	
Technology	70	280	
Civics	35	140	
Subtotal	maximum 2100		
Subjects set by region	140		
Subjects set by school	minimum 280		
Grand total	up to 2520		

^{*} Non-variable part (compulsory subjects)

The profile education model is implemented in all Russian general schools at two stages, the preparatory stage (grade 9) and profile teaching stage (grades 10 and 11).

In the preparatory stage students prepare to choose profiles that will be taught for the duration of grades 10 and 11. Students study intensively one subject for 2-3 months, or one semester. The duration of a course can vary from 12 hours to 100 hours. During the preparatory stage students can explore different profiles.

In the profile teaching stage students commit to a profile (group of subjects) that will be taught at an advanced level. For every educational program only a few subjects remain mandatory. Mandatory subjects are taught at the basic level.

The complete model of profile education (both the preparatory and profile teaching stages) is being implemented across the country in 2006/2007.

The Unified State Exam

Another recent reform in Russian general education is the Unified State Exam (USE) (Единый Государственный Экзамен (ЕГЭ), *Edinyj Gosudarstvennyj Ekzamen (EGE)*). Since 2004, the Russian Ministry of Education has been experimenting with a

single, nationwide, standardized exam. Each student taking the exam receives a Certificate of USE Results (Свидетельство о Результатах ЕГЭ, *Svidetel'stvo o Rezul'tatah EGE*). The plan is to make it a standard graduation test in Russian general schools by 2009. It is currently administered at the end of the 11th grade and only at state-accredited institutions. As of 2009, it will also be administered for students leaving general school after the 9th grade.

HIGHER EDUCATION

Higher Education in the Former USSR

Overview of Higher Education in the Former USSR

Higher education in the former USSR was free, as declared by the Constitution, and controlled by the state. In 1991 there were 904 higher education institutions/HEIs (высшие учебные заведения/ВУЗы, *vysshie uchebnye zavedeniya/VUZy*). The HEIs were located throughout the Soviet republics in some 350 cities and enrolled 5.2 million students on a full-time, part-time, and correspondence basis.

Table 27. Number of Higher Education Institutions in Soviet Republics, 1991

Former Soviet Republics	Number of HEIs	Percent of All HEIs in the Former USSR
Russian Soviet Federative Socialist Republic (RSFSR)	512	56.6%
Ukrainian SSR ⁹	147	16.3%
Moldavian SSR, Armenian SSR, Georgian SSR, Azerbaijani SSR, Kirghiz SSR, Tajik SSR, and Turkmen SSR	85	9.4%
Kazakh SSR	55	6.1%
Uzbek SSR	44	4.9%
Byelorussian SSR	33	3.7%
Estonian SSR, Latvian SSR, and Lithuanian SSR	28	3.0%
Total in the former USSR	904	100%

Administration

Higher education in the country was administered by the **State Committee for Public Education**. Soviet republics and regions had their own local Committees for Public Education. In the case of some specialized institutions, corresponding ministries and departments assumed the administrative responsibility jointly with the State Committee. The State Committee set entrance requirements and determined curricula and textbooks. It also determined professional training requirements.

For each institution, the State Committee for Public Education appointed a rector. As the head of the institution, the rector chaired its Academic Council. The Academic Council included the vice-rector, deans, department chairs, and professors. Since 1987

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⁹ SSR is the abbreviation for Soviet Socialist Republic

the rector was elected by the faculty and staff for a five-year term. The Council was responsible for institutional policies.

The State Committee for Public Education recognized institutions for their contributions to education and research. The Order of Lenin (Орден Ленина, *Orden Lenina*), the Order of the Red Labor Banner (Орден Трудового Красного Знамени, *Orden Trudovogo Krasnogo Znameni*), the Order of the October Revolution (Орден Октябрьской Революции, *Orden Oktyabrskoi Revolutzii*), and the Order of the Friendship of People (Орден Дружбы Народов, *Orden Druzhby Narodov*) denoted institutional quality. Institutions could also be granted the honor of being named after a distinguished citizen in recognition of their academic merit.

Types of Institutions

Institutions of higher education included universities, institutes, academies, *uchilishcha*, and conservatories. ¹⁰ The types of institutions were considered equal in terms of academic standards, admission requirements, and awards offered. The categories were functional and were not meant to represent an educational hierarchy. For about 900 institutions in 1990 the breakdown is shown in the table below.

Table 28. Types of Institutions of Higher Education in the former USSR

Institution Type	Description	Percent of All Institu- tions in 1990
University	 Universities were large comprehensive institutions offering a broad range of disciplines in the sciences and humanities. They did not offer courses in areas such as the applied sciences, engineering or medicine. 	8%
	• The education was often theoretical and focused on preparing researchers and teachers for the post-secondary level. The research was primarily fundamental.	
	• Universities were located in major urban centers.	
	• In 1987, 68 universities enrolled approximately 600,000 students. In 1990, there were 70 universities. The average enrollment ranged between 8,000 and 9,000 including part-time and correspondence students.	
Institute	 Institutes typically specialized in one major applied discipline, for example medicine, agriculture, economics, teacher education, technology, aviation, etc. A combination of practical industrial experience and 	80%

¹⁰ Institutional listings for the former USSR could be found in *the International Handbook of Universities*, 12th edition, and the World of Learning 1989, 39th edition.

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	 theoretical knowledge was emphasized. Even though fundamental research also was done at institutes the focus was more applied. Institutes were generally smaller than universities, with between 3,000 and 7,000 students. 	
	• Polytechnical institutes, or polytechnics, were the largest type of institutes, with an average enrolment of 10,000 to 15,000 students. They trained engineers and technologists. Polytechnics numbered 64 in 1991.	
Academy	 Academies could be educational institutions or institutions dedicated to academic research. Only graduate degrees were awarded at research academies. There were four major research academies in the former USSR: the Academy of Sciences, the Academy of Pedagogical Sciences, the Academy of Agricultural Sciences, and the Academy of Medical Sciences. 	1%
Uchilische	• Some <i>uchilishche</i> were higher education institutions, even though the majority represented technical/vocational institutions. The higher education <i>uchilishche</i> was generally similar to the specialised institutes.	9%
	 Examples of higher education uchilishche included: theatrical uchilishche (театральное училище, teatral'noe uchilishche) - school of drama and cinematography, higher military uchilishche (высшее военное училище, vysshee voennoe uchilishche) - military school, higher marine engineering uchilishche (высшее инженерное морское училище, vysshee inzhenernoe morskoe uchilishche) - school of marine transportation and navigational science. 	
Conserva- tory	 Conservatories offered programs of higher education in music. They were similar to Institutes of Art and Institutes of Culture. There were 22 conservatories in the former USSR. 	2%

Admission to University-Level Higher Education

Admission to higher education in the former USSR was competitive. However, admission to some institutions and programs was much more competitive than to others. Applicants had to carefully weigh their chances of admission as different institutions held their entrance examinations simultaneously. Furthermore, students had to submit the original school-leaving certificate with the application. Although their previous academic record was taken into consideration to some extent, the scores in the entrance exams was the most important factor. To prepare students for the entrance exams, many higher education institutions offered one-year preparatory courses. These one-year preparatory courses were typically taken during the last year of school education.

Table 29. Higher Education Admission Requirements in the Former USSR

Admission	Description
Requirement	
Academic credential	A school or vocational education credential:
requirement	Certificate of Completion of Secondary Education (Attestat o Srednem (Polnom) Obshchem Obrazovanii), or
	A diploma of vocational education that includes complete secondary education (for further details see the chapter on Vocational/Technical Education)
	AND
Examination requirement	Oral and written entrance examinations set by individual institutions for entry into different specialisations or areas of study. The typical number of exams is three to five.

Additional Admission Considerations

- For full-time study the age limit of 35 years was typically enforced. There was no age limit for part-time, evening and correspondence studies.
- Institutions typically reduced the number of examinations for certain categories of applicants. For example:
 - individuals who had been awarded a medal (at the completion of school education) or a diploma with honors/distinction (at the completion of vocational education) or some other awards,
 - graduates of specialized schools.
- Students from certain regions (rural regions or certain republics) who intended to study in subject areas that would directly benefit the development of their regions, such as agriculture and pedagogy, might have been granted priority in admission.
- The former USSR supported students from developing countries. However, **foreign students** were expected to meet the same entrance requirements as Soviet nationals,

in particular, had completed school education and taken entrance exams. There was a compulsory pre-academic year for those who did not know Russian or/and for those with weak pre-university training.

Forms of Education

Different forms of education were offered in the former USSR: full-time, part-time (evening and correspondence programs), and so-called *externat* (a form of education that enabled individuals to study independently and to take examinations). A limited number of specialisations (medicine, arts, and some technical disciplines) could only be completed through full-time study.

Unlike in western countries, a large number of students in the former USSR enrolled in evening and correspondence programs. Out of 5,147,000 students in 1985-86, 54% were enrolled on a full-time basis, 12% studied in the evening, and 34% registered through correspondence. Part-time students followed the same curricula and received diplomas of the same format as full-time students.

Academic Year

Applications for admission were generally accepted in June. Entrance examinations were held in July and August. Registration for enrollment took place at the end of August.

The academic year ran from September to June and was divided into two semesters, September to January and February to June. Student contact hours throughout the year amounted to 34 to 40 hours a week, including lectures, seminars, and labs. At least 20% of time was assigned to practical exercises and laboratory work in technical and science curricula. Independent work and background reading occupied a less significant amount of time than in western countries.

Each semester culminated in a final exam session, which included oral and written exams in about five core subjects. Other courses taken in the term were marked pass/fail on the basis of oral exams. The final mark "fail" was very rare as students were allowed to repeat a failed exam up to two times. Students who failed more than two courses were required to withdraw from their program.

Language of Instruction

Russian was overwhelmingly the language of instruction throughout the former USSR.

Curriculum Standards

Under the Soviet system, the central control by the state resulted in a high degree of uniformity in course and program contents. Higher education programs followed highly specialized curricula that provided theoretical and practical fundamentals for their

fields of specialization. Based on specialty groupings, specializations were numbered and provided by the State Committee for Public Education.

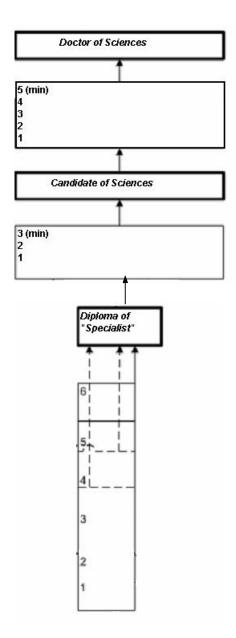
Students chose their fields of specialization before their entrance to an institution of higher education. The first two years of undergraduate study were devoted to the study of foundation courses, mainly in social and natural sciences. Specialization courses generally began in the third year. Foundation studies and core subjects typically represented 50% of a program, general profile courses 35%, and specialization courses 15%.

Pure theoretical sciences, such as Mathematics and Physics, were highly emphasized in Soviet education. Even students specializing in humanities took compulsory courses in these areas. Compulsory courses in all specializations also included foreign language studies, the history of the Communist Party, Marxist-Leninist philosophy, military training, and civil defense.

Education Structure and Credentials

The Soviet system of higher education consisted of two distinct phases. The first phase was typically five years in length and resulted in the Diploma of "Specialist". The second phase included two levels: Candidate of Sciences and Doctor of Sciences.





A summary of the credentials of higher education in the former USSR is presented in the following table.

Table 30. Higher Education Credentials in the Former USSR

Credential	Typical Length	Primary	Admission	Access to	Thesis	Sample
Creuentiai	of Full-time Study	Orientation	Requirements	Access to	Comp- letion	Document in Appendix 2
Diploma of "Specialist" (Диплом Специалиста, Diplom Spetzialista)	5 to 6 years (4 for some teaching qualifications)	Academic/ Professional	Completion of school education and entrance exams	Candidate of Sciences program or Employment	3-4 months	A, B, C
Candidate of Sciences (Кандидат наук, <i>Kandidat Nauk</i>)	Minimum 3 years including research and optional coursework	Advanced Academic Research	Diploma of "Specialist", entrance exams, and research qualifications	Doctor of Sciences program and Associate Professor position	At least 2.5 years	D
Doctor of Sciences (Доктор наук, <i>Doktor</i> <i>Nauk</i>)	5 to 15 years	Advanced Academic Research	Candidate of Sciences, academic position, and research qualifications	Full-Professor position	5 to 15 years	M

Undergraduate Education xix:

Diploma of "Specialist" (Диплом Специалиста, *Diplom Spetzialista*), or First Diploma (Первый Диплом, *Pervyj Diplom*)

The first degree of higher education in the former USSR was commonly referred to as the First Diploma or the Diploma of "Specialist". The credential itself, however, did not use these terms. It was normally entitled Diploma of Completion of Higher Education (Диплом об окончании высшего учебного заведения, *Diplom ob okonchanii vysshego uchebnogo zavedeniya*) or just "Diploma" (Диплом, *Diplom*). A specialisation appeared in the diploma as a professional title such as Engineer, Teacher, etc.

The Diploma of "Specialist" required five years of full-time study for most majors. Only a small number of programs required four years of study, such as some teaching qualifications. Programs in architecture required five-and-a-half years of study. The program in medicine required six years; in addition students undertook one year of specialisation practice (the *internatura*) in a selected field of medicine. Other disciplines, such as geology and certain branches of engineering, technology, and fine arts also required six years of study. A typical Diploma of "Specialist" program represented 4,500 to 5,500 hours of instruction in approximately 20 to 34 subjects depending on the specialisation.

State Final Examination

The State Final Examination stage consisted of the state final examinations and defence of a final research project. The final research project was expected to be of independent research or scholarship. It was defended before the State Examination Commission. The chairman of the commission was appointed by the State Committee for Public Education on the recommendation of the rector of the institution. Members of the Commission were appointed by the rector and included faculty and industry representatives. Additionally, the State Examination Commission examined each student in the field of specialisation.

Graduate Education:

Graduate education could be obtained at institutions of higher education (research institutes, academies, universities, etc.).

A study program leading to the Candidate of Sciences was called *aspirantura*, and a student pursing such a degree - *aspirant*. A study program leading to the Doctor of Sciences was called *doktorantura*, and a student pursing such a degree - *doktorant*. The Candidate of Sciences and Doctor of Sciences may have been undertaken either full-time or part-time. They could also be awarded following independent study.

Both graduate degrees were traditionally awarded by the Supreme Certifying Commission (Высшая Аттестационная Комиссия/ВАК, Vysshaya Attestatsionnaya Comissiya/VAK) under the auspicies of the Council of Ministers of the USSR.

Candidate of Sciences (Кандидат наук, Kandidat Nauk)

The Candidate of Sciences was the first graduate degree in the former USSR. It was awarded across a broad range of academic disciplines. The discipline might be stated in the title, for example the Candidate of Economic Sciences.

Students were admitted to the Candidate of Sciences after completing the first diploma, or the Diploma of "Specialist", with an overall grade of 'excellent' or 'good'. They must have also passed qualifying examinations, in their proposed field of specialisation, in a foreign language, and in philosophy.

Students undertook supervised research and prepared a thesis during at least three years. Coursework was voluntary but common. The thesis was critically reviewed by at least two official reviewers (opponents). It was typically about 150 pages in length. An extended abstract of the thesis was sent out to approximately 100 other institutions for review. The thesis was publicly defended before the Dissertation Council of the institution. (For more information, consult the subsection on the Candidate of Sciences in the Russian Federation.)

Doctor of Sciences (Доктор наук, Doktor Nauk)

The Doctor of Sciences was the highest academic credential in the former USSR. Highly research oriented, it was obtained by senior scholars. The primarily objective of the *doktorantura* was to develop a publication track record and facilitate faculty promotion. The Doctor of Science entitled its holder to obtain the position of a full Professor or department head at an institution of higher education. The Doctor of Sciences is determined by a secret ballot by peers and approved by the Supreme Certifying Commission (VAK).

To be eligible for admission, a candidate must have held the Candidate of Sciences, met research requirements, and been under 40 years of age. The Doctor of Sciences required the submission of another thesis after the Candidate of Sciences. The Doctor of Sciences thesis must have represented a piece of original research with results of fundamental scientific or applied significance. Publication of 10 to 20 scientific papers was required.

Although extremely rarely, the Doctor of Sciences could have been awarded immediately after the Candidate of Sciences if the research was of appropriately high standard. (For more information on the Doctor of Sciences, consult the subsection on the Doctor of Sciences in the Russian Federation.)

Sample Programs

Sample "Specialist" programs in Medicine, Civil Engineering, and Architecture are presented in the tables below. 11

¹¹ The number of hours and the subjects varied by institution. The state examinations for specialisations were the same across different institutions.

Table 31. Six-Year "Specialist" Program in Medicine (Specialization number 1901, Therapist), Moscow Medical Academy, 1991**

Subject	Lecture	Lab/Practice/ Seminar	Total
History of the Communist Party of the USSR	60	60	120
Marxist-Leninist Philosophy	80	60	140
Principles of Scientific Atheism	18	6	24
Political Economy	50	50	100
Scientific Communism	40	40	80
Special Training	68	186	254
Civil Defense	20	30	50
Physical Education, including Medical Gymnastics & Medical Control	11	174	190
Latin & Medical Terminology		72	72
Foreign Language		350	350
Medical Biology & Genetics	28	120	148
Medical & Biological Physics, with Information			
Science & Medical Equipment	36	132	168
General & Bio-Organic Chemistry	48	140	188
Biochemistry	46	144	190
Human Anatomy	54	222	276
Histology, Embryology & Cytology	34	134	168
Normal Physiology	50	186	236
Microbiology, with Virology & Immunology	38	146	184
Pharmacology	36	130	166
Clinical Pharmacology	4	52	56
Pathological Anatomy, with Dissection	38	148	186
Pathological Physiology	38	128	166
General Hygiene, with Ecology	36	94	130
Social Hygiene & Organization of Health Services	56	96	152
General Patient Care (Therapy)		40	40
Introduction to Internal Diseases	36	168	204
Internal Disease & General Physical Therapy	76	256	332
Endocrinology	18	38	56
Tuberculosis	18	78	96
Polyclinic Training	18	52	70
Occupational Diseases	8	30	38
Roentgenology & Radiation Medicine	18	58	76
General Patient Care (Surgery)		32	32
General Surgery & Anesthesiology	46	120	166
Reanimation & Intensive Therapy	4	34	38
Operative Surgery & Topographical Anatomy	18	112	130

Surgical Diseases	70	210	280
Urology	8	30	38
Stomatology	8	30	38
Traumatology & Orthopedics	40	94	134
Oncology	12	50	62
Infectious Diseases & Epidemiology	42	120	162
Dermatology & Venereal Diseases	26	70	96
Neurology, Neurosurgery & Medical Genetics	38	112	150
Psychiatry	26	66	92
General & Medical Psychology	4	32	36
Otorhinolaryngology	18	56	74
Pulmonology	18	56	74
Forensic Medicine	16	70	86
Soviet Law	30	18	48
Obstetrics & Gynecology	50	182	232
Pediatrics	36	130	166
Pediatric Surgery	8	58	66
Subtotal number of hours			6,906
Specialisation:			
Internal Diseases	70	1,106	1,176
Surgical Diseases	70	1,106	1,176
Obstetrics & Gynecology	70	1,106	1,176
Total Hours			8,082

State Examinations were required at the end of second, fifth, and sixth years as follows:

Second year:

Human Anatomy

Normal Physiology

Histology

Biochemistry

Fifth Year:

Internal Diseases

Surgical Diseases

Obstetrics & Gynecology

Sixth Year:

Specialization

Marxism-Leninism

Social Hygiene & Organization of Health Services

In medicine, there were four major types of "Specialist" programs: the therapist (primary-care physician), the hygienist (sanitarian-epidemiologist-hygienist), the pediatrician (children's primary care physician), and the

stomatologist (dentist). The Diploma of "Specialist" listed the title of physician (врач, vrach).

