
THE SOVIET SYSTEM OF MASS EDUCATION

1. SOVIET SCHOOLS OF GENERAL EDUCATION

The Ten-Year School

The nearest Soviet counterpart of the twelve grades comprising elementary and secondary education in the United States is the so-called ten-year school, with ten grades, age 7 to 17, divided into 4-3-3 progressive stages very roughly corresponding to the 6-3-3 division of the elementary, junior high, and (college preparatory) senior high school grades in the American system. In terms of the Soviet 4-3-3 grade divisions an individual school may have only the first four grades (elementary school), or seven grades ("incomplete secondary" or "seven-year school"), or all ten grades ("complete secondary" or "ten-year school"), each corresponding grade being identical as to content and level of instruction in all such schools.*

Beyond the fact that both the twelve-grade schools in the United States and the Soviet ten-year school provide mass education up to the college level and that both are coeducational there are no significant similarities. On the contrary, as will be discussed in the following chapters, in every essential aspect the two systems stand in sharp contrast. For the present we need to note only one of the most distinguishing characteristics of the Soviet ten-year school: the uniformity of its curricula, textbooks, and methods of instruction, grade for grade, with only minor regional variations throughout the Soviet Union. In Moscow or Irkutsk, Russians or Buryats, boys or girls in corresponding grades follow the same curriculum prescribed by the Ministry of Public Education and study identical subjects, following uniform syllabi and, except for the language in which they are written, identical "approved"

* Georgian and Lithuanian schools have an 11-year course of instruction; Latvia and Estonia have both ten- and eleven-year schools.

textbooks. Thus, in theory, each intermediate level (elementary, after 4 years, at age 11; "incomplete secondary," after 3 more years, at age 14) and the terminal level, after graduation from the tenth grade at age 17, are all clearly definable as to the scope and subjects of instruction they imply.

In reality, the uniformity is purely formal. There are significant qualitative differences between the city and rural schools of general education, those in the densely populated areas and in remote localities, those in the predominantly Russian communities and in the national minority regions. Furthermore, not all Soviet children attend regular (full-time) ten-year schools; there are also part-time schools for "working youth" (grades V through X) and part-time evening schools for (usually over-age) "rural youth" (grades I through VII). Although the subjects, as well as the scope of instruction, in these schools are identical on paper with those provided in the curricula of the regular schools, these part-time schools are qualitatively distinct. There is also an unknown but relatively small number of military schools of secondary education with a curriculum in general subjects comparable or identical to that in the corresponding grades of the regular ten-year school. Moreover, beginning with the 1956-1957 academic year, still another type, the widely commented upon boarding schools designed to place Soviet secondary education under completely controlled conditions, have been opened in limited numbers. These schools are briefly discussed in Chapter 2, but it will be some years before their relation to higher education will become apparent.

The Universal and Compulsory Minimum

In tsarist Russia, according to historian George Vernadsky, just prior to World War I the number of pupils in the primary schools was 8 million, somewhat over half the number of children of school age. The educational committee of the Duma estimated that universal education through the primary grades would be reached in 1922.¹ As history would have it, that year, after the virtual destruction of the pre-Revolutionary (state and private) school system during the civil war, witnessed the very nadir of public education in the by then 5-year-old Soviet Russia. Not until 1930 was legislation passed prescribing 3 years of education (age 8 through 10) as a universal and compulsory minimum for 1930-1931, to be expanded to 4 years (age 8 through 11) by the following year;* and not until c. 1934 was 4-year elementary education established on a basis anywhere nearly approach-

* 16th Congress of the Communist Party, June-July 1930.

ing universality. Nonetheless, the Party's 17th Congress, held in January 1934, proclaimed for a universal 7-year base, an objective which only recently has been realized.

The history of the intervening years is worth noting. The 18th Congress (1939) prescribed the achievement during the third Five Year Plan (1938–1942) of universal *secondary education* (10 years, age 8 through 18) in the cities and “the final achievement” of universal 7-year education. Whatever progress in that direction may have been made from 1939 to 1941 was reversed by the war. In 1949 it was decreed that compulsory 7-year education must be made universal within 3 years. On August 13, 1950, *Pravda* stated that “since last year our country has everywhere passed on to universal compulsory seven-year education.” *Pravda's* claim was premature. Since c. 1954, however, with some substantial lapses here and there, most Soviet children have continued on at least through the seventh grade (age 7 through 14);* and in 1956 the Constitution of the USSR was amended to state in its article on education that in the Soviet Union a 7-year education is universal and compulsory.†

It is the Soviets' intention that 10 years of education shall be the minimum by 1960. Judging by past progress toward universality of 7-year education, it is doubtful that this objective will be fully met. As late as 1955 it was said:

Year after year the national plan in regard to universally compulsory education is not fulfilled. Many children still receive no instruction, and the number of children who leave school is still extremely large.²

In the meantime, however, the changes made in the definition of objectives and a continued expansion of part-time schools and of vocational training facilities in the Soviet Union should materially help to raise the proportion of students with 10 years of education of one type or another. As originally formulated by the Party's 19th Congress (1952), the minimum was to be a *ten-year school* education—in urban

* The entering age for the first grade was changed to 7 by a decree dated September 8, 1943.