Table 32. Five-Year "Specialist" Program in Civil Engineering (Specialization Number 2903), Patrice Lumumba People's University, 1991^{xxi}

Subject	Lecture	Lab/Practice/ Seminar	Total
History of Soviet Society	51	51	102
Philosophy	68	68	136
Philosophical & Methodological			
Problems in Science & Technology	17	17	34
Political Economy	76	62	138
Scientific Communism	45	31	76
Foreign Language		464	464
Physical Education		136	136
Introduction to Specialization	34		34
Higher Mathematics	221	238	459
Chemistry	34	68	102
Physics	136	136	272
Theoretical Mechanics	85	102	187
Descriptive Geometry & Drafting	34	170	204
Engineering Geodesy	51	51	102
Construction Materials	51	51	102
Metals & Welding Technology	51	17	68
Strength of Materials	119	85	204
Hydraulics & Hydraulic Machines	68	68	136
Electrical Technology & Electronics	68	51	119
Principles of Civil Construction	62	62	124
Principles of Hydro-Technical Construction	62	62	124
Water Supply & Sewerage	34	17	51
Heat, Air Conditioning & Climate Control	48	31	79
Construction Mechanics	127	79	206
Soil Mechanics	65	31	96
Reinforced Concrete & Concrete Structures	90	76	166
Metal Structures	62	31	93
Construction Machines	45	45	90
Reconstruction of Civil & Industrial Buildings	34		34
Highways	65	48	113
Land Reclamation	62	48	110
Computer Science & Programming	31	65	96
Work Safety	45	31	76

Branch Economics	42	14	56
Engineering Geology	51	34	85
Management Automation Systems	17	34	51
Principles of Soviet Law		34	34
Courses in Specialization	353	353	706
Total Hours			5,465

Diploma Project: 14 weeks

State Examinations: Philosophy, Specialization

Table 33. Five-and-A-Half Year "Specialist" Program in Architecture (Specialization Number 2901), Moscow Architectural Institute, 1991***

Subject	Lecture	Lab/Independ ent Work	Total
		ent work	
History CPSU	182	122	304
Philosophy	78	62	140
Aesthetics	62	46	108
Economics	120	120	240
Communism	32	44	76
Soviet Law	30	14	44
World Culture	24		24
Foreign Language	124	156	280
Higher Mathematics	32	28	60
Building Mechanics	142	130	272
Planning Technique	90	52	142
Architectural Materials	90	46	136
Architectural Construction	120	115	235
Construction Site Technology/Safety	62	46	108
Construction Economics	62	46	108
Construction Organization	40	30	70
Geodesy	32	14	46
Site Preparation	62	42	104
Building Engineering Equipment	62	42	104
Building Physics	116	100	216
Descriptive Geometry	130	94	224
Drawing	380	180	560
Painting	136	40	176
Sculpture	85	40	125
Art History	82	48	130

History of Architecture	60	48	108
Russian Architecture	64	34	98
Urban History	60	48	108
Soviet Architecture	30	24	54
Foreign Architecture	20	20	40
Problems of Architecture & Urban Planning	30	20	50
Introduction to the Profession	32	22	54
Architectural Typology of Buildings	30	20	50
Theory of Urban Planning	30	14	44
Ecological Issues	30	14	44
Volume/Distance Planning	124	146	270
Basics of Architecture Planning	380	420	800
Architectural Planning	490	554	1,044
Civil Defense	52	26	78
Disciplinary Specialized Courses (Residential Architecture):			
Sociology of Residential Buildings	12		12
Theory of Architectural Composition	30	21	51
Special Course on Construction & Engineering Equipment	70		70
Rural Building Projects	12		12
Practical Work		29	29
Course Project		284	284
Total Hours			7,332
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Table 34. Five-Year "Specialist" Program in Literary Studies (Specialization Number 0216), A.M. Gorkij Literary Institute, 1991***

Subject	Lecture	Lab/Practice/	Total
		Seminar	
History of the Communist Party of the USSR	56	64	120
Analytical Problems in the History of the Communist	50		50
Party of the USSR			
Marxist-Leninist Philosophy	60	80	140
Political Economy	58	82	140
Scientific Communism	30	38	68
History of the USSR	70		70
World History	70		70
History of Philosophy	70		70
Marxist-Leninist Aesthetics	70		70
Principles of Scientific Atheism (changed to History of Religion)	34		34

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Soviet Law	36		36
Foreign Languages		490	490
Introduction to Literary Studies	58	12	70
Oral Folk Art	28	6	34
History of Russian Literature	258	48	306
History of Soviet Literature	140		140
Seminar in Contemporary Soviet Literature		300	300
History of Foreign Literature	280		280
Introduction to Linguistics	36		36
Contemporary Russian	100	100	200
Orthography and Punctuation Practice		70	70
History of Russian Literary Language	48	22	70
Russian Stylistics	70	70	140
Editing Theory and Practice	32	18	50
Studies in Literary Crafts (Poetry, Prose, Drama.		450	450
Literary Criticism, Translation)			
Courses in Specialization	360	120	480
Civil Defense	30	6	36
Physical Education		140	140
Diploma Project			variable
Total Hours			4,160

State Examinations:

Marxism-Leninism History of Russian and Soviet Literature

Grading System

The grading system in higher education in the former USSR was the same as at the other levels of education. Additionally, some courses were marked <code>3auem</code> (zachet), which is usually translated as pass or credit. No more than five set examinations were typically graded each semester. The remaining courses of the term were marked <code>3auem</code> (zachet), if passed. Students could continue their programs and graduate only if they passed each subject of the curriculum. They could retake a failed exam at most two times.

Table 35. Grading Scale in Higher Education in the Former USSR

Scale	Description	
5	Excellent (Отлично, Otlichno)	
4	Good (Хорошо, Horosho)	
2	Satisfactory (Удовлетворительно,	
3	Udovletvoritel'no)	
2	Fail (Неудовлетворительно,	
2	Neudovletvoritel'no)	
Zachet	Pass (Зачет, Zachet)	
Nezachet	Fail (Незачет, Nezachet)	

Higher Education in the Russian Federation

Reforms in Higher Education

Since the early 1990's the system of higher education in the Russian Federation has undergone major reforms. The reforms were based on the 1992 Law of Education and 1996 amendments and changes to the Law on Education passed as the Law on Higher Education and Graduate Education.

As institutions moved toward administrative and financial autonomy, a new accreditation system was developed to make it possible for institutions to disengage from centralized authority and control. Further, the 1992 Law on Education provided for the establishment of private higher education institutions. By 2005 there were 631 licensed private institutions of which about 75% were accredited. In addition, public higher education institutions now admit a significant number of tuition-paying students.

The higher education sector has witnessed a rapid growth. In 1990 there were about 900 higher education institutions. In 2005 there were 1304 higher education institutions. The number of students enrolled in higher education has increased dramatically as well: 2.6 million in 1993, 3.7 million in 1999/2000, 5.9 million students in 2002-2003.

As part of the integration of the Russian Federation into the Bologna process a new degree structure was adopted. From 1992/93 the Russian Federation has implemented a new credential structure of Intermediate Diploma, Bachelor's and Master's degrees. The longer traditional first degree of Diploma of "Specialist" continues to be widely offered in parallel to the Bachelor's and Master's degrees. In 2004, 92.4% of undergraduate students were enrolled in Diploma of "Specialist" programs compared to 7.2% in Bachelor programs.

A new examination at the end of Grade 11, known as the Unified State Examination, has been progressively implemented since 2001. It is used to evaluate secondary school outcomes, and as a standardized national entry examination to higher education institutions. Proponents expect the USE to improve the transparency and equity of the higher education admission process, and to reduce corruption and bribery.

Recent years have also witnessed changes in the priorities of specialisations. The numbers of students in the fields of economics, management, law, foreign languages, sociology, and psychology have considerably increased. At the same time, in the fields of engineering and technology the numbers have declined. This is in contrast to the 1980's, when the portion of students in the latter fields steadily exceeded 40 percent of the total number of students.

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¹² One of the goals of the Bologna process is to make academic degree and quality assurance standards more comparable throughout Europe. The Bologna declaration was signed by ministers of education from 29 European countries in the Italian city of Bologna in 1999.

New specialisations have been designed especially in the humanities and the socio-economic sciences. Higher education institutions now offer educational programs in cultural studies, theology, political science, management, commerce, public relations, accounting, state and municipal management, marketing, and in many other fields. Some of these programs are based on revisions of specialisations that existed in the former USSR, while others have been designed anew.

Courses in humanities and the socio-economic sciences have been included in programs in engineering and the natural sciences. Their volume has doubled and now constitutes more than 20 percent of contact hours. The teaching of sociology, political science, and cultural studies has been introduced. The study of philosophy, history, law, market economics, and other disciplines has been freed from ideology and brought nearer to the achievements of science. In the humanities and the socio-economic sciences, training in modern technologies has been strengthened. In particular, the study of the foundations of information technology (informatics) has been introduced.

Administration

Higher Education Institutions (HEIs) in the Russian Federation can be administered federally, locally, or privately. In 2003 there were 676 federal, 45 local, and 578 private HEIs.

Table 36. Higher Education Administration in the Russian Federation, 2006

Level of	Administration Administration in the Russian Federation, 2006 Administrative Body and Its Main Responsibilities		
Adminis- tration			
Federal	The Ministry of Education and Science of the Russian Federation (Министерство Образования и Науки, Ministerstvo Obrazovaniya i Nauki)		
	• Federal Higher Education Institutions may be administered directly by the Ministry of Education and Science. The Ministry of Education and Science is responsible for legislative regulation and the development of national policy for all levels of education, research, technology, and innovation. It controls and coordinates numerous subordinate agencies.		
	Federal Industry-Specific Ministries and Agencies		
	About half of federal HEIs operate under the auspices of various industry- specific Ministries and Agencies, such as the Ministry of Health Care, etc.		
Local	Regional and Municipal Administrations		
	Regional and municipal authorities have responsibility for the local development of education (curriculum development, textbooks, teaching methods, budgets, construction, and equipment). They also establish local HEIs.		
Private	Private Institutions		

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 Private HEIs may be set up by private bodies, local and foreign enterprises and organisations in accordance with the 1992 Law on Education. They are most prolific in the fields of Law, Management, Finance, and Humanities.

The federal Ministry of Education and Science has undergone several name changes:

- 1991 1996: Ministry of Education and State Committee for Higher Education of the Russian Federation
 - The Ministry of Education was in charge of the development and implementation of state policy in pre-school, general, and vocational education.
 - The State Committee for Higher Education was responsible for the development and implementation of state policy in higher education.
- 1996 1999: Ministry for General and Professional Education
- 1999 2004: Ministry of Education
- 2004-present: Ministry of Education and Science (commonly referred to as the Ministry of Education)

State Education Standard

The State Education Standard comprises the state-defined (federal) minimum curriculum requirements for different specialisations. It is developed by teaching and methodological associations and approved by the Ministry of Education of the Russian Federation. To be accredited, educational programs must comply with the State Education Standard, and research degrees with the requirements of the Russian Academy of Sciences. Institutions that do not have state accreditation do not have to comply with the Standard.

To oversee compliance with the standard, higher education institutions are governed by an Academic Council headed by a rector who is responsible for the direct administration of the institution. An Academic Council is comprised of academic staff. The term of office of an Academic Council is five years.

Quality Assurance/Accreditation

The 1992 Law on Education and 1996 Law on Higher and Graduate Education stipulate that quality assurance of higher education in the Russian Federation is implemented through licensing, attestation, and accreditation, as well as the State Education Standard. State (public) and non-state (private) institutions are subject to the same compliance criteria and processes. Campuses of an institution undergo these processes at the same time as the head institution.

It is important to note that **only accredited institutions may grant diplomas of the state format and only for their accredited programs.** Licensing and attestation are prerequisites for accreditation.

Table 37. Quality Assurance Stages in the Russian Federation

Quality Assurance	Description Description
Stages	
Licensing	Licensing permits an institution to engage in educational activities in specified specialisations at specified levels but not grant diplomas of the state format . An evaluation team considers whether the institution meets state requirements with respect to educational facilities, equipment, teaching staff, and teaching materials.
Attestation	The attestation is based on a self-evaluation and external examination by a central or regional agency. Attestation is a decision by the State Attestation Board that the institution complies with the State Educational Standard for higher education in terms of the level and quality of its graduates. Attestation alone does not give the right to grant diplomas of the state format.
Accredita- tion	Accreditation means permission to grant diplomas of the state format and apply a state seal. Accreditation involves both institutional and program accreditation based on a self-evaluation and peer review. The institution is evaluated against twelve criteria to determine whether the State Educational Standard is met. As of 2004, 79% of all institutions were accredited. However, not all of the programs of an accredited institution may be accredited. Non-accredited institutions issue their own non-state diplomas.

Accredited Institutions

A list of accredited institutions in Russia can be found at http://www.russianenic.ru/english/cred/index.html. 93 % of state institutions are accredited, whereas among non-state institutions only 60 % are accredited.

Types of Institutions of Higher Education

There are three major types of higher education institutions in the Russian Federation: universities, academies, and institutes. As was the case in the former USSR, the types of institutions are comparable in terms of the level of education.

Table 38. Types of Institutions of Higher Education in the Russian Federation

Institution	Description	Percent
Type	Description	of All Institu- tions in 2005
University	 A university is a large comprehensive institution that conducts fundamental and applied research and offers undergraduate and graduate programs in a wide range of disciplines. In the Russian Federation many institutions of other types (such as institutes) have changed their names to universities. There are now Pedagogical Universities (former Pedagogical Institutes), Medical Universities (former Medical Institutes), Agricultural Universities (former Agricultural Institutes), Technical Universities (former Polytechnic and Specialized Institutes), etc. They coexist with the classical universities of the Soviet era that offer programs of a wide range of Humanities and Sciences. 	27%
Academy	 An academy conducts fundamental and applied research and offers undergraduate and graduate programs in a single major area of science, technology, or culture. Many institutions of other types (such as institutes) have changed their names to academies. 	15%
Institute	 An institute may be an independent institution or a division of a university or academy with a more specialised focus. An institute offers undergraduate programs in one or more disciplines, and may offer graduate programs. They conduct fundamental and applied research in those disciplines and carry out professional development of specialists. 	57%
Other	• Some institutions of other types (such as <i>uchilische</i> and conservatory) have kept their names since the Soviet times. Consult the section on higher education in the former USSR for more information.	1%

In 2006, out of 1387 institutions of higher education, 378 were universities, 205 academies, and 804 institutes.

Students may **transfer** to other higher education institutions if they meet requirements of that institution.

Admission to University-Level Higher Education

Table 39. Higher Education Admission Requirements in the Russian Federation

Admission Requirement	Description		
Academic credential requirement	 A school or vocational education credential: Certificate of Completion of Secondary Education (Attestat o Srednem (Polnom) Obshchem Obrazovanii), or A diploma of vocational education that includes complete secondary education (for further details see the chapter on Vocational/Technical Education) 		
AND			
		Since the introduction of the USE in 2001	
	Oral and written entrance examinations set by individual institutions for entry into different specialisations or areas of study. The typical number of exams is three to five.	 Certificate of USE results And/or Oral and written entrance examinations as before (as set by the institution) 	

Unified State Examination (USE)

The Unified State Examination (Единьй государственный экзамен/ЕГЭ, *Edinyj* gosudarstvennyj ekzamen/EGE) has been implemented since 2001 as a standardised school graduation examination. Test takers receive the Certificate of USE Results (Свидетельство о результатах ЕГЭ, *Svidetel'stvo o Rezul'tatach EGE*).

Higher education institutions may use the USE results in place of, or in addition to, their own entrance examinations. With a Certificate of USE Results and an applicable school leaving credential, students can apply simultaneously to several institutions all over the country.

By 2004, 70% of the student cohort across 64 regions took the USE. There were 946 participating higher education institutions. The plan was to have 1,650 participating HEIs by 2005.

For more information on the USE please consult the chapter on School Education.

Additional Admission Considerations

- Admission for fee-paying students may not be as competitive as for students financed from the state budget.
- Institutions of higher education may reduce the number of examinations for certain categories of applicants. For example:
 - individuals who have been awarded a medal (at the completion of school education) or a diploma with honors/distinction (at the completion of vocational education) or some other awards,
 - graduates of specialized schools.
- **Foreign students** must meet the same entrance requirements as Russian nationals, in particular, have completed school education and taken entrance exams. There is a compulsory pre-academic year for those who do not know Russian or/and for those with weak pre-university training. Foreign applicants may not be older than 28 (35 for doctoral studies). In addition, they must have a valid Student visa and financial guarantees.
- Bribery to gain admission is a widespread problem in the Russian Federation, perhaps on a greater scale than in the former USSR, and more so at prestigious schools and programs. The adoption of the USE to replace the entrance exam requirement is hoped to help combat this problem.

Forms of Education

There are different forms of education: full-time, part-time (evening and correspondence programs), and so-called *externat* (a form of education that enables individuals to study independently and to take examinations). The State Education Standard specifies acceptable forms of education for each specialisation. The minimum content requirements set by the State Education Standard do not depend on the form of education.

Academic Year

Entrance examinations are traditionally held in August. The academic year runs from September to June. It is divided into two academic semesters with examinations held at the end of each. Examinations may be oral or written and number about five per semester. In contrast to other countries, in the Russian Federation 100% of the course grade is determined by the final examination grade in that subject. Other courses may be evaluated as pass/fail. In order to qualify for the final examination, students must also complete professional practice requirements.

The university level higher education curriculum stipulates 36 weeks of study a year. Depending on the field of study (specialisation), mandatory courses in the curriculum constitute 80 to 85 percent, optional courses 15 to 20 percent. The total workload of a student should not exceed 54 hours a week, including classroom work and

independent studies. For part-time evening education, classwork should be no less than 10 hours a week. In the case of correspondence education, students are offered at least 160 contact hours a year.

It is important to note that the system of higher education in the Russian Federation, as in the former USSR, emphasizes contact hours at the expense of homework and independent study. Therefore a direct conversion of instructional hours in the Russian Federation to semester hours (credits) in Western countries may be misleading.

One of the current initiatives of the Russian Ministry of Education in conjunction with the Bologna process is the introduction of credits. The European Credit Transfer System (ECTS) uses a standard system of 30 hours corresponding to one ECTS credit. It is envisioned that one academic year will comprise of approximately 60 credits.

Language of Instruction

The principal language of higher education in the Russian Federation is Russian. Higher education may be conducted in other languages of the Russian Federation, as well as foreign languages. The language of education is set by the appropriate administrative body.

State Final Examination

All state-accredited institutions follow the same state final examination procedure (государственная итоговая аттестация, gosudartvennaya itogovaya attestatziya). It includes state final examinations and a final research project. A state final examination may be in an individual subject or in an interdisciplinary subject area. The minimum number and content of the state final examinations are set in the State Education Standard.

Curriculum Standards

As in the former USSR, higher education programs in the Russian Federation are divided into study areas (направления, napravleniya), which are further subdivided into specialisations (специальности, spetsial'nosti). Similarly, all programs continue to be identified by a number and a name. xxvii Specialisations within the same study area may carry the same identification number but different names. The total number of specialisations has increased as traditional specialisations exist in parallel with new specialisations. New specialisations were added in study areas such business/management, law, sociology, computer science/informatics, languages, environmental science, etc.

Foundation studies, in the 1st and 2nd year of study, now integrate compulsory teaching in humanities and social sciences for natural science programs, and vice versa. Also in a shift from the Soviet system, some subjects, such as the history of the Communist Party of the USSR, scientific communism, and political economy, which were

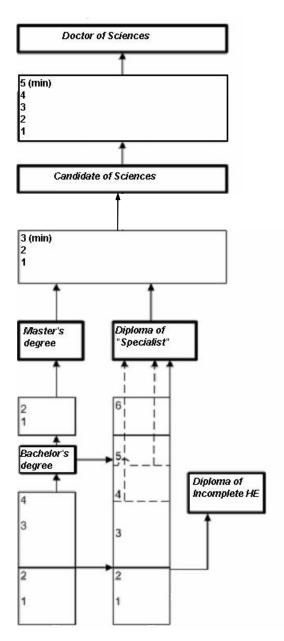
previously part of foundation studies within all specialisations, have been renamed, revised or eliminated. Despite a broader general character of studies in the first two years of study, many Bachelor and "Specialist" programs continue to represent a high degree of professional specialisation.

The division of the course content into foundation studies, basic professional courses and specialised courses are similar to that in the Soviet system of education. However, now institutions of higher education have some autonomy with regard to determining the course content. Institutions may define 15 to 20% of the curriculum based on regional requirements and specialisation. As well, in addition to compulsory courses, students may choose among a certain number of electives. In Bachelor and "Specialist" programs, the state-determined curriculum constitute most of the study hours. In Master programs, the state educational standard defines only general course requirements.

Education Structure and Credentials

In the Russian Federation the new Diploma of Incomplete Higher Education, Bachelor's and Master's degrees are offered in parallel with the traditional Diploma of "Specialist", the Doctor of Sciences, and the Candidate of Sciences.





A summary of the credentials of higher education in the Russian Federation is presented in the following table.

Table 40. Higher Education Credentials in the Russian Federation

Table 40. Higher Education Credentials in the Russian Federation							
Credential	Typical Length of Full-time Study	Primary Orientation	Admission Requirements	Access to	Thesis Comp- letion	Existed in the Former USSR	Sample Document in Appendix 2
Diploma of Incomplete Higher Education (Диплом о неполном высшем образовании, Diplom o Nepolnom Vysshem Obrazovanii), or Incomplete Diploma	2 years	Academic	Completion of school education and entrance exams	Bachelor or "Specialist" program or Employment	N/A	No	Е
Bachelor's degree (Бакалавр, Bakalavr)	4 years (2 years after Incomplete Diploma)	Academic	Same as above or Incomplete Diploma	Master or "Specialist" program or Employment	1.5-4 months	No	F,G
Diploma of "Specialist" (Диплом Специалиста, Diplom Spetzialista)	5 to 6 years (4 years in few specialisations) (1 to 1.5 years after a Bachelor, 3 years after Diploma of Incomplete Higher Education)	Academic/ Professional	Same as above or Bachelor's degree	Candidate of Sciences program or Employment	3-4 months	Yes	H,G

Credential	Typical Length of Full-time Study	Primary Orientation	Admission Requirements	Access to	Thesis Comp- letion	Existed in the Former USSR	Sample Document in Appendix 2
Master's degree (Магистр, <i>Magistr</i>)	2 years after a Bachelor's degree (1 to 1.5 years after a Diploma of "Specialist", not common)	Academic Research	Bachelor's degree or Diploma of "Specialist", entrance exams	Candidate of Sciences program or Employment	0.5-1 years	No	I,G
Candidate of Sciences (Кандидат наук, Kandidat Nauk)	Minimum 3 years after a "Specialist" or a Master's degree	Advanced Academic Research	Diploma of "Specialist" or Master's degree, entrance exams, and research qualifications	Doctor of Sciences program and Associate Professor position	At least 2.5 years	Yes	K
Doctor of Sciences (Доктор наук, <i>Doktor</i> <i>Nauk</i>)	5 to 15 years after a Candidate of Sciences	Advanced Academic Research	Candidate of Sciences, academic position, and research qualifications	Full- Professor position	5 to 15 years	Yes	L

Undergraduate Education xxviii:

Diploma of Incomplete Higher Education (Диплом о неполном высшем образовании, Diplom o Nepolnom Vysshem Obrazovanii)

The Diploma of Incomplete Higher Education is also known as Incomplete Diploma or Intermediate Diploma. This diploma is not considered a degree; it is only an intermediate qualification. It is issued at the student's request or to students who cease study part-way through a Bachelor or "Specialist" program. It may be issued after at least two years in a Bachelor or "Specialist" program and later be used for reentry into a relevant program. After the first two years of studies students would have usually covered the compulsory fundamental courses in a given study area.