† Article 121, as amended July 14, 1956:

“The citizens of the USSR have the right to education.

“This right is secured by universal compulsory seven-year education, by the widespread development of secondary education; by [the fact] that education of all types—whether secondary or higher education—is free; by a system of state scholarships for college and university students who distinguish themselves; by the conduct of school instruction in the native language [of the student]; and by the provision for industrial, technical, and agronomic free training of workers at factories, state farms, machine-tractor stations, and collective farms.”

(*Narodnoye obrazovaniye*, No. 9, September 1956.)

areas by 1955, and throughout the Soviet Union by 1960. The 20th Congress, however, in 1956 somewhat modified the original formulation of the 1960 goal; its directive prescribes "essentially to achieve" universal 10-year education which need not be ten-year school education but 10 *years* of education and thus may include 7 years of general education and 3 years of technical or vocational training; and the 7 years of general education may include education obtained on a part-time basis.

Part-Time Schools of General Education

We have already mentioned the schools for "working youth" and for "rural youth." Although first organized as emergency war measures to provide a modicum of education for the adolescent girls and boys employed in industry and in agriculture whose normal education was interrupted or who had no previous education, both have apparently become permanent fixtures in the Soviet educational system.

The schools for working youth were organized in 1943, their aim, according to the regulations issued in the following year, being to provide general education corresponding to the scope of the seven- and ten-year schools and "to nurture the youth in the spirit of unconditional love of the Motherland and devotion to the Soviet rule." The establishment of these schools is the responsibility of the councils (soviets) in each of the fifteen political subdivisions ("states") of the Soviet Union and of their prototypes at the lower levels of administration, down to the city councils. Academic supervision and authority, as with all other schools of general education below the university level (except the "technicums," see Chapter 4), rest with the ministries of public instruction in each of the constituent "states" of the Soviet Union. Each school for working youth by definition is attached to one or more of the industrial enterprises in a given locality, it being the responsibility of these industrial units to provide the necessary space and equipment and to see that the work schedule of the employed juveniles does not interfere with the established school hours. The pupils enrolled in schools for working youth may be divided into as many groups as there are work shifts in a given plant, each group attending 3 hours of morning, afternoon, or evening classes 3 days a week for 48 weeks per year.

There are two types of schools for working youth: the 7-year level, with grades V through VII, and the 10-year level, with grades V through X. Although a prior completion of grades I through IV was assumed, the regulations of 1944 provided for the organization of preparatory groups for those who had not completed elementary education. Soviet

statistics show that, at least since 1950, the per cent of over-age students at the elementary level has been dropping. In the fall of 1950, when the total registration in these schools was 838,000, some 86,000 were to be enrolled in grades I through IV; in 1955 the comparable figure was reported at 54,000 in the total working youth school registration of 1.4 million.³ Fall registration statistics for working youth schools from 1950 through 1955 are shown in Table 1. The steadily growing registration for the three upper grades of these part-time schools suggests that, in addition to the promoted working youth pupils, the senior grade ranks include a substantial number of pupils transferred from schools of general education.

TABLE 1. FALL REGISTRATION IN PART-TIME SCHOOLS FOR WORKING YOUTH
1950-1955
USSR

Year	Total Registration (thousands)	Registration by Grades		
		I-IV (thousands)	V-VII (thousands)	VIII-X (thousands)
1950	838.3	85.6	460.4	292.3
1951	1,001.8	91.6	527.1	383.1
1952	1,126.3	80.5	558.8	487.0
1953	1,352.9	79.0	628.1	645.8
1954	1,416.6	72.8	589.9	753.9
1955	1,387.1	54.0	533.9	799.2

Source: *Kul'turnoye stroitel'stvo SSSR, statisticheskii sbornik* (Cultural Progress of the USSR, a Statistical Compilation), Moscow: State Statistical Publications, 1956 (hereafter referred to as *Kul'turnoye stroitel'stvo SSSR, 1956*), pp. 156-157.

No direct statistics are available on either the actual *attendance* or the number *completing* a given grade in working youth schools. Nevertheless, one source specifically stated that in 1952 (when, we would add, the supply of ten-year school graduates was low relative to the quota for college freshman enrollment) 16,000 graduates of the schools for working youth entered institutions of higher education.⁴ The fact that qualitatively the graduates of the working youth schools are rated below the graduates of the full-time, regular schools is clear from numerous Soviet references. In 1954, for example, the RSFSR Deputy Minister of Education wrote:

Many institutions of higher technical education refer to the graduates of the working youth schools with alarm. The graduates of the working youth schools possess solid work-experience, are distinguished by considerable purposefulness, application and persistence in studying; and those among them who enter [that is, are admitted

to] institutions of higher education give promise of becoming valuable workers. But they lag behind the pupils of the regular schools in theoretical preparation; they frequently fail to qualify in the competitive admission examinations; and those who are admitted show indifferent achievement in higher mathematics and, as a result, a poorer mastery of all other scientific and engineering subjects.⁶

It would be a safe assumption that a very large proportion, if not all, of the working youth school graduates who qualify for admission to schools of higher education enter either as correspondence or evening students on a part-time basis combined with full-time employment.

The schools for rural youth, "for the purpose of instructing the rural youth and adolescents [14 years of age and older] without a disruption of agricultural work," were established in 1944. These are evening schools originally planned to conduct classes 4 hours per day, 5 days per week from November 1 through March. Two types are recognized: the elementary, with grades I through IV, and the seven-year, with grades I through VII. In many cases a "school" for rural youth is simply a group of over-age peasant children enrolled in special evening classes at the regular schools. In the fall of 1950 only 511.7 thousand children were registered in some 15,564 "schools"—an average of fewer than thirty-three pupils per unit. In 1955 the total registration was

TABLE 2. FALL REGISTRATION IN PART-TIME SCHOOLS FOR RURAL YOUTH
1950-1955
USSR

Year	Total Registration (thousands)	Registration by Grades		
		I-IV (thousands)	V-VII (thousands)	VIII-X (thousands)
1950	511.7	259.8	248.3	3.6
1951	481.1	210.6	268.1	2.4
1952	455.2	144.5	308.2	2.5
1953	479.2	109.8	364.7	4.7
1954	395.8	68.0	320.4	7.4
1955	345.4	44.1	277.8	23.5

Source: *Kul'turnoye stroitel'stvo SSSR, 1956*, pp. 156-157.

345.4 thousand for 10,772 "schools"—about thirty-two students per school. Although originally these schools were limited to seven grades, Soviet statistics since c. 1950 have shown a small registration for the upper grades—for the tenth grade, for instance, 0.3 thousand in 1950, 1.9 thousand in 1954, and 5.1 thousand in 1955. A summary of the rural youth school registration statistics is given in Table 2. In con-

trast with the comparable figures for the working youth schools, the total registration in the rural youth schools has been declining.

Judging by many indications—among them, the irregularity of attendance, high drop-out rates, part-time teachers, and lack of facilities—both the efficiency and the quality of these schools are lower than in the working youth schools.

No high claims are made for either type even in the most patriotic Soviet accounts. On the contrary, a typical comment runs something like the following:

The educational process in schools for working and rural youth is badly organized. Many schools are not fully staffed. Lessons are conducted at hours which are not suitable for the employed youngsters—hence the poor attendance and low level of achievement.⁶

The Russian Republic (RSFSR) Minister of Higher Education in 1955 implied that these part-time schools are not expected to maintain regular standards when he emphasized that “hoodlums and pupils who do not respond to correction” should be expelled from the regular schools and added that “such people would not be denied the opportunity for the education they need for the future [inasmuch as they can study] in schools for young industrial and agricultural workers.”⁷

The peak of registration, if not of actual enrollment, may have been reached for the agricultural youth schools in 1950, with a 512,000 registration, and in the industrial schools perhaps in 1954, with over 1.4 million on the rolls. Since these dates, the registration in both categories has been declining; but in 1955, some 11 years after these emergency schools were first established, they still accounted for 1.7 million pupils—roughly, 6 per cent of the number enrolled in the regular schools. Apparently, their enrollment is again expected to increase. E. I. Afanasenko, the RSFSR Minister of Education, as reported in *Uchitel'skaya gazeta* of May 16, 1956, stated that in the RSFSR alone (which accounts for approximately 55.2 per cent of the USSR population) by 1960 there should be 1.15 million enrolled in the working youth schools and 0.23 million in the rural part-time schools. Whatever the future rate of growth and particular role of these part-time schools, they have not in the past figured significantly in the education of future scientists and engineers, and no more needs to be said about them for our purpose.