The Diploma gives direct access to the labour market and facilitates mobility among education institutions and/or different specialisation programs. It often states that it gives the right to carry out the professional activity at the level it represents or to continue higher education.

Bachelor's degree (Бакалавр, Bakalavr)

The Bachelor's degree is the first degree in the Russian post-secondary system.

About 80% of the curriculum in a Bachelor program is based on State Educational Standards. Each Bachelor program contains a defined portion of fundamental education with courses taken from the humanities, the social sciences and economics, and the natural sciences. In senior years students receive specialized education and complete professional practicum. The Bachelor's degree is primarily an academic degree, and gives access to the Master's degree. It is considered to be less professionally oriented than the traditional Diploma of "Specialist", and may be less popular with some employers. It may be awarded in all disciplines except medicine and related disciplines such as veterinary medicine and dentistry.

The Bachelor program normally requires 25-30 contact hours per week. The program also includes a compulsory 10 to 12-week professional practicum in the area of specialisation.

The State final attestation includes the defense of a final research project and State final examinations. The final research project is prepared over a period of up to four months of full-time study and defended before a State Examination Commission. State final examinations may be in individual subjects or an interdisciplinary area.

The Supplement to the Diploma (Приложение κ Диплому, *Prilozhenie k Diplomu*) includes the list of subjects, number of hours, grades, professional practicum, and the results obtained in the final state examinations and in the defence of the final research project. The Supplement to the Diploma may also be translated as the Addendum to the Diploma.

Diploma of "Specialist" (Диплом Специалиста, Diplom Spetzialista) referred to informally since the Soviet era as the "First Diploma" (Первый диплом, Pervyj Diplom)

The traditional first degree from the Soviet system, the Diploma of "Specialist", continues to be offered in parallel with the new Bachelor's degree. The document is titled "Diploma" and does not state "Specialist" although it is commonly known as the Diploma of "Specialist". A specialisation appears in the document as "qualification" with a specialist title such as Economist, Teacher, Engineer, Doctor, etc. The "Specialist" is for students who choose to pursue advanced study in their specialisation. It is primarily oriented toward professional practice but also gives access to the Candidate of Sciences.

A "Specialist" program may be undertaken as a first degree following the completion of school education, or as a second undergraduate degree following a Bachelor's degree. As a first degree, it typically requires five years of full-time study although programs in different specialisations may vary from four to six years in length. Only a small number of programs require four years of study, such as pedagogy or finance. Medicine requires six years of study, as do some engineering and technology disciplines. Following a Bachelor's degree, the Diploma of "Specialist" normally requires one to one and a half years of full-time study.

The State final attestation for the Diploma of "Specialist" includes the defence of a final research project and State final examinations. The State final attestation procedures and the format of the Diploma and the supplement are the same as for the Bachelor's degree.

Foreign students who successfully complete a "Specialist" program receive a diploma format that is different from the typical Diploma of "Specialist". Foreign students are typically required to study Russian for at least one year prior to enrolling into a "Specialist" program. Their Diploma of "Specialist" is often translated as "Master".

Diploma of Professional Retraining (Диплом о профессиональной переподготовке, Diplom o Professionalnoi Perepodgotovke)

The Diploma of Professional Retraining is awarded to those who already have a higher education credential (a Diploma of "Specialist" or a Bachelor's degree) and who complete studies in another specialization. The Diploma is awarded with a professional title. Programs of professional retraining vary in length but are shorter than the regular degree programs (typically between six months and two years). The Diploma of Professional Retraining represents a type of the After Degree program.

Final Research Project Preparation in Undergraduate Programs

For the preparation of a final research project, a supervisor is appointed for each student. Students choose topics from a list of topics set by the institution or propose their own topics. The final research project is expected to be of independent research or

scholarship. Before the defense can take place, experts in the respective fields review the work.

A final research project is defended before an examination commission, called the State Attestation Commission, set up by the rector of the institution. The members of State Attestation Commission are professors and researchers from various institutions and experts from the industry. The chairperson is invited from outside the institution and is approved by the administrative body in charge of the institution.

Graduate Education:

Master's degree (Магистр, *Magistr*)

The Master's degree is obtained upon the completion of a minimum two years of study following a Bachelor 's degree or a minimum of one year following a Diploma of "Specialist".

For holders of a Bachelor's degree in the same field, admission procedures may consist of examinations, interviews, etc. as determined individually by educational institutions. Holders of a Bachelor's degree wishing to pursue a Master program in another discipline must pass additional tests that reflect the curriculum of the Bachelor program in the chosen discipline. Master's degrees give access to Candidate of Sciences study.

The Master is primarily an academic program leading to the defense of a thesis. Each Master program consists of two equally weighted components: the *course* component and the *independent research* component. In addition to core area courses it usually includes some pedagogy courses. Professional practice may also be required.

The final State attestation includes the defence of a thesis and State final examinations. The thesis is based on original research under the guidance of a supervisor. The document of a Master's degree indicates both the discipline and the research area and follows the general format of the document of a Bachelor's degree.

The State educational standard defines only general requirements for Master programs and not specific requirements for the content of education. Institutions of higher education make their own decisions regarding the program content.

Traditional Doctoral degrees: the Candidate of Sciences and the Doctor of Sciences

In the Russian Federation, the two traditional doctoral degrees of Candidate of Sciences and Doctor of Sciences continue to be offered. Only public fully-accredited higher education institutions and research institutes may award the doctoral degrees. They operate respectively under the general supervision of the Ministry of Education and Science, and the Russian Academy of Sciences.

A study program leading to the Candidate of Sciences is called *aspirantura*, and a student pursing such a degree - *aspirant*. A study program leading to the Doctor of Sciences is called *doktorantura*, and a student pursing such a degree - *doktorant*. The Candidate of Sciences and Doctor of Sciences may be undertaken either full-time or part-time. They can also be awarded following independent study.

The doctoral candidate publicly defends the doctoral thesis before a Dissertation Council established under the overall supervision of the Supreme Certifying Committee (*Vysshij Attestatsionnyj Komitet/VAK*) of the Russian Federation.

Candidate of Sciences (Кандидат наук, Kandidat Nauk)

The Candidate of Sciences is the first doctoral degree in the Russian educational system and is awarded in all disciplines. It is focused on research and university teaching.

Admission is competitive and institutions set quotas for the number of students admitted each year. The quotas are based on the available funds and facilities, research staff, as well as federal guidelines for the needs in science and economy. Institutions usually set an age limit of 35 years for full-time *aspirants* and 45 years for part-time *aspirants*.

Admission is based on a five or six-year Diploma of "Specialist", or since 1996, a Master's degree. The overall level of achievement required in these degrees is at least 'Good'. Application requirements include a research proposal, research and academic track record, and entrance examinations. Additionally, preliminary discussions of proposed research with prospective supervisor(s) are usually required. Applicants take competitive entrance examinations in the subject of specialization, in one foreign language, and in philosophy. Admission is awarded based on the results of the entrance examinations and evaluation by prospective supervisor(s).

A Doctor of Sciences, or a Professor, specializing in the research area is appointed as a supervisor for each *aspirant* as soon as he or she joins an *aspirantura*. Aspirants may be required or encouraged to teach in their subject areas, usually seminar classes. In that case they hold a position of an assistant (*assistent*). Full-time Candidate students receive a stipend from the state and any salary as an assistant.

Programs include both graduate courses and research. The theoretical coursework component of the program comprises 20%.

The courses consist of lectures and seminars. During graduate studies, students study pedagogy and teaching methods, psychology, economics, information technology, mathematical simulation, and other subjects.

In addition to course examinations, *aspirants* must pass qualifying (Candidate) examinations in the given specialization, in philosophy, and in a foreign language. The Academic Council of the institution determines the content of these exams. Qualifying examinations are usually completed within the first year of study.

The thesis is expected to make a significant original contribution to the field of knowledge. The thesis defence is public before a Dissertation Council. A Dissertation Council is comprised of holders of the Doctor of Sciences and the Candidate of Sciences degrees. Dissertation Councils are appointed by the Supreme Certifying Committee (*Vysshij Attestatsionnyj Komitet, VAK*) of the Russian Federation. **xxix**

The Candidate of Sciences is a preferred credential for the position of Associate Professor (*dotzent*). It grants its holder a competitive advantage in applying for teaching and research positions at educational and research institutions and leads to a higher salary.

The Candidate of Sciences awarded to foreign nationals may be translated as a PhD degree.

Doctor of Sciences (Доктор наук, Doktor Nauk)

The second level of doctoral studies and highest academic degree in the Russian Federation, as in the former USSR, is the degree of Doctor of Sciences. Similarly to the Candidate of Sciences, it is awarded in all disciplines. In architecture and fine arts, the degrees awarded are the Doctor of Architecture and the Doctor of Fine Arts, respectively. In technical sciences, the degree is called the Doctor of Technical Sciences.

It requires a period of study following the Candidate of Sciences and the writing of another doctoral thesis leading to a public defence. Although the program has no fixed duration, in practice it generally requires five to 15 years of full-time study. Doctoral theses are prepared either on a full-time basis during doctoral studies in *doktorantura* or independently, outside *doktorantura*.

Doctor of Sciences programs are offered at leading educational and research institutions. The qualifying requirements for a doctoral thesis are higher than those for a Candidate thesis. The thesis for the degree of Doctor of Sciences must be an advanced work that solves an important problem of social, scientific, or technological significance. It must also serve as a basis for several referred publications. Similarly to the Candidate of Sciences, the Doctor of Sciences is awarded by resolution of the Supreme Certifying Committee of the Russian Federation.

Admission to *doktorantura* is competitive and available to holders of Candidate of Sciences degrees known for their contributions in their respective fields. Candidates must hold teaching and/or research positions at recognized educational or research institutions. The standard age limit for *doktorantura* is 40 years. In some cases it may be 45 years. Outside of *doktorantura*, no age limit is applied to those seeking the Doctor of Sciences degree through independent research.

The main admission requirements are research achievements in a chosen area. Applicants must submit a complete outline for a thesis, a list of research publications, and reviews of the applicant's research. The Academic Council of the institution makes admission decisions and approves individual research programs.

Doctoral programs have no course component; they consist only of research. A research consultant, who must be a holder of the Doctor of Sciences degree, is appointed to advise a *doktorant*. As well, *doktorants* may visit other leading research centres in the country or abroad for their research. *Doktorants* present an annual progress report to the

Academic Council. The Academic Council monitors the progress against their individual programs and decides as to their continuation in *doktorantura*.

The *doktorant* submits the thesis to the Dissertation Council. The Dissertation Council for the Doctor of Sciences degree is designated by the Supreme Certifying Committee and consists of Doctors of Sciences. The general defence procedure for the degree of Doctor of Sciences is the same as for the Candidate of Sciences degree. The final decision for the award of a Doctor of Science degree is after the Supreme Certifying Committee.

The degree of Doctor of Sciences serves as a prerequisite for appointment to the post of a full Professor (Προφεςςορ, *Professor*) at a higher education institution.

Sample Programs

The State Education Standards (minimum curriculum requirements) for several sample programs are presented in the tables below.

Table 41. State Education Standard for the Bachelor of Technology in Metallurgy (Specialisation number 550500), 2000xxx

Study area and related subjects	Individual Subject Hours	Total Hours
Humanities and socio-economic area – total number of hours		1800
Mathematical and scientific area – total number of hours		2450
Math and computer science	860	
General scientific subjects	1100	
Physics		
Chemistry		
Basis of crystallography and mineralogy		
Physical chemistry		
Ecology		
Student electives (subjects are determined by the institutions)	490	
General introduction to the specialisation – total number of hours		1820
Exchange of heat and mass and heat technology of metallurgy	120	
Descriptive geometry and drawing	150	
Applied mechanics	200	
Electro technology and electronics	190	
Physical metal science	260	
Physics and chemistry of process and systems of metallurgy	100	
Physical- chemical methods of analysis	100	
Heat machinery and heat energetic of metallurgy	190	
Metrology, standardisation	70	
Safety	100	

Student electives (subjects are determined by the institutions)	340	
Specialisation including seminars and workshops		824
Additional subjects		450
Total hours for the theoretical course component		7344
Practical training and state final exams		40 weeks

Table 42. State Education Standard for the Bachelor of Economics (Specialisation number 521600), valid from 1997/98^{13 xxxi}

Study area and related subjects	Individual	Total
	Subject Hours	Hours
Humanities and socio-economic area – total number of hours	Hours	1690
Philosophy		
Foreign language	340	
Culture		
History		
Sport	408	
Law		
Sociology		
Politology		
Psychology and pedagogy		
Student electives (subjects are determined by the institutions)	324	
Mathematical and scientific area – total number of hours		1200
Math and computer science		
Modern scientific theories		
Student electives (subjects are determined by the institutions)	300	
General introduction to the specialisation – total number of hours		2900
Theory of economics	360	
Economic thinking throughout history		
History of economics		
Statistics		
Accounting		
Finance, money and credit		
Management		
Economics and sociology of labour		
World economy		
Marketing		
Strategic organisation		
Price formation		
Social and economic prognosis		
Tax systems		

 $^{^{13}}$ If the number of hours within a specific subject is not stated then the number of hours is determined individually by institutions.

Human recourse		
Incomes policies and salary		
Student electives (subjects are determined by the institutions)	1058	
Specialisation		806
Additional subjects		640
Total hours for the theoretical course component		7236
Practical training		12 weeks
Final State Examinations and Defence of Final Research Project		2 weeks

Table 43. State Education Standard for the "Specialist" of Engineering with Specialisation in Metallurgy of Black Metals (Specialisation number 110100), 2000****

Study area and related subjects	Individual Subject Hours	Total Hours
Humanities and socio-economic area – total number of hours		1802
Mathematical and scientific area - total number of hours		2380
Mathematics and computer science	920	
Mathematics	670	
Computer science	250	
Physics	400	
Inorganic chemistry	270	
Basis of crystallography and mineralogy	60	
Physical chemistry	250	
Ecology	200	
Student electives (subjects are determined by the institutions)	280	
General introduction to the specialisation -total number of hours		1850
Exchange of heat and mass and heat technology of metallurgy	250	
Descriptive geometry and drawing	150	
Applied mechanics	200	
Electro technology and electronics	190	
Physical metallurgy	260	
Coloured metals production	80	
Processing of metals under pressure	70	
Physical- chemical methods of analysis	100	
Metrology, standardisation and certification	70	
Safety	100	
Organisation and management	100	
Student electives (subjects are determined by the institutions)	280	
Specialised subjects within metallurgy – total number of hours		1630
Specialisation including seminars and workshops	530	
Additional subjects		600
Course total		8262
Practical training		12 weeks

Table 44. State Education Standard for the Master in Philology (Specialisation 520300), 2000xxxiii

Study area and related subjects	Individual Subject Hours	Total Hours
State determined curriculum		700
Modern problems of philology	300	
History and methodology of philology	300	
Computer technology in philology	100	
Subjects determined by region		434
Subjects determined by institution		300
Specialisation subjects		900
Scientific research activities		2034
Total hours (courses and research)		4368
Total theoretical course including scientific research activities, professional practicum and thesis		58 weeks
Practical training		20 weeks
Scientific research	14 weeks	
Pedagogical (scientific area)	6 weeks	
Examinations		6 weeks
Final state examinations		4 weeks
Total		88 weeks

In "Specialist" programs in medicine there are now nine areas of study. They can be studied not only at medical institutes but also at medical academies and regular universities.

Table 45. Areas of Study in "Specialist" Programs in Medicine in the Russian Federation, 2000

Area of Study	Area of Study	Years of Full	Specialist Title
Number		Time Study	
040100	Medicine	6	Physician
040200	Pediatrics	6	Physician
040300	Prophylactic medicine	6	Physician
040400	Dentistry	5	Physician
040500	Pharmacy	5	Pharmacist
040600	Nursing	4	Nursing Supervisor
040800	Medical biochemistry	6	Physician – Biochemical
040900	Medical biophysics	6	Physician – Biophysics
041000	Medical cybernetics	6	Physician- Cybernetics

Grading System

The grading system in higher education in the Russian Federation is the same as that in the former USSR. It includes the same grading scale as at the other levels of education. Additionally, some courses are marked <code>3avem</code> (zachet), which is usually translated as pass or credit. No more than five set examinations are typically graded each semester. The remaining courses of the term are marked <code>3avem</code> (zachet), if passed. Students can continue their programs and graduate only if they pass each subject of the curriculum. Students are only allowed to resit a failed exam two times.

Table 46. Grading Scale in Higher Education in the Russian Federation

Scale	Description
5	Excellent (Отлично, Otlichno)
4	Good (Хорошо, Horosho)
3	Satisfactory (Удовлетворительно, <i>Udovletvoritel'no</i>)
2	Fail (Неудовлетворительно, Neudovletvoritel'no)
Zachet	Pass (Зачет, Zachet)
Nezachet	Fail (Незачет, Nezachet)

TECHNICAL/VOCATIONAL EDUCATION

Technical/Vocational Education in the Former USSR¹⁴

Overview of Technical/Vocational Education in the Former USSR

Technical/vocational education in the former USSR was offered at two levels, lower vocational education and higher vocational education. The two distinct levels of vocational education led to different credentials, the Diploma of Lower Vocational Education and the Diploma of Higher Vocational Education respectively, as well as different qualification titles. The title of a qualified worker in a specific vocation was associated with lower vocational education. A professional title was associated with higher vocational education.

Table 47. Technical/Vocational Education in the Former USSR

Technical/Vocational	Credential Name	Title on the	Number	Number
Education Level		Diploma	of	of
			Schools	Students
			in 1989	in 1989
Lower Vocational	Diploma of Lower	Qualified	5,900	2.5
Education	Vocational Education	worker (in a		million
(начальное	(Диплом об	specific		
профессиональное	окончании	occupation)		
образование, nachal'noe	профтехучилища,			
professional'noe	Diplom ob okonchanii			
obrazovanie)	proftehuchilishcha)			
Higher Vocational	Diploma of Higher	Professional	4,500	4.2
Education	Vocational Education	title (nurse,		million
(среднее	(Диплом об	teacher, etc.)		
профессиональное	окончании среднего			
образование, srednee	специального			
professional'noe	образования, Diplom			
obrazovanie)	ob okonchanii srednego			
	spetzial'nogo			
	obrazovaniya)			

The majority of teachers at both levels of vocational education possessed university qualifications in respective fields.

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¹⁴ For information on the grading scale, language of instruction, administration, quality assurance, etc. see the chapter on Higher Education.

Lower Vocational Education in the Former USSR

Lower vocational education in the former USSR was aimed at the training of skilled workers. Programs varied according to the type of institution, the entry level (after lower secondary or upper secondary education), and the occupation for which training was provided. The type of educational institution and the entry mode determined the duration and level of the program.

Lower vocational education was usually obtained on the basis of lower secondary education. But for few occupations training was offered only after completion of upper secondary education.

Types of Institutions Offering Lower Vocational Education in the Former USSR

Most lower vocational programs in the former USSR were offered by the following types of institutions:

- 1.) Professional Technical *Uchilishche* (PTUs) and
- 2.) Secondary Professional Technical *Uchilishche* (SPTUs).

The main distinction between PTUs and SPTUs was that PTUs did not offer complete secondary education.

1.) Professional Technical *Uchilishche* PTU (Профессионально-Техническое Училище ПТУ, *Professional'noe Tehnicheskoe Uchilishche PTU*), may also have been called Professional *Uchilishche* PU (Профессиональное Училище ПУ, *Professional'noe Uchilishche PU*)

PTUs were developed post World War II to train skilled workers in a wide variety of trades. For example, they trained technical personnel in carpentry, cookery, hairdressing, industrial and technical drawing, lathe operation, metalwork, machining, motor vehicle mechanics, plumbing, radio electronics, secretarial studies, sewing machine operation, welding, etc.

PTUs offered very narrow and practically oriented instruction, about 80% of which was practical and the remaining 20% theoretical. Work experience was an integral part of all programs.

PTUs did not offer complete secondary education. Individuals who entered after lower secondary education followed different curricula than those after upper secondary education. Students without upper secondary education were offered some basic courses from the upper secondary curriculum and additional courses in Soviet society and military training. Students with upper secondary education received a more advanced understanding of their craft.

2.) Secondary Professional Technical *Uchilishche* SPTU (Среднее Профессионально-Техническое Училище СПТУ, *Srednee Professional'noe Tehnicheskoe Uchilishche SPTU*)

SPTUs developed from PTUs in the early 1970s as many PTUs started to incorporate complete upper secondary education in their vocational programs. Upper secondary education by SPTUs was considered to be fully equivalent to that at general secondary schools. They offered vocational education in a wide range of trades, similar to PTUs.

Programs incorporating upper secondary education usually lasted three years. Upper secondary courses were distributed throughout the duration of the program. Student took examinations in upper secondary subjects at the end of their second and third years. The exams were similar to those in general secondary schools. Only those students who completed the full three-year program obtained an equivalent of complete upper secondary education.

Diploma of Lower Vocational Education in the Former USSR

The Diploma of Lower Vocational Education (Диплом об окончании профтехучилища, *Diplom ob okonchanii proftehuchilishcha*) was generally referred to as the Diploma of "Skilled Worker". The *Diplom* stated that the occupational qualification was awarded by decision of the State Examination Commission (also called the State Attestation or Qualification Commission). It listed the institution attended and the dates the program started and ended. If the program combined upper secondary and vocational education, the diploma attested that the person had "gained complete secondary education".