2. SPECIAL SCHOOLS OF SECONDARY EDUCATION

Military Schools

In tsarist Russia the schools of secondary education included gymnasiums (classical schools preparing students mainly for the universities), the Russian counterpart of the German *Oberrealschule* (intended largely for the future students of engineering schools), commercial secondary schools (with programs generally intended as preparation for professional schools), and the so-called cadet corps schools which combined secondary education (more or less of the *Oberrealschule* type) with military upbringing and which were designed largely to prepare students for officers' training and careers in the tsarist armed forces. Under the Soviets, gymnasiums and other civilian types of pre-Revolutionary schools were reorganized and eventually integrated within the uniform network of the ten-year schools; the cadet corps schools were categorically abolished in 1918. But some 26 years later, during the last war, a system of conceptually identical schools was organized—tsarist-type uniforms and all—as the Suvorov and the Nakhimov schools, named after General A. V. Suvorov (1730–1800) and Admiral P. S. Nakhimov (1802–1855), respectively. These are Soviet preparatory schools for the Soviet counterparts of the United States Military, Naval, and Air Academies.

The training of the future Soviet officers starts early. According to one émigré source, the entrance age for the Suvorov and Nakhimov schools was originally set at 8 years of age, but, he added:

Experience has shown that little boys who have just left home were unbearably lonesome away from the family and were unable all at once to immerse themselves in the intricacies of the military science prescribed [by the USSR Ministry of Defense] for the first-graders.⁸

A Soviet encyclopedia* states that instruction at the Suvorov schools starts with the fourth grade (age 11) and at the Nakhimov schools with grade VI. Both types of schools give the equivalent of the ten-year school general education plus a great deal of military training, including summer camping, exercises, and training cruises. No statistics as to the enrollment, graduation, or disposition of Suvorov and Nakhimov graduates are available. The same source (2nd Ed., Vol. 29) states that “there are Nakhimov schools in Baku and Leningrad”; perhaps there

* *Bolshaya sovetskaya entsiklopediya* (hereafter referred to as *BSE*), 2nd Ed., Vol. 29, 1954, and Vol. 41, 1956.

are only two of these pre-naval training schools in the Soviet Union. The number of Suvorov schools is not known to this writer.

Whatever their number, it is certain that these pre-officer training schools enjoy a highly privileged position and that their students are given extraordinary care and attention. Not only is the instruction in these schools free, but in every other respect the boys selected for training are cared for wholly by the state. All references suggest that no costs are spared to provide the best of facilities, teaching personnel, and physical living conditions—perhaps by way of compensation for the extremely rigorous regime and discipline. Judging by all accounts, the students of these establishments are likely to be extremely well conditioned, thoroughly indoctrinated, and otherwise fully prepared for Soviet officer training and future careers in the Soviet armed forces.

Specialized Secondary Education

A very important Soviet alternative, and, since 1952, a supplement, to the regular ten-year school education is provided by a large network of schools usually called technicums or more generally "schools of specialized secondary education." These schools combine general education with a program of vocational training at the subprofessional level. They accept, on a competitive basis, seven-year school graduates (age 14) for the normal course of instruction of 4 years and ten-year school graduates for an accelerated course of from 2 to 2½ years training for all kinds of occupations, including those in engineering and other technical fields.

The technicums, with a total enrollment in 1955–1956 of nearly 2 million, of whom 1.7 million were full-time resident students, play a vital role in the formation and growth of the all-important subprofessional specialists in every imaginable occupational category. Because of their importance for the industrial and the economic mechanism of the Soviet Union generally, they are discussed separately in Chapter 4.

Here it may be noted that no one category of American institutions for subprofessional education can be properly equated to the Soviet technicums as a group. Even in the Soviet system they occupy a unique administrative and functional position. Whereas all civilian schools of general education in the Soviet Union are under the complete jurisdiction of the ministries of public education, the technicums are under a dual control. Academically, they are supervised by the Ministry of *Higher* Education; in all other respects each technicum is operated by, and exclusively for, an industrial or other operational ministry or agency of the state or for a single plant under their control. Thus,

although in terms of general education technicums are formally equated with the ten-year school, they are outside the basic network of general schools of public education; and, although technicums are under the control of the Soviet Ministry of Higher Education, they are not rated as higher educational institutions.

3. THE USSR "STATE LABOR RESERVE" AND ITS TRAINING PROGRAMS

Some hundreds of thousands of teen-age Soviet boys and girls are drafted each year for training in the schools of the USSR "State Labor Reserve," a very important, centrally controlled adjunct of Soviet industry.

The original decree of October 2, 1940, "On the State Labor Reserves of the USSR," authorized an annual draft of from 800,000 to 1,000,000 males 14 to 17 years of age for training, the term of which was to vary from 6 months to 2 years, and for a subsequent compulsory work duty of 4 years "at regular wages" during which period they were deferred from military service. The decree obligated every rural community (collective farm) to provide each year two males, 14 to 17, either volunteers or draftees, per one hundred of the community's total population between the ages of 14 and 55. The urban quotas were to be established yearly by the Council of Ministers and filled by the city councils (soviets). During the war the labor draft was extended to girls from 16 to 18 years old; and in 1947 it was extended to include girls from age 15 to 18 and young males up to 19 years of age.

The quotas authorized by the 1940 labor draft decree have not been filled every year. An article published in *Pravda* on August 20, 1956 stated that more than 8 million State Labor Reserve workers had been trained since the inauguration of the plan in 1940, and that during the 1955-1960 period the labor reserve schools must train "three and a half million such workers for industry, transportation, construction, and agriculture."

Scholastically and occupationally these schools are a dead end. It is plainly evident that their chief function has been to provide a pool of cheap mobile labor under the guise of an educational procedure. An article in *Pravda*, February 15, 1948, for instance, reported that in 1947 "pupils in labor schools produced 2 million tons of coal and 270,000 tons of ore, overhauled and repaired 2,000 locomotives and 17,000 freight cars, built 2,000 metalworking machines, and made 60 million rubles' worth of spare parts for agricultural machinery." As to mobility, in 1947 and 1948, for instance, to meet the shortage

of workers in the coal industry, Soviet labor reserve schools "trained and sent about 690,000 young workers" to the coal mines.⁹ The implications of such official statements are clear; the fraudulence of the Soviet stand against child labor is evident.

Vital as these schools are for the Soviet economy, only a brief further mention needs to be made here of the several types of schools operated within the Soviet labor reserve system. We shall refer to them later only as Soviet alternatives to the more advanced training with which we are mainly concerned.*

The FZO Schools

At the lowest level stand the Soviet labor reserve schools of "FZO"—"factory and plant instruction." These schools recruit and train young workers, male and female, largely for coal and ore mining, metallurgical and oil industries, and the building trades—all of which together represent numerically the largest category of labor reserve workers. The normal age of enrollment is 16 to 19; and the course of instruction varies from the originally prescribed 6 months up to 1 year in certain trades. FZO training is supposed to include 100 hours of classroom instruction along with direct work training in shops or plants. No prior education seems to have been required of pupils recruited for training in these schools. It is not clear how the short term of instruction in FZO schools will be reconciled with the plan to achieve universal 10-year education by 1960 unless at least 9 years of prior education should be made the entrance requirement. As shown in Table 3, since 1940, and through 1955, these schools have recruited 5.1 million young workers, of whom 990,000 were trained during the fifth Five Year Plan (1951–1955).

Trade, Railroad, and Mining Schools

A 2-year term was originally prescribed for training in semi-skilled industrial, maintenance, and service occupations in schools (usually called *uchilishcha*) such as Labor Reserve Railroad Schools and others. The entrance age for these 2-year schools is 14 for boys and 15 for girls, but only elementary prior education is required to qualify for enrollment. Now that the 7-year general education has been officially declared to be the universal minimum throughout the Soviet Union, the educational base of pupils enrolled in these schools is likely to be raised accordingly. Furthermore, inasmuch as 10 years of education

* For a brief but highly informative account and analysis of the USSR labor reserve system see Solomon M. Schwarz, *Labor in the Soviet Union*, New York: Praeger, 1952, pp. 77–83.

is to be the minimum by 1960, the term of instruction in these schools will probably be increased at least by one year in order to eliminate the obvious discrepancy.

The 2-year course of training in the labor reserve trade schools is structured on a 7-hour per day basis (2 hours of classwork, 5 hours of job training), 6 days per week, September through June. In July there are no classes but job training of 3 hours per day continues; August is the vacation month.¹⁰ The total scheduled hours of the course are distributed between job training (about 52 per cent) and other types of instruction, including drafting, mathematics, physics, and the Russian language (about 17 per cent in all), technical subjects (about 12 per cent), physical education, and "political classes." Since 1940, when they were first organized in their present form, and through 1955, these schools trained a total of 2.4 million workers.