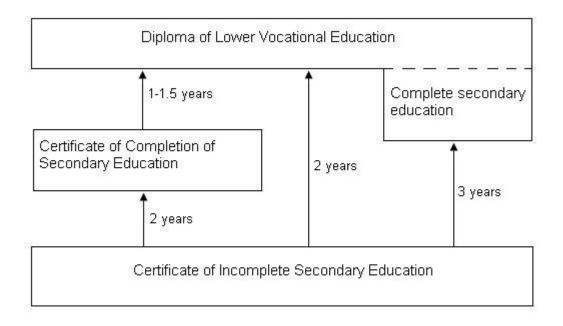
The Diploma usually also referred to a numeric category (категория, *kategoriya*) or, equivalently, level/grade (разряд, *razryad*) that was assigned to each specialization. This identified the level of vocational skill and pay grade.

The Diploma awarded in the former Russian Soviet Federative Socialist Republic (RSFSR) was in Russian. The Diploma awarded in any other former Soviet Socialist Republic was bilingual – in Russian and the local language of that Republic.

Table 48. Lower Vocational Education in the Former USSR

A 1 · ·								
Admission	Incorporates	Duration	Institution	Access to	Credential			
Requirements	Complete		Type					
_	Secondary							
	Education							
Certificate of	No	2 years	PTU	Employment	Diploma of Lower			
Incomplete					Vocational			
Secondary	Yes	3 years	SPTU	Employment	Education			
Education				or higher	(Diploma of "Skilled			
(typically				education	Worker", e.g.			
without entrance					Mechanic, Cook,			
exams)					etc.)			
Certificate of	N/A	1-1.5 years	PTU,	Employment				
Completion of			SPTU					
Secondary								
Education								
(typically								
without entrance								
exams)								

Figure 6. Lower Vocational Education Structure in the Former USSR



Higher Vocational Education in the Former USSR

The objective of higher vocational education was to train mid-level professionals such as pre-school/primary teachers, nurses, etc. Most higher vocational students - 66.7% in 1989 - were enrolled full-time, 6.6% in evening programs, and 26.6% in correspondence programs. Correspondence study generally required an additional year of study compared to the other forms of education.

Types of Institutions Offering Higher Vocational Education in the Former USSR

Institutions of higher vocational education in the former USSR were known as Specialised Secondary Education Institutions (Средние специальные учебные заведения ССУЗ, *Srednie spetzial'nye uchebnye zavedeniya/SSUZ*). They fell into three main categories:

- 1.) tehnikum,
- 2.) uchilishche, and
- 3.) college (since 1989).
- 1.) The *tehnikum* (техникум) was for technical and business fields.
- 2.) The *uchilishche* (училище) offered programs for a range of skilled non-technical occupations, such as preschool and primary school teaching, nursing, etc. 15
- 3.) The *college* (колледж, *kolledzh*) emerged in 1989. *Colleges* were created to educate highly trained specialists for the type of work previously entrusted to university-level graduates. As of 1990, 12 *tehnikum* were upgraded to *colleges*. (For more information on *colleges*, see the section on Higher Vocational Education in the Russian Federation.)

Admission to *SSUZ* was by entrance examinations that tested the knowledge of the curriculum of lower secondary or upper secondary education, depending on the mode of entry. Entry into a *college* was the most competitive out of all the types of *SSUZ*.

Diploma of Higher Vocational Education in the Former USSR

Students who successfully completed their course at a SSUZ were awarded the **Diploma of Higher Vocational Education** (Диплом об окончании среднего специального образования, Diplom ob okonchanii srednego spetzial'nogo obrazovaniya, also Диплом о среднем специальном образовании, Diplom o srednem spetsialnom obrazavanii). This credential was also known as the Diploma of Technician,

¹⁵ Some *uchilishche* are institutions of higher education. See the Chapter on Higher Educaton.

Diploma of Nurse, Diploma of Feldscher, etc. The Diploma was awarded by the Examination Commission, which was also referred to as the Attestation or Qualification Commission

Diplomas awarded in the former Russian Soviet Federative Socialist Republic (RSFSR) were in Russian. Diplomas awarded in another former Soviet Socialist Republic were bilingual – in Russian and the local language of that Republic.

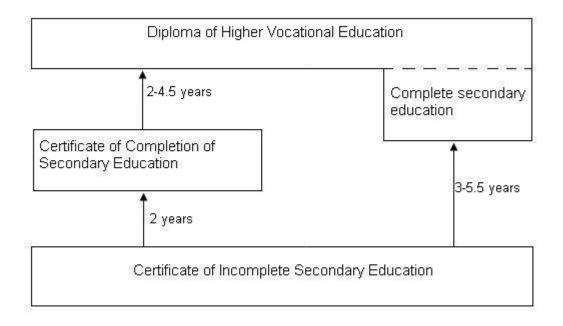
Holders of the Diploma of Higher Vocational Education completed upper secondary education, either prior or during their study at a *SSUZ*. If upper secondary education was obtained at a *SSUZ* the Diploma may not have always attested to that. But the Supplement to the Diploma included upper secondary courses and the duration of the program was appropriately longer. *SSUZ* graduates could continue their education at a higher educational institution, but the majority entered the workforce.

In addition to the type of the Diploma issued by the *tehnikum* and *uchilishche*, the *college* may have also awarded the Diploma with the title of "Junior Engineer" (Младший инженер, *Mladshij inzhener*). The Diploma of "Junior Engineer" required an additional 1.5 years. *College* graduates with this credential may have been granted advanced standing at the third year of appropriate higher education programs.

Table 49. Higher Vocational Education in the Former USSR

Admission Requirements	Incorporates Complete Secondary Education	Duration	Institution Type	Access to	Credential
Certificate of Incomplete Secondary Education and entrance exams	Yes	3-5.5 years: 3-5 years, typically 4 years 4 to 5.5 years	Tehnikum/ Uchilishche	Employment or higher education	Diploma of Higher Vocational Education (Diploma of Technician, Diploma of
Certificate of Completion of Secondary Education and entrance exams	N/A	2-4.5 years: 2-3 years, typically 2 years 3 to 4.5 years	Tehnikum/ Uchilishche College	Employment	Nurse, Diploma of Feldscher, etc.)

Figure 7. Higher Vocational Education Structure in the Former USSR



Technical/Vocational Education in the Russian Federation¹⁶

Overview of Technical/Vocational Education in the Russian Federation

Technical/vocational education in the Russian Federation, as in the former USSR, is offered at two levels, lower vocational education and higher vocational education. XXXIV In the Russian Federation, there have appeared new types of institutions of vocational education - the professional lyceum (an institution of lower vocational education) and the college (an institution of higher vocational education).

Table 50. Technical/Vocational Education in the Russian Federation

Technical/Vocational	Credential Name	Title on the	Number	Number
Education Level		Diploma	of Schools	of Students
			in 2002	in 2002
Lower Vocational	Diploma of Lower	Qualified	3,900	1.6
Education	Vocational Education	worker (in a		million
(Начальное	(Диплом о начальном	specific		
профессиональное	профессиональном	occupation)		
образование, nachal'noe	образовании, Diplom o			
professional'noe	nachal'nom			
obrazovanie)	professional'nom			
	obrazovanii)			
Higher Vocational	Diploma of Higher	Professional	2,600	2.5
Education	Vocational Education	title (nurse,		million
(среднее	(Диплом о среднем	teacher, etc.)		
профессиональное	профессиональном			
образование, srednee	образовании, Diplom o			
professional'noe	srednem			
obrazovanie)	professional'nom			
	obrazovanii)			

Technical/vocational schools may be state (public) or non-state (private) institutions. Fifty five percent of public institutions have federal status, 44% regional and 1% municipal. Most teachers (97%) possess university qualifications. The remaining 3% of teachers are teachers of practical subjects with much vocational experience.

In 2002, higher vocational professionals made up 31% of the work force in Russia. Technical and economic programs are the most popular and attract more than 70% of all higher vocational students.

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¹⁶ For information on the grading scale, language of instruction, administration, quality assurance, etc. see the chapter on Higher Education.

Lower Vocational Education in the Russian Federation

The aim of lower vocational education is to train skilled workers. Students are usually admitted on the basis of lower secondary education. Vocational training for certain occupations may require completion of upper secondary education.

The academic year runs from September 1 to the end of June. Instruction is usually 36 hours a week. During industrial practicum, instruction is reduced to seven hours a week. xxxv

Programs vary according to the type of institution, the entry level, and the occupation for which training is provided. They may be offered at the basic (базовый, bazovyj) and advanced (повышенный, povyshennyj) levels. Generally, advanced-level lower vocational programs require one more year of study compared to basic level vocational training for that occupation. The diploma with the title of Qualified Worker may refer to the vocational level, basic or advanced. Further, each specialization of lower vocational education is also assigned a numeric category (категория, kategoriya) or level/grade (разряд, razryad). This identifies the level of vocational skill and pay grade.

In vocational education in the Russian Federation, the type of educational institution and the entry mode (after lower secondary or upper secondary education) determine the duration and level of the program. It is, therefore, very important to pay attention to the institution name and the mode of entry.

<u>Types of Institutions Offering Lower Vocational Education in the Russian Federation</u>

Most lower vocational programs in the Russian Federation are offered by institutions of the following types:

- 1.) Professional Technical *Uchilishche* (PTUs),
- 2.) Professional Lyceums, and
- 3.) Secondary Professional Technical *Uchilishche* (SPTUs).

As evident from their names, PTUs and SPTUs are types of *uchilishche* (училище). They are not to be confused, however, with other types of *uchilishche*. Some other *uchilishche* are higher education institutions, while the majority are higher vocational institutions. Examples of higher education *uchilishche* include theatrical *uchilishche*, higher military *uchilishche*, higher marine engineering *uchilishche* (see the chapter on Higher Education). Examples of higher vocational *uchilishche* include pedagogical *uchilishche*, medical *uchilishche*, musical *uchilishche* (see the section on Higher Vocational Education).

Uchilishche that are lower vocational institutions are either PTUs or SPTUs. The main distinction between PTUs and SPTUs is that PTUs do not offer complete secondary education

1.) Professional Technical *Uchilishche* PTU (Профессионально-Техническое Училище ПТУ, *Professional'no-Tehnicheskoe Uchilishche PTU*), may also be called Professional *Uchilishche* PU (Профессиональное Училище ПУ, *Professional'noe Uchilishche PU*)

PTUs continue to operate in the post-Soviet era, although some have closed, merged, or upgraded to institutions of higher vocational education under new names. PTUs are lower vocational institutions that train skilled workers and junior technical personnel. The programs are quite narrow and applied. Eighty percent of the content is practical and 20% is theoretical.

Programs requiring lower secondary education (9 years) for admission are designed for basic crafts or trades. They also include some secondary education although it does not have the breadth or depth of complete upper secondary education (11 years). Programs requiring upper secondary education (11 years) typically provide training in a vocation at a more advanced level than those requiring lower secondary education (9 years) for admission.

After passing the State final examination, graduates of PTUs are awarded diplomas that give them the right to practice a vocation. Such a diploma also entitles its holder to course credit if they pursue higher vocational education in the same field. However, this type of vocational education on its own does not grant access to university level higher education as it does not incorporate in its curriculum complete secondary education

2.) Professional Lyceum (Профессиональный Лицей, Professional'nyj Litzej)

Professional lyceums offer lower vocational training as well as complete upper secondary education. The secondary education provided by professional lyceums is fully equivalent to the Certificate of Completion of Secondary Education.

Professional lyceum programs evolved from other types of lower vocational training that added an extra year of study for a more advanced level of vocational education. The vocational training is at a higher level than that offered by PTUs and the awarded document refers to the advanced level. Professional lyceums also offer shorter programs that are purely vocational for individuals who already hold a Certificate of Completion of Secondary Education.

After passing the State final examination, graduates of a professional lyceum are awarded diplomas that not only give them the right to exercise a vocation but also

indicate that they have received complete secondary education. This diploma gives its holder the right to be admitted to university-level higher education institutions. If higher education is pursued in the same field course credit can be granted by the institution.

3.) Secondary Professional Technical *Uchilishche* SPTU (Среднее Профессионально-Техническое Училище СПТУ, *Srednee Professional'noe Tehnicheskoe Uchilishche SPTU*)

SPTUs continue to operate in the post-Soviet era although some have become professional lyceums. Similarly to professional lyceum programs, SPTU programs that require the Certificate of Incomplete Secondary Education for admission combine lower vocational education with higher secondary education. Other SPTU programs require the Certificate of Completion of Secondary Education for admission. SPTUs offer vocational education in a wide range of trades, similar to PTUs. For more information, see the description of SPTUs in the section on Lower Vocational Education in the Former USSR.

Some higher vocational institutions may offer lower vocational programs as well. See the section on Higher Vocational Education in the Russian Federation.

Diploma of Lower Vocational Education in the Russian Federation

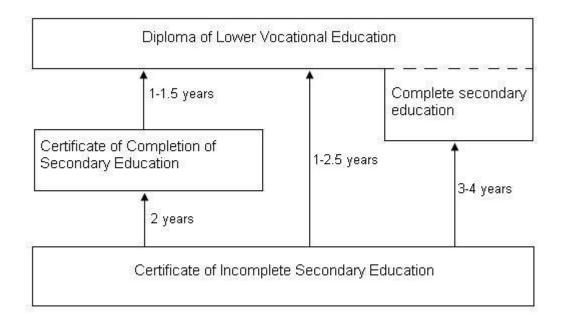
The Diploma of Lower Vocational Education (Диплом о начальном профессиональном образовании, *Diplom o nachal'nom professional'nom obrazovanii*) is generally referred to as the Diploma of "Skilled Worker". The Diploma identifies the skilled worker title (electrician, etc.). It states that the occupational qualification is awarded by decision of the State Examination Commission (also called the State Attestation or Qualification Commission). It lists the institution attended and the dates the program started and ended. If the program provided upper secondary in addition to vocational education, the diploma attests that the person "has gained complete secondary education".

The Diploma of Lower Vocational Education in the Russian Federation is in Russian.

Table 51. Lower Vocational Education in the Russian Federation

Admission Requirements	Incorporates Complete	Duration	Institution Type	Access to	Credential
	Secondary Education				
Certificate of Incomplete	No	1-2.5 years	PTU/PU	Employment	Diploma of Lower
Secondary Education (typically without entrance exams)	Yes	3-4 years	professional lyceum/SPTU	Employment or higher education	Vocational Education (Diploma of "Skilled Worker", e.g.
Certificate of Completion of Secondary Education (typically without entrance exams)	N/A	1-1.5 years	PTU/ professional lyceum/SPTU	Employment	Mechanic, Cook, etc.)

Figure 8. Lower Vocational Education Structure in the Russian Federation



Higher Vocational Education in the Russian Federation

The objective of higher vocational education is to train higher level professionals such as pre-school/primary school teachers, nurses, bookkeepers, technicians^{xxxvi}, etc. They are trained at institutions of various types that offer programs of different duration and level.

Admission to higher vocational education is competitive. Applicants take entrance exams set by educational institutions for specific specialisations. Admission to some programs and institutions is more competitive than others but the average admission ratio in 1995 was about 180 applicants per 100 vacant places. Even though it is possible to enter higher vocational education after lower secondary education, the number of applicants with incomplete secondary education has been declining. They currently account for about one-third of the total number of applicants. Some programs are offered exclusively to students who have completed upper secondary education.

The duration of programs vary according to the mode of entry, field of study, and level of program. Generally, basic programs in humanities and the arts are shorter than those in technical fields. In addition, there are two levels of program – basic (standard) and advanced. It is possible to upgrade from a basic level diploma to an advanced level diploma by an additional year of full-time study.

The curricula stipulate forty-five weeks of study per year. Academic time is equally divided between theoretical education and a practical component. The total workload of a full-time student is fifty-four hours a week, including classwork and independent studies. The instructional hours are thirty-six hours a week. For part-time (evening) education, classwork amounts to sixteen hours per week. In the case of correspondence education, each student must be provided with at least 160 contact hours a year.

Coursework includes humanities, business administration, law, Russian language, mathematics, and informatics. Other subjects are professionally oriented and divided between general subjects within the chosen field of study and specialisation subjects. In addition, programs include compulsory external professional practicum. Programs conclude with a supervised diploma project which must be defended, and final examinations.

Types of Institutions Offering Higher Vocational Education in the Russian Federation

Most higher vocational programs are offered in disciplines such as technology, agronomy, business, services, teaching, health (allied medical professions), culture and art. Institutions are usually named according to their area of specialisation.

In the Russian Federation, there are three types of institutions of higher vocational education:

- 1.) tehnikum (техникум),
- 2.) uchilishche (училище), and
- 3.) college (колледж, kolledzh).
- 1.) Typical *uchilishche* programs of higher vocational education provide training for occupations in services, health, teaching (pre-school or primary), and art.¹⁷ Examples of higher vocational *uchilishche* are medical *uchilishche*, pedagogical *uchilishche*, etc.
 - 2.) The *tehnikum* typically provides programs in technology and business.
- 3.) Educational programs of *colleges*, in addition to the educational programs for *tehnikum* and *uchilishche*, include more in-depth theoretical education and professional training for up to one additional year. *Colleges* can be independent educational institutions or constituent parts of higher education institutions. *Colleges* may also award the Diploma of Incomplete Higher Education that can be used for entry into year three of a Bachelor or Specialist program of higher education. (For more information on the Diploma of Incomplete Higher Education see the chapter on Higher Education.)

Most programs at a *tehnikum* and an *uchilishche* are at the 'basic' level. A *tehnikum* and an *uchilishche* may obtain state accreditation for one or several advanced vocational programs so that they can assume the more prestigious 'college' name. Most *colleges* offer both basic (standard) and advanced higher vocational programs. Only *colleges* can offer advanced vocational programs.

Diploma of Higher Vocational Education in the Russian Federation

On the successful completion of the coursework and State final examinations, students are awarded the **Diploma of Higher Vocational Education** (Диплом о среднем профессиональном образовании, *Diplom o srednem professional'nom obrazovanii*) and a professional title (the Diploma of Technician, Diploma of Nurse, Diploma of Feldscher, etc.). The Diploma is in Russian.

Unlike in the former USSR, the diploma format is now similar to the formats issued by university-level higher education institutions. The diploma supplement lists subjects taught during the period of studies and the grades earned. The supplement also states whether the admission credential was the Certificate of Completion of Secondary Education or whether the program of study incorporated upper secondary education. The text of the diploma refers to the qualification being at the "Basic level" (базовый

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¹⁷ Note that other types of *uchilishche* are lower vocational institutions and higher education institutions.

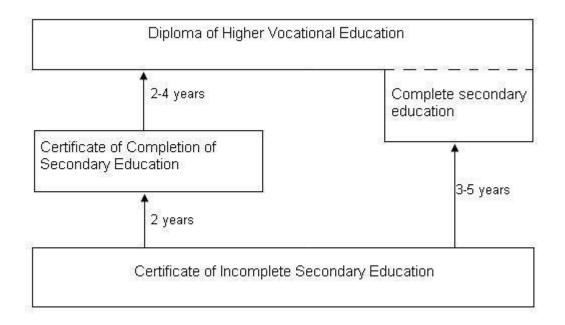
уровень, *bazovyj uroven'*) or "Advanced level" (повышенный уровень, *povyshennyj uroven'*). Students who complete advanced training (typically, at a *college*) may be awarded a professional title with addition of the word "senior" (старший, *starshij*), for example "senior technician" (старший техник, *starshij tehnik*).

Graduates of higher vocational programs are entitled to apply to institutions of higher education. Typically the *Diplom* at the basic level provides one year of advanced standing in a relevant Bachelor or Diploma of Specialist program, while a *Diplom* at the advanced level provides two years of advanced standing. Graduates of higher vocational education seek admission to university-level higher education on the same conditions as upper secondary school graduates. The majority of graduates, however, enter the labour market. Of those who continue their education, 70% follow evening or distance studies while working.

Table 52. Higher Vocational Education in the Russian Federation

Admission Requirements	Incorporates Complete Secondary Education	Duration	Institution Type	Typical Level of Vocational Training	Access to	Credential
Certificate of	Yes	3-5 years:			Employment	Diploma of
Incomplete		Minimum 3 years	Tehnikum/	Basic	or higher	Higher
Secondary			Uchilishche		education	Vocational
Education and						Education
entrance exams						(Diploma of
		4 to 5 years	College	Basic and		Technician,
				Advanced		Diploma of
Certificate of	N/A	2-4 years:			Employment	Nurse, Diploma
Completion of		2-3 years	Tehnikum/	Basic		of Feldscher,
Secondary			Uchilishche			etc.)
Education and		3 to 4 years	College	Basic and		
entrance exams				Advanced		

Figure 9. Higher Vocational Education Structure in the Russian Federation



TEACHER EDUCATION

Teacher Education in the Former USSR

In the former USSR there was no professional certification requirement for teachers. The professional title of teacher was awarded on academic credentials and could be listed as педагог (*pedagog*), учитель (*uchitel'*), от преподаватель (*prepodavatel'*) - these terms were synonymous.

Pre-school and primary school teachers did not receive a specialization in a particular subject. They taught all subjects to a respective class of students, pre-school or primary. In contrast, lower secondary and upper secondary teachers specialized in one or two subjects. They generally taught these subjects to different classes of students, lower secondary and upper secondary.

The different kinds of teachers were trained at the following levels of education:

- higher vocational education (at pedagocial *uchilishche*), and
- university-level and graduate education (at pedagogical or other institutes, universities, and academies).