Technical Trades Schools

As will be more fully discussed elsewhere, in recent years (since c. 1953) the yearly Soviet crop of ten-year school graduates has been running far in excess of the planned rate of admission to the universities and other types of institutions for higher education. This situation has posed a problem, since the last three grades of the 10-grade undifferentiated Soviet system of general education have been traditionally conceived and conducted as college preparatory grades. The training of the ten-year school graduate, like that of the American high school graduate of 50 years ago, has been aimed to qualify him for college.

As one of the means for channeling the surplus of the 10-year graduates into the labor-hungry Soviet industry and agriculture, there was created in 1954 a new type of short-term training school, the technical trades school, to be operated within the State Labor Reserve system. Some 250 of these schools were established in that year at industrial plants, mines, machine-tractor stations, and other state enterprises. The term of instruction was set at one year for most trades, with a 2-year maximum. The schools were to give training in some 98 occupational categories—such as machinery operators, mechanics, plumbers, estimators, draftsmen, inspectors, and other skilled and junior supervisory occupations—in several industrial fields and in agriculture.* In 1955, after both the number of schools and the number of training programs had been increased, some 280 trades were taught in these schools. As of April 1956 there were 439 technical trades schools with a total

* A detailed summary and analysis of the training programs and other information on technical trades schools is included in Cenis Source Memorandum No. 31.

enrollment of approximately 117,000.¹¹ In the meantime, as of November 1, 1955, the training period was dropped to only 6 months in some categories, a 10-month term was prescribed for others, and the original 1-year and 2-year courses were retained for certain occupations.¹² The shorter term of training has already been criticized by the Deputy Director of the USSR Labor Reserve, who in August 1956 wrote:

One should recognize it was an error to shorten the term of training at the technical trades schools; the trainees of the previous graduating classes, before the term of instruction was shortened, were better prepared to start productive work.¹³

The technical trades schools of the State Labor Reserve have not been in existence long enough to permit a categorical appraisal of their relationship to other types of vocational training, let alone of their potential role in preparing young ten-year school graduates for engineering training. According to the regulations, the trainees who distinguish themselves by graduating with "excellent" grades need only to pass the required entrance examinations, without having to compete on the basis of grades, to gain admission to the extension, that is, part-time, schools of higher education. In general, it appears that all these trade schools are decidedly of the terminal type conceived more or less on a crash basis to alleviate the shortage of qualified workers in industry and agriculture and to help wean the reluctant ten-year school

TABLE 3. NUMBER OF YOUNG WORKERS TRAINED IN LABOR RESERVE SCHOOLS OF THE SOVIET UNION, BY FIVE-YEAR PERIODS, 1941-1955
(In Thousands of Workers)

Kind of School*	1941-1945	1946-1950	1951-1955	1941-1955
FZO	1,790	2,368	990	5,148
Trade	685	1,024	719	2,428
Technical	27	27
All three	2,475	3,392	1,736	7,603

Source: *The National Economy of the USSR, 1956*, p. 203.

* FZO—"Factory, Plant [and Mine] Training" schools. Course of training: 6 months.

Trade—railroad, mining, and other trade schools with a 2-year course of instruction.

Technical—technical trades schools, *tehnicheskkiye uchilishcha*, established in 1954 to train (1 to 2 years) ten-year school graduates in manual (technical) skills.

graduate from his visions of the privileged status which in the Soviet Union is firmly identified with higher education. It is quite certain that in their first 2 years of operation the technical trades schools have

not been popular with the students. It is also likely that the drop-out rate has been fairly high; for instance, it was reported that 60,000 students were enrolled at the outset in 1954 but, as shown in Table 3, only 27,000 were graduated in 1955. A substantial proportion of these students apparently enter employment without having completed the course.

4. SCHOOLS OF MECHANIZATION IN AGRICULTURE

Schools for the training of agricultural machinery and tractor mechanics in the Soviet Union have been operated by the Ministries of Agriculture and of State Farms. In 1954 the Ministry of Agriculture was accused of having failed to provide instructors, textbooks, equipment, and other facilities for the mechanization of agriculture schools in its jurisdiction. Consequently, according to *Pravda*, January 5, 1954, all such schools were transferred to the Ministry of Culture; and later, when *this* ministry was reorganized, in March 1954, the Main Administration of the Labor Reserves assumed control over most of them.

The schools of mechanization in agriculture train mechanics and operators of tractors, combines, and other agricultural machinery. The minimum entering age is 17 for both males and females; a prior 10-year secondary education is preferred but not required.¹⁴ In 1954 the labor reserve agricultural mechanization schools accounted for about 44 per cent of the mechanics so trained and for nearly 50 per cent (of a smaller total) in 1955, as follows (in thousands):

Trained in:	1954	1955
Labor Reserve Schools	344	284
Other schools	436	294
Total	780	578

One wonders if there are enough tractors and other agricultural machines in the Soviet Union to keep all these mechanics busy, considering the fact that the total number trained in 6 years (1950-1955) has been reported at 3,764,000.