Higher Vocational Institutions (Pedagocial *Uchilishche*)

Pedagocial *uchilishche* trained mainly pre-school and primary school teachers, as well as some lower secondary school teachers. At a pedagogical *uchilishche*, holders of the Certificate of Completion of Secondary Education completed a two-year program. Holders of the Certificate of Incomplete Secondary Education trained for three-and-a-half years for pre-school teaching or four years for primary or lower secondary school teaching. The curriculum included foundation studies, education subjects, practice teaching, as well as secondary education subjects for students without completed secondary education. The Diploma of Higher Vocational Education was awarded as a *Diplom* with a relevant professional title.

Table 53. Higher Vocational Teacher Education in the Former USSR

Professional Title Awarded	Title in Russian	Translitera- tion	Typical Length of Study		Taught Children
			After CCSE ¹	After CISE ²	
pre-school	педагог	pedagog	2 years	3.5	3-6 years of age
teacher	дошкольного	doshkol'nogo		years	
	образования	obrazovaniya			
primary school	учитель	uchitel'	2 years	4 years	primary school
teacher	начальных	nachal'nyh			grades 1-3 (1-4)
	классов	klassov			

¹ CCSE stands for Certificate of Completion of Secondary Education.

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² CISE stands for Certificate of Incomplete Secondary Education.

lower secondary	учитель	uchitel'	2 years	4 years	lower secondary
school teacher	средних	srednih			grades 4-8 (5-9)
	классов	klassov			

Table 54. Two-Year Program of Pre-School Teacher (following the Certificate of Completion of Secondary Education), Ufa Pedagogical *Uchilishche* #1, 1983xxxvii

Subject	Hours
History of the Communist Party of the Soviet Union	134
Foundations of Scientific Atheism	16
Foundations of Marxist-Leninist Ethics and Aesthetics	38
State and Law	40
Anatomy	136
Psychology	137
Pre-School Pedagogy	286
Russian	114
Methods of Speech Development, Correctness and Instruction of Alphabet	249
Literature for Children, Reciting	156
Natural Sciences for Children, Practicum	116
Development of Elementary Mathematical Concepts	117
Drawing, History of the Arts	92
Methods of Teaching Art to Children	116
Music, Singing, Rhythm	72
Methods of Musical Education	108
Methods of Physical Education	135
Workplace Safety	32
Subject of Narrow Specialty	38
Physical Education	134
Labour Education	116
Subtotal	2382
Pedagogical Practice	340
Total	2722

University-Level Institutions (Pedagogical and Other Institutes, Universities, Academies)

The majority of lower and upper secondary school teachers in the former USSR were trained at university-level educational institutions (pedagogical and other institutes, universities, and academies). Graduates of these institutions received the Diploma of "Specialist". The title of teacher on the Diploma of "Specialist" was followed by a subject specialization such as teacher of the French language (учитель французского языка, *uchitel' francuzskogo yazyka*). Students preparing to teach one subject typically completed a four-year program. Those preparing to specialize in two subjects typically completed a five-year program. Few "Specialist" programs were up to six years in length. In addition, some university-level institutions (typically pedagogical institutes) also offered four-year programs for pre-school or primary school teaching.

Table 55. University-Level Teacher Education in the Former USSR

Professional	Title in	Translitera-	Typical	Taught Children
Title Awarded	Russian	tion	Length of	
			Study	
pre-school	педагог	pedagog	4 years	3-6 years of age
teacher	дошкольного	doshkol'nogo		
	образования	obrazovaniya		
primary school	учитель	uchitel'	4 years	primary school grades 1-3
teacher	начальных	nachal'nyh		(1-4)
	классов	klassov		
teacher	учитель	uchitel'	4-6 years	lower secondary grades 4-8
(specialization				(5-9) and/or
in specific				upper secondary grades 9-10
subject(s))				(10-11)

Approximately two hundred pedagogical institutes (university-level educational institutions) trained specifically pre-school, primary, and secondary school teachers. Study of the subject(s) to be taught occupied a central part of the curriculum. Education-related courses included psychology, educational theory and methodology, history of education, and school hygiene. During the last two years of the program, practice teaching and summer work at a pioneer (youth) camp was required. Final examinations at pedagogical institutes typically included an exam in philosophy/history of the Communist Party of the USSR and three exams related to the area of concentration.

Compared to students at pedagogical institutes, students at universities received narrower, more specialized training in a specific subject area. General education subjects (psychology, educational theory, school hygiene, etc.) and practice teaching were given less importance. Universities granted the title of teacher generally in addition to another title such as "chemist and teacher of chemistry".

The majority of **technical and vocational teachers** were trained at university-level institutions as well. Few technical and vocational teachers with long vocational

experience may have been trained at institutions of higher vocational education such as *uchilishche*, *tehnikum*, or *college*.

University Teachers' Classification

Teaching ranks at universities and other institutions of higher education included the positions of a Professor (full professor), Docent (associate professor), Senior Teacher (senior lecturer), and Assistant (seminar teacher). Assistants were typically engaged in teaching seminars only. Professors, Docents, and Senior Teachers could teach lectures as well.

Table 56. Teaching Ranks at Universities and Other Institutions of Higher Education in the Former USSR

Teaching Rank	Position Requirements
Professor (Профессор,	Normally, the Doctor of Sciences
Professor)	(in exceptional cases, the Candidate of Sciences and
	outstanding research achievements and/or long
	careers)
Docent (Доцент, Dotzent)	Normally, the Candidate of Sciences
	(in exceptional cases, the Diploma of "Specialist"
	and outstanding research achievements and/or long
	careers)
Senior Teacher (Старший	The Diploma of "Specialist" and teaching
преподователь, Starshij	experience of at least five years
prepodovatel')	
Assistant (Ассистент,	The Diploma of "Specialist" and, normally,
Assistent)	registration in aspirantura or doktornatura

Table 57. Five-Year Program of Teacher of English and German, Astrahan' Pedagogical Institute, 1986xxxviii

Subject	Hours
History of the Communist Party of the Soviet Union	170
Political Economy	140
Aspects of Modern Socialism	130
Fundamentals of Scientific Atheism	40
Physical Education	140
Developmental Physiology and Student Health	54
General Psychology	100
Developmental and Pedagogical Psychology	40
History of Pedagogy	90
School Pedagogy	90
Methods of Teaching Foreign Language	300
Practical Training in Spoken and Written Language	1322
Practical Phonetics	288
Practical Grammar	286
Theory and Practice of Translation	60

Language History	70
• • • • • • • • • • • • • • • • • • • •	
Theoretical Phonetics	40
Theoretical Grammar	70
Lexicology	70
Stylistics	40
History of British Literature	100
Introduction to Linguistics	70
Latin Language	70
Regional Studies	70
Technical Aids for Instruction	40
Comparative Typology of Native and Foreign Languages	40
Second Foreign Language	750
Special Course on Pedagogy	18
Special Course on Methodology	18
General Linguistics	80
Logic	40
Fundamentals of Ethics and Aesthetics	60
Methods of Teaching Second Foreign Language	120
Modern Russian Language	160
Total	5176

Term papers: Linguistics, Methodology of teaching foreign languages, Psychology

Additional practical training (not included in the total number of hours): Summer pedagogical practice 2 weeks, Summer children program facilitator 3 weeks, Teaching practice 6 weeks, Teaching practice 8 weeks

Final state examinations and final diploma paper in specialization

Table 58. Teacher Education in the Former USSR: Summary

Education	Institution	Credential	Typical			Gives	Access to T	Teaching	_	
Level	Types		Duration	Pre- school	Pri- mary	Lower secon- dary	Higher secon- dary	Voca- tional	Univer- sity- level	Gra- duate
Higher vocational education	Pedagogical uchilishche	Diploma of Higher Vocational Education	2 years after CCSE ¹ , 3.5 to 4 years after CISE ²	X	Х	X				
University- level education	Pedagogical or other institute, University, Academy	Diploma of "Specialist"	4 to 6 years	X	X	x	X	X	X	
Graduate education		Candidate of Sciences	Minimum 3 years						X	х
		Doctor of Sciences	5 to 15 years						X	х

¹ CCSE stands for Certificate of Completion of Secondary Education. ² CISE stands for Certificate of Incomplete Secondary Education.

Teacher Education in the Russian Federation

In the Russian Federation there is no professional certification requirement for teachers. The professional title of teacher is awarded on academic credentials and can be listed as педагог (*pedagog*), учитель (*uchitel'*), от преподаватель (*prepodavatel'*) - these terms are synonymous.

Pre-school and primary school teachers do not receive a specialization in a particular subject. They teach all subjects to a respective class of students, pre-school or primary. In contrast, lower secondary and upper secondary teachers specialize in one or two subjects. They generally teach these subjects to different classes of students, lower secondary and upper secondary.

The different kinds of teachers are trained at the following levels of education:

- higher vocational education (at pedagogical *uchilishche* and pedagogical *colleges*), and
- university-level and graduate education (at pedagogical and other institutes, universities, and academies).

Since the Soviet era, there has appeared a new type of higher vocational education, the *college* (see the chapter on Technical/Vocational Education). A new university-level degree structure has been created that includes the degrees of Bachelor and Master (see the chapter on Higher Education).

Higher Vocational Institutions (Pedagocial *Uchilishche* and Pedagogical *Colleges*)

Higher vocational institutions include pedagogical *uchilishche* and pedagogical *colleges*. They mainly train pre-school and primary teachers although they may also train lower secondary school teachers. Pre-school and primary school teachers are trained in programs that require either 3-4 years of full-time study following the Certificate of Incomplete Secondary Education or 2-3 years of full-time study following the Certificate of Completion of Secondary Education. Lower secondary school teachers are trained in programs that require either 5 years of full-time study following the Certificate of Incomplete Secondary Education or 3 years of full-time study following the Certificate of Completion of Secondary Education. The Diploma of Higher Vocational Education is awarded as a *Diplom* with a relevant professional title. It generally provides 1 – 2 years of advanced standing in a degree program at a university-level institution.

Table 59. Higher Vocational Teacher Education in the Russian Federation

Professional Title Awarded	Title in Russian	Translitera- tion	Typical I Study	Length of	Taught Children
			After CCSE ¹	After CISE ²	
pre-school	педагог	pedagog	2-3	3-4	3-6 years of age
teacher	дошкольного	doshkol'nogo	years	years	
	образования	obrazovaniya			
primary school	учитель	uchitel'	2-3	3-4	primary school
teacher	начальных	nachal'nyh	years	years	grades 1-4
	классов	klassov			
lower secondary	учитель	uchitel'	3 years	5 years	lower secondary
school teacher	средних	srednih			grades 5-9
	классов	klassov			

Table 60. Three-Year Program of Pre-School Teacher (following the Certificate of Completion of Secondary Education), Moscow Pedagogical College #4, 2000xxxix

Completion of Secondary Education), Woscow Fedagogical Conege #4, 2000							
Subject	Hours						
Homeland History	172						
History of Pedagogy	125						
Pre-School Education	272						
Cultural Studies	112						
Ethics	20						
Russian	112						
Mathematics	115						
Foreign Language	105						
Pre-School Psychology	100						
Pedagogy	100						
Anatomy of the Central Nervous System	103						
Physiology	100						
Political Sciences	82						
Sociology	103						
History of Psychology	105						
Experimental Psychology	65						
Law	72						
Psychology in Age Development	103						
History of Pedagogy	105						
Comparative Pedagogy	60						
Economics	62						
Pedagogical Psychology	103						
Psychology of Personality	110						
Logic	68						

¹ CCSE stands for Certificate of Completion of Secondary Education. ² CISE stands for Certificate of Incomplete Secondary Education.

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Psychological Preparedness for School	50
Fundamentals of General Psychology	120
Methods of Teaching Pre-School Math	196
Methods of Teaching Pre-School Russian	196
Methods of Teaching Pre-School Reading	196
Methods of Teaching Pre-School Work Skills	92
Methods of Teaching Pre-School Music	196
Study of Defective Speech	90
Correctional Pedagogy	50
Psychology of Communication	50
Drawing	120
Preparation for School	100
Educational and Correctional Games	90
Culture of Speech	120
Fundamentals of Computer Knowledge	100
Physical Education	120
Total	4360

Table 61. Three-Year Program of Teacher of Preschool Children with Intellectual and Speech Disabilities (following the Certificate of Completion of Secondary Education), Moscow Pedagogical *College* #4, 1999x1

Subject	Hours
Fundamentals of Philosophy	102
Fundamentals of Economics	51
Fundamentals of Sociology and Political Science	51
Fundamentals of Law	61
History of Russia	111
World Art and Culture	87
Literature and Fundamentals of Literary Criticism	87
Standards of Speech	57
Foreign Language (English)	244
Mathematics	51
Computer Science	54
Fundamentals of Natural Science and Ecology	111
Russian Language and Fundamentals of Linguistics	168
Physical Education	300
Anatomy and Physiology of Children, Fundamentals of	
Healthy Lifestyle, Fundamentals of Podiatry and Hygiene	271
Life Safety	72
Pediatric Neuropathology	81
Pediatric Psychopathology	102
Speech and Sensory Systems, Disabilities	51
Fundamentals of Genetics	80
Mental Disabilities	32

Psychology	273
Pedagogy	245
Fundamentals of Teaching Skills	54
Fundamentals of Special Pedagogy and Special Psychology	133
Psychology of Mental Retardation, Psychology of Speech Pathology	127
Russian	37
Pedagogy of Mental Retardation	127
Children's Literature, Expressive Reading Practicum	171
Fine Art Activities	111
Practicum in Artistic Work and Design	111
Music, Rhythm	111
Fundamentals of Speech Therapy, Pronunciation Practicum	153
Special Methods:	
Methods of Speech Development and Surroundings Study	153
Methods of Nature Studies and Ecological Education	102
Methods of Mathematical Development	127
Methods of Teaching Fine Art Activities and Design	132
Methods of Teaching Physical Education and Development	127
Methods of Teaching Industrial Arts	51
Methods of Musical Development, Corrective Rhythmics	120
Methods of Teaching to Play Games	69
Methods of Developing Socio-Personal Qualities and Behaviour	54
Methods of Auditory and Visual Perception Development	51
Methods of Educational Technology and Computer Use	54
Fundamentals of Military Training	68
Total	4985

University-Level Institutions (Pedagogical and Other Institutes, Universities, Academies)

Most lower and higher secondary school teachers as well as some pre-school and primary school teachers in the Russian Federation are trained at university-level institutions (pedagogical and other institutes, universities, and academies). Bachelor and Diploma of "Specialist" programs train teachers for the particular levels of the school education system. The majority of Diploma of "Specialist" programs are five years in length. Four-year programs are offered in a limited number of single-subject disciplines (primary school education with no sub-specialization; foreign languages, where only one language is studied; and, in rare cases, Russian language and literature). Few Diploma of "Specialist" programs are six years in length. Bachelor programs are typically four years in length.

Table 62. University-Level Teacher Education in the Russian Federation

Professional	Title in	Translitera-	Typical	Taught Children
Title Awarded	Russian	tion	Length of	
			Study	
pre-school	педагог	pedagog	4 years	3-6 years of age
teacher	дошкольного	doshkol'nogo		
	образования	obrazovaniya		
primary school	учитель	uchitel'	4 years	primary school grades 1-4
teacher	начальных	nachal'nyh		
	классов	klassov		
teacher	учитель	uchitel'	4-6 years	lower secondary grades 5-9
(specialization				and/or
in specific				upper secondary grades 10-
subject(s))				11

There are over 100 pedagogical institutions in the Russian Federation. Many pedagogical institutes of the Soviet era have upgraded to pedagogical universities and pedagogical academies. Teaching qualifications may be obtained at pedagogical institutes and pedagogical universities as well as institutes, universities, and academies within other study areas.

University-level pedagogical education includes foundation studies/core courses in humanities, social sciences and natural sciences, subject specialisation, studies in biology and medicine, studies in pedagogy and psychology, and an introduction to pedagogical profession (in-service teacher training).

University-level graduates may specialize in one or two subjects, i.e. mathematics, biology, language, etc. The qualification of teacher may be added to a professional title or subject title when pedagogical requirements are fulfilled.

The majority of **technical and vocational teachers** are trained at university-level institutions as well. Few technical and vocational teachers with long vocational experience may be trained at institutions of higher vocational education such as *uchilishche*, *tehnikum*, or *college*.

University Teachers' Classification

Teaching ranks at universities and other institutions of higher education include the positions of a Professor (full professor), Docent (associate professor), Senior Teacher (senior lecturer), and Assistant (seminar teacher). Assistants are typically engaged in teaching seminars only. Professors, Docents, and Senior Teachers teach lectures as well.

Table 63. Teaching Ranks at Universities and Other Institutions of Higher Education in the Russian Federation

Teaching Rank	Position Requirements
Teaching Kank	1 osition requirements
Professor (Προφεссор,	Normally, the Doctor of Sciences
Professor)	(in exceptional cases, the Candidate of Sciences and
	outstanding research achievements and/or long
	careers)
Docent (Доцент, Dotzent)	Normally, the Candidate of Sciences
	(in exceptional cases, the Diploma of "Specialist" or
	Master's degree, and outstanding research
	achievements and/or long careers)
Senior Teacher (Старший	The Diploma of "Specialist" or Master's degree, and
преподователь, Starshij	teaching experience of at least five years
prepodovatel')	
Assistant (Ассистент,	The Diploma of "Specialist" or Master's degree,
Assistent)	and, normally, registration in aspirantura or
	doktornatura

In 1999, out of 255,900 academics employed at university-level higher education institutions, 148,300 held the Doctor of Sciences or Candidate of Sciences.

Table 64. Five-Year Program of Teacher of French and German, Samara State

Pedagogical University, 1994^{xli}

Pedagogical University, 1994 ^{xii} Course title	Hours
	110415
History of Russia	200
Philosophy	144
Economics	200
Political Science	120
Latin Language	144
Modern Russian Language	144
General Linguistics	148
Fundamentals of Information Science and Computing	72
World Art Culture	144
Cultural Studies	108
Age-Specific Physiology	36
School Hygiene	36
Physical Education	220
General Psychology	72
Age-Specific Psychology	72
Teaching Psychology	64
History of Pedagogy	72
Pedagogy	216
Methods of Teaching Foreign Languages	196
Practical Course of the Primary Foreign Language (French)	3140
Stylistics	72
Theoretical Phonetics	72
Theoretical Grammar	120
Typology	60
Lexicology	72
History of the Language	72
Regional Geography	112
Literature of the Country of the Studied Language	144
Practical Course of the Second Foreign Language (German)	960
Theory of the Second Foreign Language	40
Special Courses: Management	40
Pedagogical Systems	40
Methods of Educational Work	40
Imperialism, Symbolism in French Art	40
Special Seminars: Language of Mass Media	40
Education In Modern World	40
Total	7512

Term papers: Pedagogy, Teaching methods, Philology

Practice (not included in the total number of hours): Summer pedagogical 4 weeks,

Methodical in primary language 6 weeks, Pedagogical 8 weeks

Final state examinations: Second foreign language, Pedagogy, psychology and methods of teaching foreign languages, Fundamentals of medical knowledge Final diploma paper

Table 65. Teacher Education in the Russian Federation: Summary

Education	Institution	Credential	Typical			Gives	Access to	Teaching	5	
Level	Types		Duration	Pre- school	Pri- mary	Lower secon- dary	Higher secon- dary	Voca- tional	Univer- sity- level	Gra- duate
Higher vocational education	Pedagogical uchilishche, Pedagogical college	Diploma of Higher Vocational Education	2 to 3 years after CCSE ¹ , 3 to 5 years after CISE ²	X	х	X				
University- level education	Pedagogical institute/ university/	Bachelor's degree	4 years	X	X	X	Х	X		
	academy or University/	Diploma of "Specialist"	4 to 6 years	X	Х	X	X	Х	Х	
Graduate education	institute/ academy	Master's degree	2 years						Х	
		Candidate of Sciences	Minimum 3 years						X	X
		Doctor of Sciences	5 to 15 years						X	X

 $^{^1}$ CCSE stands for Certificate of Completion of Secondary Education. 2 CISE stands for Certificate of Incomplete Secondary Education.

GRADING SCALE

Secondary Education in the Former USSR and the Russian Federation

The grading system in secondary education in the Russian Federation is the same as that in the former USSR. The following grading scale has been used at all levels of school education

Table 66. Grading Scale in School Education in the Former USSR and the Russian Federation

Scale	Grade Description
5	Excellent (Отлично, Otlichno)
4	Good (Хорошо, Horosho)
3	Satisfactory (Удовлетворительно, Udovletvoritel'no)
2	Fail (Неудовлетворительно, Neudovletvoritel'no)

The lowest passing grade is '3'. Students must pass each course in order to enroll in the next grade or to graduate. The grade '1' also exists, but is used very rarely.

A plus (+) or a minus (-) may be added to a grade. For example, a '4+' is higher than a '4' and lower than a '5-'. A '5+' is very rare. These intermediate grades may be awarded throughout the period of study but typically not as a final grade.

Students who complete secondary education with the perfect grade in every subject may be awarded a "gold medal". Students who receive a '4' in at most two subjects and a '5' in all other subjects are typically awarded a "silver medal". Exact stipulations for the award of gold and silver medals are set by the state administrative bodies and may change from year to year.

Higher Education in the Former USSR and the Russian Federation

The grading system in higher education in the Russian Federation is the same as that in the former USSR. It includes the same grading scale as at the other levels of education. Additionally, some courses are marked <code>3auem</code> (zachet), which is usually translated as pass or credit. No more than five set examinations are typically graded each semester. The remaining courses of the term are marked <code>3auem</code> (zachet), if passed. Courses that are marked <code>3auem</code> (zachet) are likely to be part of a longer sequence of courses that is graded at the end or courses that are minor to the specialization.

Students can continue their programs and graduate only if they pass each subject of the curriculum. They are only allowed to resit a failed exam two times.

Students may be awarded a Diploma with Distinction/Honours (Диплом с отличием, *Diplom s otlichiem*), which is also called the Red Diploma (Красный диплом, *Krasnyj diplom*) due to the colour of its cover.

Table 67. Grading Scale in Higher Education in the Former USSR and Russian Federation

Scale	Description
5	Excellent (Отлично, Otlichno)
4	Good (Хорошо, <i>Horosho</i>)
2	Satisfactory (Удовлетворительно,
3	Udovletvoritel'no)
2	Fail (Неудовлетворительно,
Δ	Neudovletvoritel'no)
Zachet	Pass (Зачет, Zachet)
Nezachet	Fail (Незачет, Nezachet)

DOCUMENTATION

Both in the Russian Federation and the former USSR an academic credential may be issued in one original only. A lost or stolen credential may be replaced and the word "дубликат" (*dublikat*, duplicate) will appear on the new document. Copies of a credential may be notarised or certified by the institution with a signature and title of the certifying official and the seal of the institution.

Credentails are issued directly by the institutions but follow the State format. Documents of the state format are printed on special security paper, include the state emblem and state seal, and note that the document is a state educational document. The state format in the Russian Federation was changed from the one in the former USSR. But after the break up of the former USSR in 1991 some eductaional institutions in the Russian Federation might have still used documents of the Soviet state format for several years.

Names of Documents

An academic document may have one of the few different names. The term "диплом" (diplom, diploma) is used for higher academic credentials. "Свидетельство" (svidetel'stvo, certificate) is a credential issued after lower-level or shorter training. The term "аттестат" (attestat, attestat) is used exclusively as a secondary school credential. "Справка" (spravka, letter or certificate) is an additional document, issued by an institution on request, that may confirm the fact of study, graduation, curriculum and subject hours, etc. Examples of spravka are "архивная справка" (arhivnaya spravka, archival certificate) and "академическая справка" (akademicheskaya spravka, academic certificate).

Secondary Education

Secondary Education in the Former USSR

If successful in all subjects, secondary students are awarded the Attestat, or the Certificate of Completion of Secondary Education. In the former USSR, final grades were listed on the Attestat itself. Final exam results were generally not recorded in the certificate but reflected in the final grades. Failing grades were not typically recorded on academic credentials as either the courses were repeated or exams were retaken or the student might not graduate. Students who received the highest grade ('5' out of '5') in every subject were usually awarded a gold medal. Students who fell short by receiving '4' in only one subject usually received a silver medal.

The Attestat was the only document issued to students. They received no transcripts or other documents. The Attestat was in Russian in the Russian Republic and bilingual, in Russian and other local language, in the other republics.

Secondary Education in the Russian Federation

In the Russian Federation, the Attestat, or the Certificate of Completion of Secondary Education, may include the results of the final examinations and a transcript listing the grades achieved by students in all the subjects taught. Students who receive the highest grade ('5' out of '5') in every subject are usually awarded a gold medal. Students who fall short by receiving '4' in only one or two subjects usually receive a silver medal.

As in the former USSR, failing grades are typically not recorded on academic credentials as either the courses are repeated or exams are retaken or the student may not graduate. The Attestat is the only document issued to the student. It is in Russian.

In the Russian Federation, the Unified State Exam (see the chapter on School Education) is becoming a standard final exams for secondary school graduation and a standard university entrance exam. The Attestat may be replaced or accompanied by the Certificate of USE Results in the future.

Post-Secondary Education

Post-Secondary Education in the Former USSR

A Diploma of post-secondary education was typically accompanied by a Supplement to the Diploma, with the exception of the Candidate of Sciences and Doctor of Sciences. The Supplement to the Diploma (Приложение к Диплому, *Prilozhenie k Diplomu*) may have included additional information about the program such as the list of subjects, grades, professional practicum, and the results obtained in the final state examinations and in the defence of the final research project. The Supplement to the Diploma may have also be translated as the Addendum to the Diploma. Note that the Supplement/Addendum to the Diploma was not valid without the corresponding Diploma as identified by the serial and registration numbers and names of the student and institution.

The Supplement to the Diploma in the former USSR did not state subject hours. That information could be found on a separate document called "архивная справка" (arhivnaya spravka, archival certificate) that was issued by the institution on request.

Another document, the academic certificate (академическая справка, *akademicheskaya spravka*) was used to record courses taken and grades received for partical completion of a postsecondary program. It aslo included the number of study hours for each subject.

Post-secondary students may have been awarded a Diploma with Distinction/Honours (Диплом с отличием, *Diplom s otlichiem*), which was also called the Red Diploma (Красный диплом, *Krasnyj diplom*) due to the colour of its cover.

Failing grades were not typically recorded on academic credentials as either the courses were repeated or exams were retaken or the student might not have graduated. In postsecondary education some courses may have been marked as Pass (3a4et, *zachet*). These courses had no corresponding graded final exams.

Educational credentials were typically in Russian only in the Russian Republic. They may have been biligual, in Russian and a foreign language (English, French, Spanish, etc.) - and in a special format - if issued to a foreign student. They may have be bilingual, in Russian and other local language (Ukrainian, etc.), if issued in one of the other Soviet Socialist republics. Quality of English translations may have varied as they may have been performed by the students themselves and certified by the departments of foreign languages or international offices of the institutions.

Post-Secondary Education in the Russian Federation

A Diploma of post-secondary education is typically accompanied by a Supplement to the Diploma, with the exception of the Candidate of Sciences and Doctor of Sciences. The Supplement to the Diploma (Приложение к Диплому, *Prilozhenie k Diplomu*) is more elaborate than in the former USSR and may include the list of subjects, number of hours, admission credentials, grades, professional practicum, and the results obtained in the final state examinations and in the defence of the final research project. The Supplement to the Diploma may also be translated as the Addendum to the Diploma. Note that the Supplement/Addendum to the Diploma is not valid without the corresponding Diploma as identified by the serial and registration numbers and names of the student and institution.

Another document, the academic certificate (академическая справка, *akademicheskaya spravka*) is used to record courses taken and grades received for partical completion of a postsecondary program. It aslo includes the number of study hours for each subject.

Post-secondary students may be awarded a Diploma with Distinction/Honours (Диплом с отличием, *Diplom s otlichiem*), which is also called the Red Diploma (Красный диплом, *Krasnyj diplom*) due to the colour of its cover.

Failing grades are typically not recorded on academic credentials as either the courses are repeated or exams are retaken or the student may not graduate. In postsecondary education some courses may be marked as Pass (3auet, zachet). These courses have no corresponding graded final exams.

Educational credentials are typically in Russian only. They may be biligual, in Russian and a foreign language - and in a special format - if issued to a foreign student. Quality of English translations may vary as they may be performed by the students themselves and certified by the departments of foreign languages or international offices of the institutions.

The recent trend in the Russian Federation is to standardize different educational documents into one model. For example, the Supplement to the Diploma of Higher Vocational Education and the Academic Certificate now resemble the Supplement to the Diploma used for "Specialist", Bachelor's and Master's degrees. Further, some recent university credentials may now follow the UNESCO, European Comission, and Council of Europe model.

Summary of Educational Credentials

Summary of Educational Credentials in the Former USSR

Table 68. Summary of Educational Credentials in the Former USSR

Credential	Typical Length of	Admission	Access to
	Full-time Study	Requirements	
Certificate of Incomplete	5 years	Completion of primary	Upper
Secondary Education		school	secondary
(Аттестат об основном общем			school or
образовании, Attestat ob			vocational
Osnovnom Obshchem			education
Obrazovanii)			caucation
Certificate of Completion of	2 years	Certificate of Incomplete	Higher
Secondary Education		Secondary Education	education or
(Аттестат о среднем (полном)			vocational
общем образовании, Attestat o			education
Srednem (Polnom) Obshchem			
Obrazovanii)			
Diploma of Lower Vocational	2 years (if does not	Certificate of Incomplete	Employment
Education	incorporate complete	Secondary Education	
(Диплом об окончании	secondary education)	(typically without	
профтехучилища, Diplom ob	3 years (if	entrance exams)	Employment
okonchanii proftehuchilishcha)	incorporates complete		or higher
	secondary education)		education

	1-1.5 years	Certificate of Completion of Secondary Education (typically without entrance exams)	Employment
Diploma of Higher Vocational Education (Диплом об окончании	3-5.5 years	Certificate of Incomplete Secondary Education and entrance exams	Employment or higher education
среднего специального образования, Diplom ob okonchanii srednego spetzial'nogo obrazovaniya)	2-4.5 years	Certificate of Completion of Secondary Education and entrance exams	Employment
Diploma of "Specialist" (Диплом Специалиста, <i>Diplom Spetzialista</i>)	5 to 6 years (4 for some teaching qualifications)	Completion of school education and entrance exams	Candidate of Sciences program or Employment
Candidate of Sciences (Кандидат наук, Kandidat Nauk)	Minimum 3 years including research and optional coursework	Diploma of "Specialist", entrance exams, and research qualifications	Doctor of Sciences program and Associate Professor position
Doctor of Sciences (Доктор наук, Doktor Nauk)	5 to 15 years	Candidate of Sciences, academic position, and research qualifications	Full-Professor position

Summary of Educational Credentials in the Russian Federation

Table 69. Summary of Educational Credentials in the Russian Federation

Credential	Typical Length of	Admission	Access to
	Full-time Study	Requirements	
Certificate of Incomplete	5 years	Completion of primary	Upper
Secondary Education		school	secondary
(Аттестат об основном общем			school or
образовании, Attestat ob			vocational
Osnovnom Obshchem			education
Obrazovanii)			Caucation
Certificate of Completion of	2 years	Certificate of Incomplete	Higher
Secondary Education		Secondary Education	education or
(Аттестат о среднем (полном)			vocational
общем образовании, Attestat o			education
Srednem (Polnom) Obshchem			caucation
Obrazovanii)			
Diploma of Lower Vocational	1-2.5 years (if does	Certificate of Incomplete	Employment
Education (Диплом о начальном	not incorporate	Secondary Education	1
профессиональном	complete secondary	(typically without	
образовании, Diplom o	education)	entrance exams)	
nachal'nom professional'nom	3-4 years (if		Employment
obrazovanii)	incorporates complete		or higher
	secondary education)		education
	1-1.5 years	Certificate of Completion	Employment
	1 1.6 9 0015	of Secondary Education	
		(typically without	
		entrance exams)	

Diploma of Higher Vocational Education (Диплом о среднем профессиональном образовании, Diplom o srednem professional'nom obrazovanii)	3-5 years 2-4 years	Certificate of Incomplete Secondary Education and entrance exams Certificate of Completion of Secondary Education and entrance exams	Employment or higher education Employment
Bachelor's degree (Бакалавр, Bakalavr)	4 years	Completion of school education and entrance exams	Master or "Specialist" program or Employment
Diploma of "Specialist" (Диплом Специалиста, Diplom Spetzialista)	5 to 6 years (4 years in few specialisations) (1 to 1.5 years after a Bachelor)	Completion of school education and entrance exams or Bachelor's degree	Candidate of Sciences program or Master or Employment
Master's degree (Магистр, Magistr)	2 years after a Bachelor's degree (1 to 1.5 years after a Diploma of "Specialist", not common)	Bachelor's degree or Diploma of "Specialist", entrance exams	Candidate of Sciences program or Employment
Candidate of Sciences (Кандидат наук, Kandidat Nauk)	Minimum 3 years after a "Specialist" or a Master's degree, including research and optional coursework	Diploma of "Specialist" or Master's degree, entrance exams, and research qualifications	Doctor of Sciences program and Associate Professor position
Doctor of Sciences (Доктор наук, Doktor Nauk)	5 to 15 years after Candidate of Sciences	Candidate of Sciences, academic position, and research qualifications	Full-Professor position

Glossary of Common Russian Educational Terms

Table 70. Glossary of Common Russian Educational Terms

Russian	English
академическая степень	academic degree
академический год	academic year
академия	academy
аспирант	graduate student enrolled in a Candidate
	of Sciences program
аспирантура	graduate school, a program leading to the Candidate of Sciences
Аттестат об основном общем	Certificate of Incomplete Secondary
образовании	Education
Аттестат о среднем (полном)	Certificate of Completion of Secondary
общем образовании	Education
вечернее обучение	evening study
военная подготовка	Military Training
военное училище	military school
выпускной экзамен	graduation examination
Высшая Аттестационная Комиссия	Supreme Certifying Commission
высшее образование	higher education
высшие учебные заведения	higher educational institutions
гимназия	gymnasium
дата выдачи	date of issuance
дата окончания	date of graduation
дата рождения	date of birth
дата поступления	date of entrance
Диплом Бакалавра	Diploma of Bachelor
Диплом Доктора Наук	Diploma of Doctor of Sciences
Диплом Кандидата Наук	Diploma of Candidate of Sciences
Диплом Магистра	Diploma of Master
Диплом об окончании	Diploma of Lower Vocational Education
профтехучилища	
Диплом об окончании среднего	Diploma of Higher Vocational Education
специального образования	
Диплом о неполном высшем	Diploma of Incomplete Higher Education
образовании	
Диплом о профессиональной	Diploma of Professional Retraining
переподготовке	
Диплом Специалиста	Diploma of "Specialist"
длительность программы	program length
дневное обучение	full-time study
докторант	graduate student enrolled in a Doctor of
	Sciences program

докторантура	graduate school, a program leading to the Doctor of Sciences
Единый Государственный Экзамен	Unified State Exam
заочное обучение	correspondence study
зачет	pass
	institute
институт	Arts
искусство	research institute
исследовательский институт	
история	History
кафедра	academic department
квалификация	qualification
колледж	college
курс	course, also year of study
ликвидация безграмотности	eradication of illiteracy
лицей	lyceum
медицина	Medicine
менеджмент	Management
Министерство Образования	Ministry of Education
направление	area of study
наука	science
начальное профессиональное	lower vocational education
образование	
начальное образование	primary education
незачет	fail
неполное среднее образование	incomplete secondary education
образование	Education
общее образование	general education, same as secondary
1	education
общеобразовательная средняя школа	general secondary school
общеобразовательная школа с	general school offering intensive studies
уклоном	in certain subjects
основное общее образование	lower secondary education
Отдел Образования	Department of Education
приложение к диплому	diploma supplement
профессионально-техническое	professional technical <i>uchilishche</i> /school
училище	processional volumean weithin selection
профессиональный лицей	professional lyceum
Российская Федерация	Russian Federation
Свидетельство о Результатах ЕГЭ	Certificate of the Unified State Exam
Congetender by the Computation of the Computation o	Results
сельское хозяйство	Agriculture
	semester/term
специальность	specialization
специальность	1
среднее полное общее образование	upper secondary education

среднее образование	secondary education
среднее профессиональное	higher vocational education
образование	
среднее профессионально-	secondary professional technical
техническое училище	uchilishche/school
среднее специальное образование	specialized secondary education, same as
	higher vocational education
стажировка	practical training at another institution as
	a visiting student, intern, or scholar
техникум	tehnikum/technical school
технология	Technology
университет	university
ускоренная программа	accelerated program
учебные часы	credit hours
учебный план	curriculum
философия	Philosophy
школьное образование	school education
экономика	Economics
юриспруденция	Law
1(плохо)	1 (poor)
2(неудовлетворительно)	2 (unsatisfactory)
3(удовлетворительно)	3 (satisfactory)
4(хорошо)	4 (good)
5(отлично)	5 (excellent)
1 один	one
2 два	two
3 три	three
4 четыре	four
5 пять	five
6 шесть	six
7 семь	seven
8 восемь	eight
9 девять	nine
10 десять	ten

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Bologna Secretariat http://www.dfes.gov.uk/bologna/

CICIC Canadian Information Centre for International Credentials http://www.cicic.ca/en/page.aspx?sortcode=2.15

UK NARIC National Recognition Information Centre http://www.interskills.info/
http://www.internationalcomparisons.org.uk/

World Higher Education Database (WHED) http://www.unesco.org/iau/onlinedatabases/index.html

World Education Services http://www.wes.org/

Russian Websites

Federal Agency on Education http://www.ed.gov.ru

Federal Service for Supervision in Education and Science http://www.obrnadzor.gov.ru

Federal State Research Institute of Information Technologies and Telecommunications http://www.informika.ru/text/index.html

Ministry of Education and Science

http://www.mon.gov.ru

National Accreditation Agency of Russia http://www.nica.ru

National Information Center on Academic Recognition and Mobility, Ministry of Education of the Russian Federation http://www.russianenic.ru/

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The Unified State Exam Portal http://www.ege.ru/

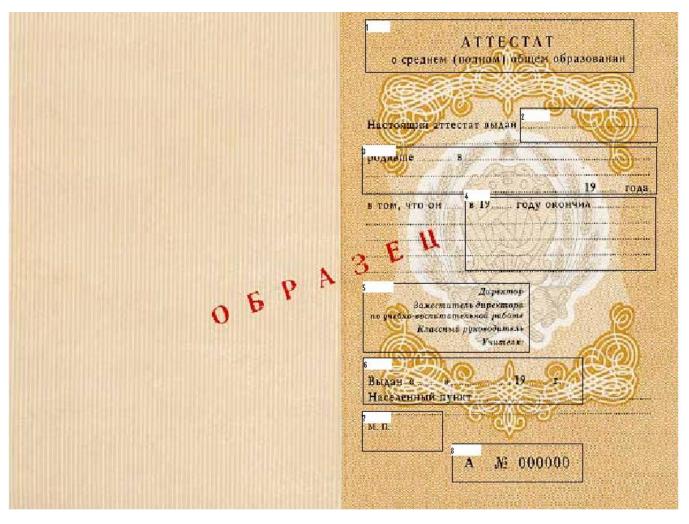
Appendix 1: Sample School Education Credentials

Sample Certificate of Incomplete Secondary Education in the Former USSR and the Russian Federation



- 1. Certificate of Incomplete Secondary Education
- 2. With distinction
- 3. Last name, first name, patronymic
- 4. Date of birth
- 5. Name and location of school
- 6. List of subjects and grades
- 7. List of subjects and grades, continued
- 8. Additionally, successfully completed a program in facultative (optional) subjects
- 9. Date of issue
- 10. Seal
- 11. Signatures of the Director, Vice-Director, and teachers
- 12. Serial number

Sample Certificate of Completion of Secondary Education in the Former USSR



- 1. Certificate of Completion of Secondary Education
- 2. Last name, first name, patronymic
- 3. Place and date of birth
- 4. Graduation year and name of school
- 5. Signatures of the Director, Vice-Director, and teachers
- 6. Date and place of issue
- 7. Seal
- 8. Serial number

Sample Certificate of Completion of Secondary Education in the Russian Federation



- 1. Certificate of Completion of Secondary Education
- 2. Last name, first name, patronymic
- 3. Place and date of birth
- 4. Graduation year and name of school
- 5. Signatures of the Director, Vice-Director, and teachers
- 6. Date and place of issue
- 7. Seal
- 8. Serial number

Sample Supplement to the Certificate of Completion of Secondary Education in the Russian Federation

	Без аттестата о среднем (полном) общем образовании недействительно
	ПРИЛОЖЕНИЕ к аттестату А № о среднем (полном) общем образовании
	2 Фамилия Имя Отчество 3 Дата рождения — услугательный принадамина
	Место рождения 1. Москва
MT Foarussa. 2001.	

- 1. Supplement to the Certificate of Completion of Secondary Education serial number
- 2. Last name, first name, patronymic
- 3. Date and place of birth

	ТАБЕЛЬ итоговых оценок успеваемос	ти
Класс 2	(профиль)	
	(ubochen)	
3 Наиме	енование предметов	4 Оценка
нусский.	AZEIK	4 (xohoweo)
cumehan	rtypa	4 (xóhouco)
acreofia u	naraua anauuza	3 (490bilemb)
requempe		3 (удовиеть)
gouzura		4 (xopouco)
acomposion	uul	5 (omeuerno)
ducious		4 (xopouro)
жишия		4 (хорошо)
FROHOLUNE	еская неография	4 (xopouco)
bceoduyaa	история'	3 (ygobuerns)
история	Pocciu	3 (удовиетв.)
общество	знание	4 (xopouo)
unocmpail	noui azou (anul)	3 (ygobuemb)
gouzureck	an rejusmytia	5 (отишено)
	amura	4 (xopoeuo)
3KOUOUW	Control of the contro	3 (omeures)
MOCKBOBE	Constitution to the contract of the contract o	5 (omeurno)
3 KOHOMIC	5-5-8	4 (xopoulo)
щовая худо.	7 77	4 (xopollo)
dobu беzonách	ости жизнедеятельности	5 (omelliruo)
Сдалквалифик	ационные экзамены по профессии	5
	>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>>	6
	икационный разряд (класс, категор	ия)
Сроме того, успе	ешно выполнил программу по	факультативным курсам
ungnyuu	aizuonniil mexnouo	ı
July Marchine	76	
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113 引 神道道	The state of the s	
112 2 3 3 3 3 3	8	nem male e e e e
1 3 Par Max	выдан «23» ИЮНЯ	20 Of r.