5. THE ROAD TO HIGHER EDUCATION

Although statistics are lacking, it is certain that since the expansion of the upper grades enrollment of the ten-year school the resident freshmen of Soviet universities and colleges have been almost exclusively recent or former graduates of the ten-year schools. Only a small

number of successful applicants comes from other types of Soviet schools, notably from technicums—under the rule whereby the best 5 per cent of the technicum graduates are permitted to apply for admission to the institutions of higher education. The extension (evening and correspondence) facilities at the university level are somewhat less selective, operating under less stringent rules of admission, but the student's choice of part-time programs is as a rule limited to the immediate field of his regular employment.

A schematic representation of Soviet school enrollment in major categories below the university level is shown on Chart 1 at the end of this chapter. The chart shows, approximately to scale, the number of students enrolled during the 1955–1956 school year by grades in accordance with the documented and in some cases estimated statistics given in Table 4. The chart, whatever its possible inaccuracies in distributing Soviet school enrollment by grades, is reliable enough, we believe, to illustrate a number of points of major significance, including the following:

1. The magnitude of Soviet efforts to provide some education for all.
2. The relatively small number of students admitted to resident status in institutions of higher education—in itself suggesting a high degree of selection.
3. The small number of school-age individuals who receive formal vocational training relative to the enrollment in the largely undifferentiated ten-year school of general education.
4. The “inverted pyramid” distribution of pupils in grades IV through VII—a reflection of the wartime birth deficit.

The last two factors have been particularly instrumental, it appears, in bringing about a number of highly significant developments in the field of basic ten-year school education since c. 1953, above all, the expansion of upper-grade enrollment and the curricular changes in the ten-year school which lead away from the former college preparatory orientation toward a vocational emphasis. These and other changes will be considered in the following chapter.

CHART 1. PROGRESSION TO HIGHER EDUCATION IN THE SOVIET UNION. (Source: Table 4.)

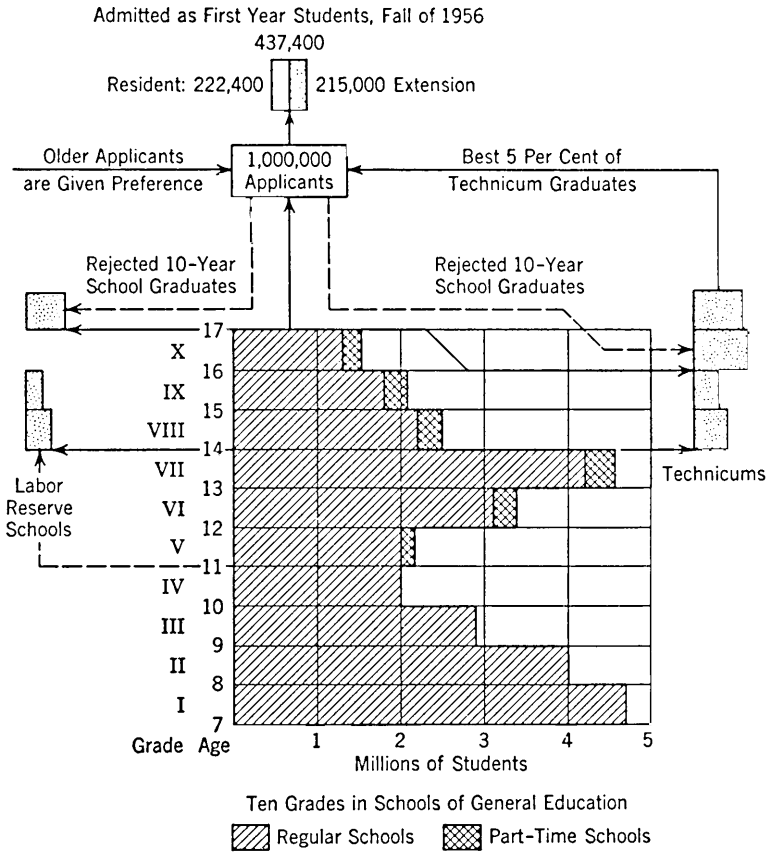


TABLE 4. SOVIET SCHOOL ENROLLMENT, PROGRESSION TO HIGHER EDUCATION AND ALTERNATIVE
(Data Used for Chart 1)