- 1. Listing of final grades
- 2. Class (profile)
- 3. Subject
- 4. Grade
- 5. Passed qualification exams for a profession
- 6. Attained qualification level (class, category)
- 7. Additionally, successfully completed a program in facultative (optional) subjects
- 8. Seal
- 9. Signatures of the Director
- 10. Date of issue

Sample Supplement to the Certificate of Completion of Secondary Education in the Russian Federation (with Final Exam Results)

1 Приложение к аттестату АС № 04	6 CASA O PLUMINGUILLE SYSSMANIA TO CASTANONIA
о среднем образовании АС № 04	Сдал . Выпускные экзамены по следующим предметам:
2 ТАБЕЛЬ	
	Наименование предметов Оценка
итоговых оценок успеваемости	menepa mypa (nucise) 5 (em enuco
(без аттестата о спеднем образовании недействителен)	pycekuie stock Stemures)
	Олгебра и напанализа 5 стишто
4	Remain anareline anon 5 (eminus)
за время обучения в имерые - гелинелии в 7	$1 - c_1 = 1$
Ленинекого напона г. Казание	a conficiencia si se su
Республики Таткретан	7
обнаружил. Д. следующие знания:	Сдал квалификационные экзамены по профессии
5 Наименование предметов Оценка	7
	Присвоен квалификационный разряд (класс,
umepamypa 5/neme)	категория)
acrophe re navaro 5 (nemi)	Кроме того, успешно выполнил программу по
ana mja	факультативным курсам
nemoher Dinererato 5 (neme)	
semples mercembo 5/ preme)	8
barnemententi me anere	Участвовал в 19 году в
renober u obucondo 5(name)	
Angura 5 (nemb)	
demposerures 5 (neme)	и занях место.
surver 5 (namb)	Награжден
Eugenus 5/pemb)	9 Kasan III Tanasanan arang ang
reorphagues, 5/ neme)	Town Town
uncempahunu ezon (aun) 5 (mami)	Важеститель директора школы по учебно-воспитательной работе
mamajarnie estir 5 (remi)	Классный руководитель
mygoter coytenese 5 (nem)	
orthobor be jonnerwenne 5/ memb)	110
neu jueget mentiteemie	выдан "13" логия 19.92 г. гу
questice case regularypa 5 (history)	Населенный пункт г. пазамь
mura re mer recenes 5 (name)	Henry Mamapeman
pyckeri szak 5 (neme)	М. П. МТ Гознака. 1990-
ISBN AND WARD OF THE PROPERTY OF THE PROPERTY AND PROPERTY OF THE PROPERTY OF	\$

- 1. Supplement to the Certificate of Completion of Secondary Education serial number
- 2. Listing of grades
- 3. Last name, first name, patronymic
- 4. Name of school
- 5. Subjects and grades
- 6. Passed final exams (subjects and grades)
- 7. Passed qualification exams for a profession... Attained qualification level (class, category)... Additionally, successfully completed a program in facultative (optional) subjects...
- 8. Participated in the year ... in ... and won ... place. Awarded ...
- 9. Signatures of the Director, Vice-Director, and teachers
- 10. Date and place of issue

Sample Certificate of Unified State Exam Results

СВИДЕТЕЛЬСТВО № 0000000000000	⁸ (фамилия, имя, отчество)
Настоящее свидетельство выдано (фамилия, имя, отчество)	по результатам сдачи единого государственного экзамена обнаружил следующие знания:
в том, что он (она) сдал единый государственный экзамен. 4 Решение государственной экзаменационной комиссии от №	9 Наименования общеобразовательных предметов Баллы
руководитель органа управления образованием субъекта Российской Федерации	
И.О. Фамилия	
6 М.П. Выдано200 г. Регистрационный №	

- 1. Certificate serial number
- 2. Last name, first name, patronymic
- 3. That she passed the Unified State Exam
- 4. By a decision of the State Exam Commission of ... date and number ...
- 5. Director of the local body of education administration
- 6. Seal
- 7. Date of issue and registration number
- 8. Last name, first name, patronymic
- 9. Subjects and scores

Appendix 2: Sample Higher Education Credentials²⁶

Sample Higher Education Credentials in the Former USSR

A. Sample Diploma of "Specialist" in the Former USSR



- 1. Diploma
- 2. With distinction
- 3. Serial number
- 4. This diploma is issued to (Last name, first name, patronymic)
- 5. that he in (year) entered (Name of school)
- 6. and in (year) completed course of (full-time/evening/correspondence) studies
- 7. Specialisation
- 8. By decision of the State Examination Commission of (date)
- 9. awarded the qualification of

_

²⁶ Only institutions that are **accredited** are permitted to award documents of the shown standard state format for their accredited programs. The **state format** includes the state emblem and state seal and uses a special security paper. There may be a separate statement by the state emblem that the diploma is the state document of higher education ("Диплом является государственным документом о высшем образовании"), or just the name of the country (e.g., Russian Federation, "Российская Федерация").

- 10. Chair of the State Examination Commission, Rector, Secretary
- 11. Seal
- 12. Date and place of issue13. Registration number

B. Sample Diploma of "Specialist" for Foreign Students in the Former USSR



C. Sample Candidate of Sciences Diploma in the Former USSR

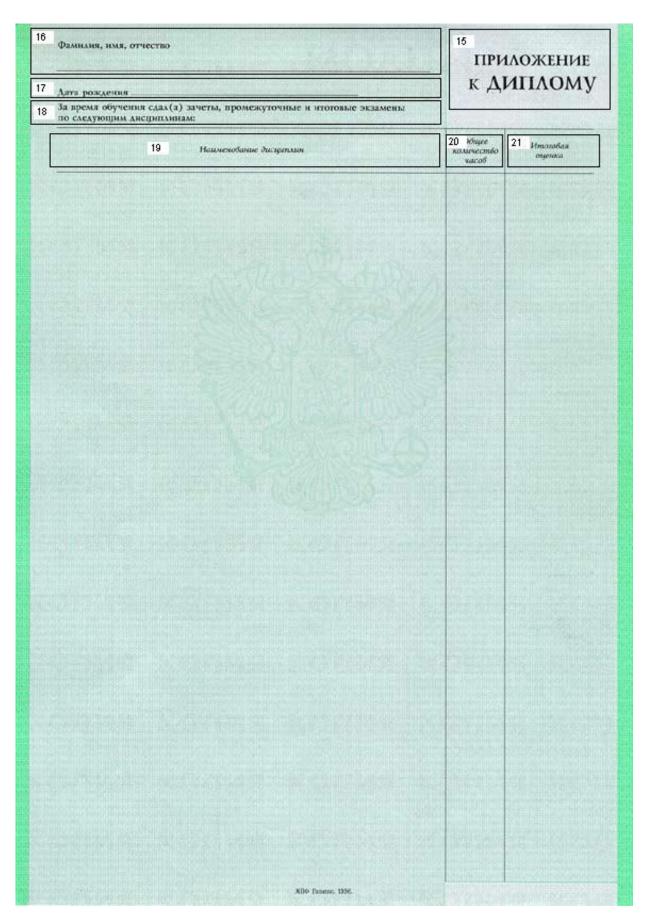


- 1. Diploma of Candidate of Sciences
- 2. Serial number
- 3. Place and date of issue
- 4. By decision of the Dissertation Council at (name of school) of (date of council decision)
- 5. Awarded the degree of Candidate of Economic Sciences
- 6. Chair and secretary of the Dissertation Council

Sample Higher Education Credentials in the Russian Federation

D. Sample Diploma of Incomplete Higher Education in the Russian Federation

- ДИПЛОМ о неполном высшем образования	BH 0032752
настоящий диплом выдан 3 В том, что он/она успешно завершил(а) курс неполного высшего обгазования	Российская федерация
4 Предыдущий документ об образовании	
5 Вступительные испытания	
8 Поступна(а) в	
7 Завершил(а) обучение в	Анплом дасы право профессиональной двательности
8 Нормативный период обучения по очной форме g Направление/специальность	и продолжения высыно образования.
10 Курсовые работы: 11 Практика:	12 (регистрационный номер) года (дата выдачи)
	Ректор 13
	Аскан Секретарь
Продолжение см. на обороте	14 M. N.



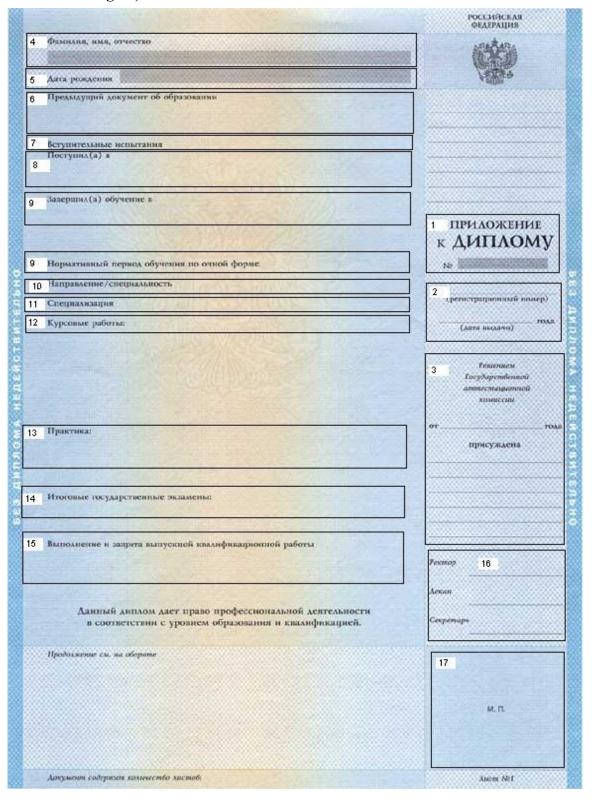
- 1. Diploma of Incomplete Higher Education
- 2. Serial number
- 3. Issued to (Last name, first name, patronymic) that she successfully completed the course of incomplete higher education
- 4. Prior education certificate
- 5. Entrance exams (passed/not passed)
- 6. Started studies in (year) at (name of school)
- 7. Stopped studies in (year) at (name of school)
- 8. Standard duration of full-time study ... years
- 9. Specialty/specialisation
- 10. Annual papers
- 11. Field work
- 12. Registration number and date of issue
- 13. Rector, Dean and Secretary
- 14. Seal
- 15. Supplement to the diploma
- 16. Last name, first name, patronymic
- 17. Date of birth
- 18. During the course of study... passed the following exams
- 19. Subject
- 20. Credit hours
- 21. Grade

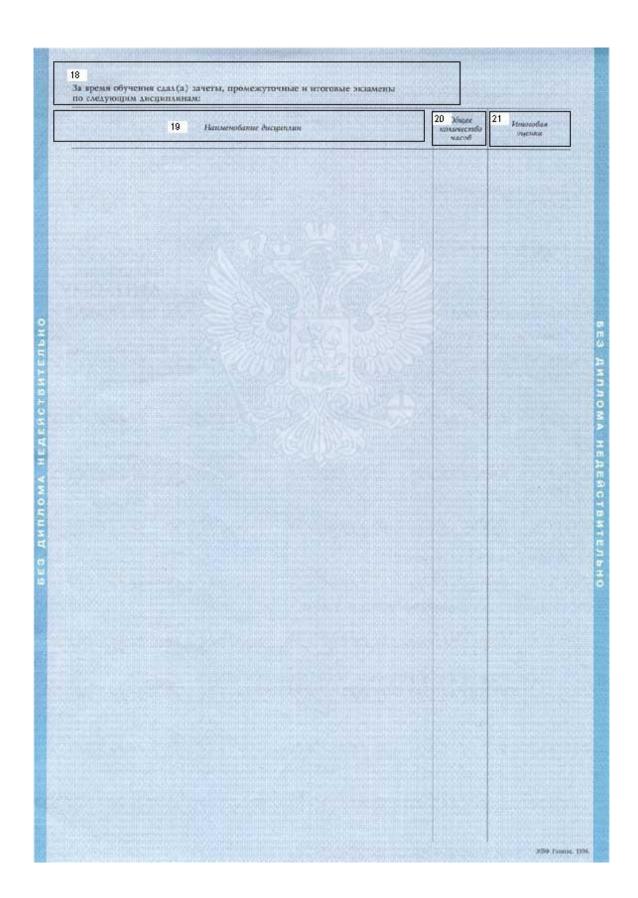
F. Sample Bachelor's Degree Diploma in the Russian Federation



- 9. Diploma, serial number
- 10. By decision of the State Examination Commission of (date)
- 11. Last name, first name, patronymic
- 12. Awarded the degree of Bachelor
- 13. Specialisation at (name of school)
- 14. Chair of the State Examination Commission
- 15. Seal
- 16. Rector

G. Sample Supplement to the Diploma (Bachelor's degree, Diploma of "Specialist", or Master's degree) in the Russian Federation





- 1. Supplement to the diploma number ...
- 2. Registration number and date of issue
- 3. By decision of the State Examination Commission of (date) awarded the degree of ...
- 4. Last name, first name, patronymic
- 5. Date of birth
- 6. Prior education certificate
- 7. Entrance exams (passed/not passed)
- 8. Started studies in (year) at (name of school)
- 9. Stopped studies in (year) at (name of school)
- 9. Standard duration of full-time study ... years
- 10. Specialty
- 11. Specialization
- 12. Annual papers
- 13. Field work
- 14. Final State examination
- 15. Final research project
- 16. Rector, Dean and secretary
- 17. Seal
- 18. During the course of study... passed the following exams
- 19. Subject
- 20. Credit hours
- 21. Grade

H. Sample Diploma of "Specialist" in the Russian Federation



- 1. Registration number
- 2. Diploma, serial number
- 3. By decision of the State Examination Commission of (date)
- 4. Last name, first name, patronymic
- 5. Awarded the qualification of (specialisation)
- 6. Chair of the State Examination Commission, and Rector
- 7. Seal

I. Sample Master's Degree Diploma in the Russian Federation



- 1. Registration number
- 2. Diploma, serial number
- 3. By decision of the State Examination Commission of (date)
- 4. Last name, first name, patronymic
- 5. Awarded the degree of Master
- 6. Specialization at (name of school)
- 7. Chair of the State Examination Commission, and Rector

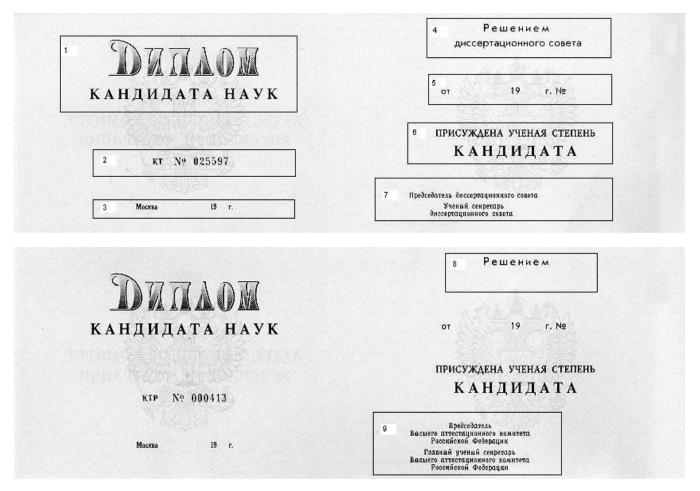
J. Sample Academic Record in the Russian Federation



по следующим дисциплинам:	18 Muge	19
Наименование дисциплин	noneverméo vacos	Итоговен ощеница
Подготовительный факультет 1994/1995 учеб.год		
1. Иностранный язык (французский)	724	хорошо
2. Развивающиеся страны в системе международных отношений	152	хорошо
3. Математика	116	удовлет
4. Биология 5. Химия	76 76	отлично
5. Физвоспитание	76	удовлет зачет
7. Информатика	40	зачет
8. Физика	36	хорошо
9. Введение в лингвострановедение	36	зачет
10. Введение в теорию перевода	36	зачет
Медицинский факультет 1995/2000 учеб.год	3	
	124	
1. Неорганическая химия 2. Анатомия человека	134	удовлет. хорошо
3. Физвоспитание	110	зачет
4. Иностранный язык (французский)	613	хорошо
5. Латинский язык	70	хорошо
6. Физика	192	зачет
7. Основы высшей математики	68	удовлет
8. Биология	213	отлично
9. История России	114	зачет
10. Уход за больными (хирургия) 11. Уход за больными (терапия)	18	зачет
12. Биоорганическая химия	102	хорошо
13. Фармакология	186	хорошо
14. Медицинская физика	102	хорошо
15. Гистология	114	хорошо
16. Патологическая анатомия	185	отлично
17. Патологическая физиология	204 76	отлично
18. Информатика 19. Нормальная анатомия	133	хорошо
20. Международное медицинское право	36	зачет
21. Охрана окружающей среды	51	зачет
22. Психология	108	отлично
23. Философия	74	зачет
24. Медицинская информатика	108	хорошо
25. Физическая и кодлондиая химия 26. Ноомальная физиология	72 352	хорошо
27 Jorusa	70	хорошо
28. Биохимия	222	удовлет
29. Стоматология	19	зачет
30. Истории медицины	72	зачет
31. Микробиология	295	ОПРИВТО
32. Медицинская биотехнология	36	зачет
33. Внутренние болезни 34. Хирургические болезни	167 95	хорошо зачет
35. Хирургия	72	хорошо
36 Гигнена	54	зачет
37. Операгивная хирургия	90	зачет
38. Анестезнология	36	зачет
39. Инфекционные болезии	18	зачет
40. Онкология 20 Общее количество аудиторных часов	54	38407
21 отчислена из РУДН по приказу Ректора	6289 № 25/м	01.02.2000
ээээээээ КОНЕЦ ДОКУМЕНТАЭЭЭЭЭЭ	DESCRIPTION OF THE PARTY OF THE	

- 1. Academic Record
- 2. Last name, first name, patronymic
- 3. Date of birth
- 4. Prior education certificate
- 5. Entrance exams (passed/not passed)
- 6. Started studies in (year) at (name of school)
- 7. Stopped studies in (year) at (name of school)
- 8. Standard duration of full-time study ... years
- 9. Specialty
- 10. Specialization (N/A)
- 11. Annual papers (N/A)
- 12. Field work
- 13. Final State examination (N/A)
- 14. Final research project (N/A)
- 15. Registration number and date of issue
- 16. During the course of study... passed the following exams
- 17. Subject
- 18. Credit hours
- 19. Grade
- 20. Total hours
- 21. Basis for program termination

K. Sample Candidate of Sciences Diploma in the Russian Federation (Two Different Samples)²⁷



²⁷ The name of the institution (not shown) may be handwritten.

- 9. Diploma of Candidate of Sciences
- 10. Serial number
- 11. Place and date of issue
- 12. By decision of the Dissertation Council
- 13. Date of the council decision
- 14. Awarded the degree of Candidate
- 15. Chair and secretary of the Dissertation Council
- 16. By decision of
- 17. Chair and chief secretary of Supreme Certifying Committee of Russian Federation

L. Sample Doctor of Sciences Diploma in the Russian Federation



- 1. Diploma of Doctor of Sciences
- 2. Serial number, place of issue
- 3. By decision of the Supreme Certifying Committee of Russian Federation of (date)
- 4. Awarded the degree of Doctor
- 5. Chair and Chief Secretary of the Supreme Certifying Committee of Russian Federation

Appendix 3: Sample Technical/Vocational Education Credentials

Sample Technical/Vocational Education Credentials in the Former USSR

Державний номітет Української РСР по професійно-технічній освіті	Государственный комитет Украинской ССР по профессионально-техническому образованию
ДИПЛОМ A № 896197	Nº 896197
Цей диалом визано	Настоящий анилом вылан
в тому, що він, воня — 1 — Вересня 1986 р. вступи в до середняєто профессилю тех нестного уталища х 31 м Керсі і 29 — Сервня 1988 р. закінчя в повиня курс середнього професіню технічного училяща за професіню сатосар — исструментальних	в том, что оп , 1 септира 1989 г. поступна в среднее профессионально технитеский у иминуе м 36 г. Керти полный кур среднего профессионально-технического училища по професси слесарь - инструментодлицик
1 здобу В . серевого освіту.	и волучил среднее обтазование
Рішенням екзаменаційної комісії 3 від	Решением экзаменационной комиссии от
присвоено кваліфікацію Слюсар-Енструмен.	присвоена квалификация слесарь - инструме тальщик третрего раз глада
Pososa ersassenaujúnot vonicit,	Председатель икзаменационной комусии М. П. Директор училища
м. п. директор училища заступник виректора училища по навчально-виробничий частим (роботі) 4	даместитель директора учи-фиц по учебно-производственной части (работе)
Видано " 2 штоля 1988 р.	Вадан " 2. " 1110 п.з. 19 8 8

- 1. Diploma serial number ...
- 2. The diploma is issued to ... (name) that s/he ... (date) entered Secondary Professional Technical *Uchilichshe* number 31 of the city Kerch and ... (date) completed a course of studies at the Professional Technical *Uchilichshe* in the occupation of ... as well as completed upper secondary education.
- 3. By decision of the Examination Commission ... (date) ... (name) received the qualification of ... (occupational title and numeric level).
- 4. Date of issue and registration number.

Sample Supplement to the Diploma of Lower Vocational Education (SPTU) in the Former USSR

Выписка	и. общеобразовательный цикл
итоговых оценок успеваемости к диплому № 896194 (без диплома недействительна)	Родная литература укр. лит. 3 (1908) Русский язык Русская литература 3 (1908)
за время обучения в среднело профессиональ- новнежнитеского утилище «31 г Керги при удоблеть, поведении и удоблеть придежании обигружна следующие знании:	Алгебра и начала внализа 3 (1908) Геометрия 3 (1908) Основы информатики 5 (оташено)
2 Наименование предметов Опенки	История СССР 4 (холосио) Всеобщая история 4 (холосио)
ПРОФЕССИОНАЛЬНО-ТЕХНИЧЕСКИЙ ЦИКЛ Уграндрамия технология 4 (хорошо) Упехническое тергение 4 (хорошо) Материаловедение 4 (хорошо) Допуски и технигеские измерения 4 (хорошо) Материалы и технология	Обществоведение География Физика Астрономия Химия Биология Инострациый язык (—) Физическая культура Начальная военная подготовка 7 (1008/1-) 4 (2008/1-) 4 (2008/1-) 7 (2008/1-) 7 (2008/1-) 7 (2008/1-) 7 (2008/1-) 7 (2008/1-) 7 (2008/1-)
машиностровния 4 (хорошо! 5 Электроноский 3 (удов.) Автематизация на основе электронного Выхислительной техники 3 (удов.) Основы экономических 3 (удов.) Знаний 3 (удов.)	ПІ. ФАКУЛЬТАТИВНЫЕ ПРЕДМЕТЫ Эстетическое поспитание У (хокошо) Основы правоведения У (гокошо) Успешно выполнил программу по Этике и психологии семейной жизни* Директор училища М. П. Заместитель директора училища по учебно-производственной части (разоте) Выдана " 2. " Шемя 1988 г.
экзамены 4(хорошо)	Регистрационный №

- 1. Supplement to Diploma serial number ...
- 2. Subjects and grades in Professional Technical education block
- 3. Final qualification examinations
- 4. Subjects and grades in Secondary education block
- 5. Subjects and grades in Electives
- 6. Date of issue and registration number

Sample Diploma of Higher Vocational Education in the Former USSR



- 1. Diploma with distinction serial number ...
- 2. This diploma is issued to ... (name) that s/he ... (date) entered the Medical *Uchilichshe* of the city Chortkov and ... (date) completed a course of studies at the named *Uchilichshe* in the occupation of Feldscher.
- 3. By decision of the State Qualification Commission ... (date) ... (name) received the qualification of Feldscher.

Note: The left-hand side of the Diploma is in the local language of a Soviet Socialist Republic (Ukrainian). In the former USSR, diplomas awarded in the Soviet Socialist Republics (SSRs) other than the Russian Soviet Federative Socialist Republic (RSFSR) were bilingual. In the Russian Federation, diplomas are in Russian.

Sample Supplement to the Diploma of Higher Vocational Education in the Former USSR

1			
	СПЕЦИАЛЬНОСТЬ ФЕЛЬДШЕРСКАЯ НА БАЗЕ ВОСЬМИЛЕТНЕЙ		
	ОБЩЕОБРАЗОВАТЕЛЬНОЙ ШКОЛЫ		
	выписка		
	из семестровых и экзаменационных ведомостей к доплому № 3-4		
	(без даплома недействительна)		
	за время		
	пребывания в Чортковском индицинском училище		
	and the same of the same of the same		
	The state of the s		
	обнаружил следующие знания:		
	1. История <u>5/п.2 т.)</u>		
	2. Общестноведение <i>5[папть</i>]		
	COB. 142080 - 571231126) 3. Ocnobis научного атенама 571231126)		
	Skoroti, glospanie 2 5 (n. žina)		
	4. Aureparypa year year 41 remoral pige sum Strates		
	5. Математика <u>41 септире</u>		
	6. Физика <u>57 пать</u>)		
	7. Химия 4/ четы/ге/		
	8. Иностранный язык <u>4/ четыре/</u> Оси, шеформиятики 4//четыре/		
	9. Латинский плык		
	10. Биология <i>5[п.хть)</i>		
	H. Ahstomes 5[name]		
	12. Физнология <u>4/ Ченты/де</u> /		
	13. Микробиология <u>57/1.277%</u>) 14. Пятологическая физиология		
	с паталогической анатомней 4/4272432/		
	15. Фармакология с рецептурой 5712.2026/		
	16. Гигиена <u>5/или</u>)		
	17. Социальная гигиена и организация эдравоохранения <u>5/22/26/</u>		
	18. Внутренние болезии с уходом за больными Пилина		
	19. Хирургические болезин 4/142тирг/		
	20. Акушерство <u>5///2/ms/</u>		
	THE STATE A PROPERTY OF		

			1
	21.	Детские болевни <i>5] п.3 год.</i>]	
	22.	Эпидемиология 4/1420020/20)	
	23.	Инфекционные болезни <u>5/12.21/24/</u>	
	24.	Волезни зубов и полости рта <u>5/1/2/11/6</u>)	
	25.	Кожные и венерические болезви 57 г.3 гг.6/	
	26.	Reperence S-MM - Strame)	
		Болезни уха, горав, носа <i>5/п2ть</i> /	
		Физнотерация, массаж и	
	Table 1	лечебная физкультура <u>О/п.2 гг. </u> Осм. мер, пометью чест - Под гг. Охрана труда и противопожарная защита <u>5/п.2 гг. </u>	
	29.	Охрана труда и противопожарная защита <u>2/12.2026/</u> Основа писимиличем – 5/12.2026/	
	30.	Основа панимичени -5/пать) Напальная повиная подготовка 5/пать) Васебиная Скоппа поменты 5/129mb/	
	31.	Физическое постигание <u>51 плеть</u>	
	1000	Производственная практика <i>Б [плить]</i>	
	2		
		1. Внутренине болезни <u>5/12-21116</u>	
		2. Хирургические болезии <u>5/12-17724</u>	and the same of th
		3. Обществоведение 5 (12.21126) 4. Детские 5 ни - 5 (12.21126)	
		H. Manager D. Fore - D. Montreal	
3		Вин диреотора по учебной части_	
		Секретарь учебной части_	
	r.	operation 1989 r.	
	Pel	runt de front de financia de f	
			г. Чергиев, в, 208—500, 1-86 г.

- 1.) Specialization Feldscher on the basis of lower secondary education. Supplement to the Diploma serial number ...
- ... (name) during the period of studies at the Medical *Uchilichshe* of the city Chortkov from ... (date) to ... (date) obtained the following grades in the following subjects.
- 2.) Passed the following state examinations.
- 3.) Signatures of Vice-Director and Secretary, seal, place and date of issue, and registration number.

Sample Technical/Vocational Education Credentials in the Russian Federation

Sample Diploma of Lower Vocational Education in the Russian Federation МЯНИСТЕРСТВО ОБРАЗОВАНИЯ РОССИЙСКОЙ ФЕДЕРАЦИИ A № 000000 Настоящий диплом выдан Решением Государственной аггестационной комиссии or « ... » ... 199 c. присвоена квалификация Председатель Государственной эттестационной комиссии M. D. Директор Выдан «...... 199 г. Регистрационный Мг......

1.) Ministry of Education of the Russian Federation

Diploma serial number

The diploma is issued to ... (name) that s/he ... (date) entered (name of the institution) and ... (date) completed a course of studies in the occupation of

By decision of the Attestation Commission ... (date) ... (name) received the qualification of ... (occupational title and numeric level).

Signatures of the Chairman of the State Attestation Commission, Director, and Secretary.

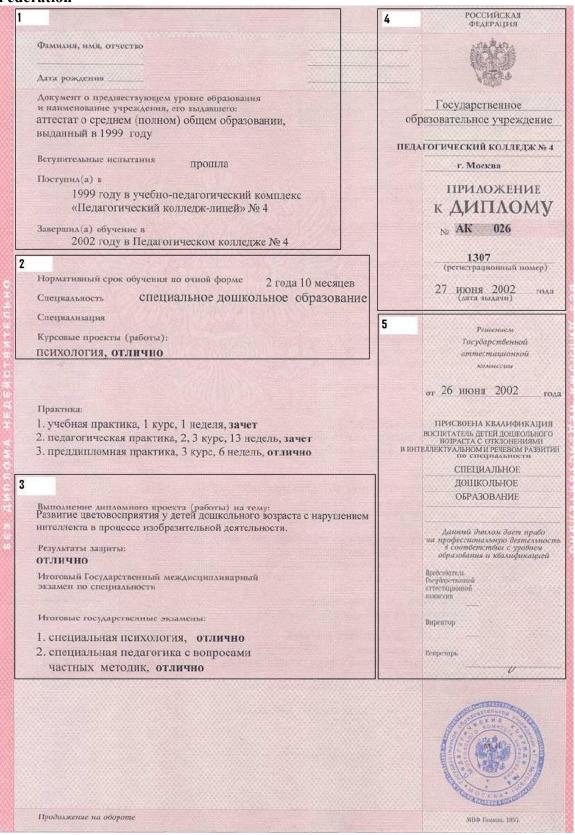
Date of issue and registration number.

Sample Diploma of Higher Vocational Education in the Russian Federation



- 1.) Russian state emblem. This diploma is a state document of higher vocational education.
- 2.) Advanced level.
- 3.) Registration number
- 4.) Russian Federation. State educational institution Pedagogical College number 4. Diploma with Distinction serial number ...
- 5.) By decision of the State Attestation Commission ... (date) ... (name) received the qualification of Preschool Teacher for Children with Special Needs with specialization in Special Preschool Education.

Sample Supplement to the Diploma of Higher Vocational Education in the Russian Federation



	Наименование дисциплирі	Количество аудиторных часов	Итогобая оценка
1.	основы философии	102	отлично
2.	основы экономики	51	онгилто
3.	основы социологии и политологии	51	онгипто
1 .	основы права история Отечества	61	онрикто
5. 5.		87	хорошо
7.	мировая художественная культура литература с основами литературоведения	87	онгиято онгикто
3.	культура речи	57	опрично
).	иностранный язык (английский)	244	ОТЛИЧНО
10.	математика	51	хорошо
11.	информатика	54	онично
12.	основы естествознания и экологии	111	хорошо
13.	русский язык е основами языкознания	168	хорошо
14.	физическая культура	300	зачет
15.	анатомия и физиология детей раннего и дошкольного возраста, основы здорового образа жизни, основы педиатрии и гигиены	271	отлично
16.	безопасность жизнедеятельности	72	онрикто
17. 18.	невропатология детского возраста	81 102	онично
19.	психопагология детского возраста	51	онично
20.	речевые, сенсорные системы и их нарушения основы генетики	80	ОТЛИЧНО ОТЛИЧНО
21.	клиника интеллектуальных нарушений	32	ОПРИСТО
22.	психология	273	отлично
23.	педагогика	245	отлично
24.	основы педагогического мастерства	54	отлично
25.	основы специальной педагогики и специальной психологии	133	отлично
26.	олигофренопсихология, логопсихология	127	онгилто
27. 28.	русский язык	37	хорошо
29.	олигофренопедагогика	127 171	отлично
30.	детская литература с практикумом по выразительному чтению изобразительная деятельность	111	отлично
31.	практикум по художественному труду и конструированию	111	онгикто онгикто
32.	музыка, ритмика	111	отлично
33.	основы логопедии с практикумом по звукопроизношению специальные методики:	153	отлично
34.	методика развития речи и ознакомления с окружающим	153	отлично
35.	методика ознакомления с природой и экологического образования	102	онгилто
36.	методика математического развития	127	отлично
37.	методика обучения изобразительной деягельности и конструированию	132	онично
38.	методика физического воспитания и развития	127	отлично
39. 40.	методика трудового воспитания	51 120	оничисто
40. 41.	методика музыкального развития, коррекционная ритмика методика обучения игре	69	ОТЛИЧНО
42.	методика обучения игре методика воспитания социально-личностных качеств и поведения	54	отлично отлично
43.	методика развития слухового и зрительного восприятия	51	отлично
44.	методика использования ТСО и ЭВТ	54	отлично
45.	основы военной службы	68	зачет

1.) Last name, first name, patronymic...

Date of birth...

Admitted based on the Certificate of Completion of Secondary Education issued in 1999

Passed entrance examinations

Admitted to Pedagogical College number 4 in 1999 Graduated from Pedagogical College number 4 in 2002

2.) Normative period of full-time study: 2 years 10 months Specialization: Special Preschool Education

Projects/papers: Psychology, excellent

3.) Final diploma project/paper: topic and grade Final state examinations: subjects and grades

4.) Russian Federation

State educational institution Pedagogical College number 4 of the city of Moscow Supplement to the Diploma serial number Registration number (date)

- 5.) By decision of the State Attestation Commission ... (date) awarded the qualification of Preschool Teacher for Children with Special Needs with specialization in Special Preschool Education.

 Signatures of the Chairman of the State Attestation Commission, Director, and Secretary
- 6.) Over the period of study passed examinations in the following subjects:
 Subjects Audited Hours Final Grade

Appendix 4: Ranking of Russian Institutions of Higher Education.

Listed below are the institutions ranked top 10 in each category by the Ministry of Education of the Russian Federation. **Iii

• Universities

Rank	Name of University
1	Moscow State University
2	Saint-Petersburg State University
3	Moscow Physical Technical Institute (State University)
4	Moscow Physical Engineering University (State University)
5	Russian Peoples' Friendship University
6	Tomsk State University
7	Nizhny Novgorod State University
8	Rostov State University
9	Kazan State University
10	South Ural State University

• Universities of Technical and Technological Fields

Rank	Name of University
1	Moscow State Technical University named after N.E. Bauman
2	Moscow State University of Mines
3	Saint-Petersburg State Institute of Mines (Technical University)
4	Saint-Petersburg State Politechnical University
5	Russian State University of Oil and Gas (Moscow)
6	Moscow State Technological University (STANKIN)
7	Moscow Energy Institute (Technical University)
8	Moscow State University of Electronic Technology (Technical University)
9	Tomsk Politechnical UniversityMoscow State Geological Exploration University
10	Voronezh State Technical University

• Pedagogical Institutes

Rank	Name of University
1	Moscow State Pedagogical University
2	Russian State Pedagogical University (St. Petersburg)
3	Moscow State Linguistic University
4	Nizhny Novgorod State Linguistic University
5	Volga State Engineering-Pedagogical Academy
6	Moscow City Pedagogical University
7	Volgograd State Pedagogical University
8	Moscow State Open Pedagogical University
9	Rostov State Pedagogical University
10	Samara State Pedagogical University

• Higher Education Institutions of Economics Rank

Kank	Name of University
1	Saint-Petersburg State University of Economics and Finance
2	Academy of National Economy under the Government of Russian Federation (Moscow)
3	State University - Higher School of Economics
4	State University of Management (Moscow)

- 5 Russian Academy of Economics (Moscow)
- 6 Moscow State University of Economics, Statistics and Informatics
- 7 All-Russian Correspondence Institute of Finance and Economics (Moscow)
- 8 Moscow State University of Consumer's Cooperation
- 9 Russian State University of Trade and Economics
- Saint-Petersburg State University for Engineering and Economics

• Higher Education Institutions of Agriculture

Rank Name of University Moscow Agricultural Academy 1 2 Stavropol State Agrarian University 3 Kuban State Agrarian University Russian State Correspondence Agrarian Academy (Balashikha Moscow Region) 4 5 Saratov State Agrarian University State University of Land Use Planning (Moscow) 6 Voronezh State Agrarian University 7 Omsk State Agrarian University 8 9 Ural State Agricultural Academy (Yekaterinburg) 10 Bashkir State Agrarian University

• Institutions of Medical Science

Rank	Name of University
1	Moscow Medical Academy
2	Moscow State Medical Stomatological University
3	Russian State Medical University
4	Saint Petersburg State Medical University
5	Saberian State Medical University
6	Ryazan State Medical University
7	Volgograd State Medical University
8	Novosibirsk State Medical University
9	Saint Petersburg State Medical Academy
10	Bashkir State Medical Academy

• Higher Education Institutions of Government Service

Rank	Name of University
1	Russian Academy of Governmental Service under the President of the Russian
	Federation (Moscow)
2	Moscow State Institute of International Relations (University)
3	North-West Academy of Governmental Service (St. Petersburg)
4	Povolzhie Academy of Governmental Service (Saratov)
5	Northern Caucasia Academy of Governmental Service (Rostov-on-Don)
6	Volgo-Vaytsk Academy of Governmental Service (Nizhny Novgorod)
7	Siberian Academy of Governmental Service (Novosibirsk)
8	Ural Academy of Governmental Service (Yekaterinburg)
9	Orel Regional Academy of Governmental Service
10	Volgograd Academy of Governmental Service

• Higher Education Institutions of Law

Rank	Name of University
1	Moscow State Law Academy
2	Ural State Law Academy
3	Saratov State Law Academy
4	Russian Academy of Justice
5	Saint-Petersburg Law Institute of the General Prosecutor's of Russia
6	Academy of Law and Management of Ministry of Justice of Russia
7	Vologda Institute of Law and Economics
8	Pskov Law Institute of Ministry of Justice of Russia

• Higher Education Institutions of Service

Rank	Name of University
1	Moscow State University of Service
2	South-Ural State University of Economics and Service
3	Vladivostok State University of Economics and Service
4	Ufa State University of Service
5	Sochi State University of Tourism and Resort Business
6	Saint-Petersburg State Academy of Economics and Service
7	Toliyatti State Institute of Service
8	Omsk State Institute of Service

• Higher Education Institutions of Architecture and Art

Rank	Name of University
1	Moscow Architectural Institute (State Academy)
2	Moscow State Artistically Industrial University
3	Ural State Architectural - Artistic Academy (Ekaterinburg)
4	Novosibirsk State Architectural - Artistic Academy
5	Saint-Petersburg State Artistically Industrial Academy
6	Rostov State Academy of Architecture and Art

• Non-state Accredited Higher Education Institutions with 700+ full time students

Name of University
Russian International Academy of Tourism (Skhodnya)
International University (Moscow)
Moscow Academy of Finance and Law
Tatar Institute for Business Promotion (Kazan)
Institute of Special Pedagogy and Psychology (Saint-Petersburg)
Institute of Management and Economy (Saint-Petersburg)
Moscow Open Social University (Institute)
Taganrog Institute of Management and Economics
Saint-Petersburg Institute of Foreign Relations, Economics and Law
International Independent University of Ecology and Politology (Moscow

• Non-state Accredited Higher Education Institutions with 100-700 full time students

on-state Accredited Higher Education Histitutions with 100-700 full time students		
Rank	Name of University	
1	Institute of International Law and Economics named after A.S. Griboedov (Moscow)	
2	Institute of Practical Oriental Studies (Moscow)	
3	Institute of Management (Arkhangelsk)	
4	Moscow Institute of Economics, Politics and Law	
5	Saint-Petersburg International Institute of Management	

- Institute of World Economy (Moscow)
 Ural Institute of Finance and Law (Ekaterinburg)
 Novosibirsk Institute of Economics and Management
 International Bank Institute (Saint-Petersburg)
 Institute of Jurisprudence and Management (Saint-Petersburg)

ENDNOTES

ⁱ Nordic Recognition Network (NORRIC). The System of Education in Russia. 2005

ⁱⁱ For teacher training requirements at this and other stages of education see the chapter on Teacher Training.

iii Adapted from *Informatsionnyi Sbornik Ministerstva Narodnogo Obrazovaniya RSFSR*, no. 14 May 1989 pp18-19.

By the Ministry of Education Order No. 1312 of September 3, 2004

^v Ministry of Education of the Russian Federation, National Information Centre on Academic Recognition and Mobility.

vi Ministry of Education of the Russian Federation, National Information Centre on Academic Recognition and Mobility.

vii Ministry of Education of the Russian Federation.

viii Adapted from *Informatsionnyi Sbornik Ministerstva Narodnogo Obrazovaniya RSFSR*, no. 14 May 1989 pp18-19. ix Ministry of Education of the Russian Federation, National Information Centre on

Academic Recognition and Mobility.

^x Adapted from *Informatsionnyi Sbornik Ministerstva Narodnogo Obrazovaniya RSFSR*, no. 14 May 1989 pp18-19

Alberta Advanced Education, International Qualifications Assessment Service (IQAS). Issue: Determining an Appropriate Alberta Equivalency for Elementary and Secondary Education in the Former USSR

xii Ministry of Education of the Russian Federation, National Information Centre on Academic Recognition and Mobility.

xiii Sample documents are made available by the National Information Centre on Academic Recognation and Mobility of the Ministry of Eucation and Science of the Russian Federation.

xiv UNESCO. Mutual Recognition of Qualifications: The Russian Federation and the Other European Countries. Second Edition. 2000. (Compiled by Kouptsov Oleg Dr.)

xvi Ministry of Education Order Number 334 "Program of the Ministry of Education and Russian Academy of Education concerning mutual activities towards implementation of profile education at the third level of secondary education" of 9 June 2003

xvii For more information see www.profile-edu.ru

xviii Nordic Recognition Network (NORRIC). The System of Education in Russia. 2005

xixWe define undergraduate programs as those directly admitted to after school education and its equivalents. We define graduate programs as those admitted to from a level one (first degree) higher education program. These terms not meant to portray equivalency to any programs in other countries. The terms "Professor" and "Associate Professor" refer to the requirements and interpretation established in the country of the former USSR or the Russian Federation.

xx Popovich E, Levin-Stankevich B. *The System of Soviet Education*. 1992

xxi Ibid.

xxii Ibid.

xxiii Ibid.

xxiv http://www.edu.ru/db/cgi-bin/portal/spe/list.plx?substr=&gr=0&st=all. In Russian only.

xxv See Chapter 3 on School Education.

xxvi See vi.

xxvii See vi.

xxviiiSee i.

xxix During the Soviet period the Candidate of Sciences was awarded directly by decision of the Dissertation Council. The Russian Federation continued this practice until 1997. From that date the Supreme Certifying Committee of the Russian Federation approved the decision of the Dissertation Council.

xxx State Education Standards of the Russian Federation as translated in NORRIC *The System of Education* in Russia, 2005.

xxxi Ibid.

xxxii Ibid.

xxxiii Ibid.

xxxiv A list of specialisations (as per the State Education Standard) for lower vocational education may be found at http://www.edu.ru/db/cgi-bin/portal/nach/list1.plx?substr= and

http://www.edu.ru/db/mo/Data/d_00/pr7-1.doc. A list of specialisations (as per the State Education Standard) for higher vocational education may be found at http://www.edu.ru/db/cgibin/portal/sred/list.plx?substr= . Both are available in Russian only.

xxxv UK NARRIC Interskills.

xxxvi The Russian words "техник" (tecnik) and "технолог" (tecnolog) mean "technician" and "technologist" respectively. However, they may have been used interchangeably to describe similar programs. The specialisation on the diploma, the coursework and its duration should be given more weight than the literal qualification title. xxxvii An IQAS file.

xxxviii Ibid.

xxxix Ibid.

xl Ibid.

xli Ibid.

xlii http://www.useic.ru/russian education/rating.htm. Results as of 2004. Not currently updated.