1. Schools of General Education, enrollment by grades, 1955-1956, in millions

Grade	Estimated	Soviet Figures
X	1.3	} 5.25
IX	1.8	
VIII	2.2	
VII	4.2	} 9.3
VI	3.1	
V	2.0	
IV	2.0	} 13.6
III	2.9	
II	4.0	
I	4.7	
Total enrollment	28.2 millions	28.15 millions

2. Schools for Working and Rural Youth, 1955-1956

Enrollment by Grades	X	VIII-X	V-VII	I-IV	Total
Working youth	223	799	534	54	1,387
Rural youth	5	24	278	44	346
Total (thousands)	228	823	812	98	1,733

Estimated distribution of total enrollment by grades (approximately in proportion to the regular ten-year school enrollment):

Grade	Millions	Grade	Millions
X	0.23	V	0.17
IX	0.27	IV	} negligible
VIII	0.32	III	
VII	0.37	II	
VI	0.27	I	

3. Labor Reserve schools, 1956 enrollment

	Estimated
FZO, 6-month course*	100,000
Trade Schools, 2-year course	300,000
Mechanization of Agriculture, 1-year course	250,000
Technical Trades School, 1-year course (average)	120,000
Total for Labor Reserve schools	770,000

4. Technicums (*Pravda*, April 25, 1956, p. 3, reported total technicum enrollment at 1,959,000. *Kul'turnoye stroitel'stvo SSSR, 1956*, on p. 231 gives 1,960.4 thousand.)

TABLE 4 (continued)

Estimated Distribution by Years	
Fourth	570
Third	640
Second	350
First	400
Total	<u>1,960</u> thousand

5. College Admissions Data, fall of 1956†

Resident full-time students	222,400
Part-time, evening and correspondence students‡	<u>215,000</u>
Total college admissions, fall of 1956	437,400

Source: (except as noted) *The National Economy of the USSR, 1956*, pp. 229 and 230.

* *Izvestia*, December 11, 1955, states 100,000 were to be enrolled.

† *Trud*, August 31, 1956.

‡ In 1955 the number was 176,000.

NOTES TO CHAPTER I

¹ George Vernadsky, *A History of Russia*, 3rd revised Ed., New Haven: Yale University Press, 1951, p. 195.

² *Uchitel'skaya gazeta*, November 30, 1955, p. 4; in *The Current Digest of the Soviet Press* (hereafter referred to as *CDSP*), Vol. VII, No. 50, p. 32.

³ *The National Economy of the USSR, a Statistical Compilation*, issued by the Central Statistical Administration, Council of Ministers USSR, Moscow, 1956. Mimeographed translation (272 pp.) published by the U. S. Government, p. 230 (hereafter referred to as *The National Economy of the USSR, 1956*).

⁴ A. Shtyl'ko, *Pod'em kul'turno-tekhnicheskovo urovnya trudyashchikhsya* (The Rise in the Cultural and Technical Level of the Toilers), Moscow: Goskul'prosvet, 1953, pp. 44-46.

⁵ *Sovetskaya pedagogika*, No. 5, 1954, p. 121.

⁶ K. Mikhailov in *Sovetskaya Latvija*, March 20, 1954.

⁷ "Train Younger Generations to Be Alert and Disciplined," *Pravda*, October 13, 1955, p. 2; in *CDSP*, Vol. VII, No. 41, p. 26.

⁸ N. Aksakov, "Suvorovtsy i nakhimovtsy," *Svoboda* (Munich), No. 15, August 1953, p. 5.

⁹ A. Bordadyn (Deputy Director of the USSR Council of Ministers' Chief Administration of the Labor Reserves), "Nazrevshiy voprosy podgotovki trudovykh rezervov" (The Urgent Questions in the Training for Labor Reserves), *Pravda*, August 20, 1956, p. 2.

¹⁰ E. N. Medynskii, *Narodnoye obrazovaniye v SSSR* (Public Education in the USSR), Moscow: RSFSR Academy of Pedagogical Sciences, 1952, p. 145 (hereafter referred to as E. N. Medynskii, *Narodnoye obrazovaniye v SSSR*).

¹¹ *BSE*, 2nd Ed., Vol. 42, 1956, p. 392.

¹² "Povysit' kachestvo raboty tekhnicheskikh uchilishch" (Raise the Quality of

Work at the Technical Trades Schools), *Professional'no-technicheskoye obrazovaniye*, No. 10, October 1955, pp. 1 f.

¹³ A. Bordadyn, *op. cit.*

¹⁴ *Spravochnik dlya okonchiushikh sredniye shkoly* (Reference Book for Those Who Have Completed Secondary Schools), Moscow: Uchpedgiz, 1955, p. 44.