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ABSTRACT

Soviet education is designed not only to produce specialists whose skills will be more useful to the State, but also to reshape the character of the person so that it is compatible with Communist ideology. The study attempts to investigate and describe the development of higher education correspondence study in the U.S.S.R. Subproblems investigated involve the relationship between Soviet education and the Central Committee of the Communist Party which actually determines the direction of education, and the relationship between the Soviet higher correspondence education and the economic requirements of national economy. A review of the existing literature from the pre-Soviet period to the present indicates that although there has been a decline in the number of higher correspondence students since 1965, this form of instruction still plays a significant role in supplying the Soviet economy with a great number of specialists. Correspondence students represent over 1.6 million students, one-third of the total higher education students in the U.S.S.R. (Author/JMF)

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HIGHER EDUCATION CORRESPONDENCE STUDY IN THE SOVIET UNION

by

Alexander J. Michaels

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Submitted in partial fulfillment of the
requirements for the Degree of Doctor of Philosophy
in Laurence University

1973

ABSTRACT

Title of Dissertation: Higher Education Correspondence Study in the Soviet Union

Alexander J. Michaels, Doctor of Philosophy, 1973

Advisor: Dr. Victor A. Fadiay, Ph.D.

PROBLEM: The problem of this study was to investigate and describe the development of higher education correspondence study in the U.S.S.R. from the beginning of the twentieth century to the present time. Sub-problems investigated in this study involved discovering the relationship between Soviet education and the Central Committee of the Communist Party and also showing the relationship which exists between the Soviet higher correspondence education and the economic requirements of national economy. The purpose of this study was to provide the needed background on Soviet higher correspondence study for use by American educators, and to assess the role and significance of higher education correspondence instruction within the Soviet educational system.

PROCEDURE: The historical method of research was used in reviewing the available Soviet literature on higher correspondence instruction from the pre-Soviet period to the present time. In this regard, it should be emphasized that most of the Soviet sources can be considered official records or primary sources since they were published by the Government. These items were primarily located in the Slavic Division of the Library of Congress. In addition, an analysis was made of the available official statistical data on correspondence student enrollment, admission and graduation totals for various years.

FINDINGS: Although there has been a decline in the number of higher correspondence students since 1965, this form of instruction still plays a significant role in supplying the Soviet economy with a great number of specialists. As compared with the other forms of instruction, the number of Soviet higher correspondence students represents over 1.6 million students or one-third of the total higher education students.

The study indicated that graduates of higher correspondence schools lack the scientific background required in handling problems of modern science. It also emphasized the enormous drop-out rate (50 percent) among correspondence students as compared with only 10 percent for full-time students.

CONCLUSIONS: It is noteworthy to emphasize that the Soviet basic philosophy of education is to serve the State and not the individual. It is designed not only to produce specialists whose knowledge and skills will be more useful to the State, but also to reshape the character of a person so that it is compatible with Communist ideology.

Although the U.S.S.R. Ministry of Higher and Secondary Specialized Education has overall responsibility for coordination of research and training of specialists in all of the Soviet higher schools, it is the

Central Committee of the CPSU and the topmost organ known as the Politburo which actually determine what direction education will pursue in the Soviet Union.

The Educational Reform of 1958, more than any other piece of legislation, expanded correspondence education in the Soviet Union. The reason for this reform was to keep as many students as possible employed in the national economy, because of the existing lack of trained manpower.

In the middle sixties, many secondary school graduates who entered higher correspondence study were criticized by various enterprises for not having the theoretical knowledge required to meet the demands of modern science. As a result, the Reform of 1964 modified the Reform of 1958 by introducing a new curricula to raise the scientific level of secondary students; the new courses would prepare them for practical work or higher education.

Although the reliability of Soviet educational statistics is sometimes questionable, it is still very possible to abstract meaningful data by careful analysis. In this regard, it should be noted that Soviet statistics on higher correspondence instruction sometimes consisted of dubious figures, missing years, and "lumping" of certain categories, making it somewhat difficult to determine trends. However, when any shift in statistical data was observed, attempts were made to explain and clarify the implications behind it.

570

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TABLE OF CONTENTS

ACKNOWLEDGMENTS iii
LIST OF TABLES vii
LIST OF CHARTS ix
LIST OF APPENDIXES x

Chapter

I. THE PROBLEM AND ITS COMPONENTS 1
 Introduction
 Background Information to the Problem
 Statement of the Problem
 Purpose of the Study
 Need and Significance of the Study
II. ASSUMPTIONS, HYPOTHESES, DEFINITIONS AND DELIMITATIONS 7
 Assumptions
 Hypotheses
 Definitions
 Delimitations
III. REVIEW OF RELATED LITERATURE 10
 Introduction
 Philosophical Foundations
 Historical Evidences
 Economic Circumstances
 Sociological Conditions
 Posture of the Central Committee of the CPSU Re-
 garding Soviet Education
 Posture of the Administration
 Posture of the Instructional Staff
 Current Problems and Issues
 Summary

IV.	METHODOLOGY, COLLECTION AND TREATMENT OF DATA	21
	Methodology	
	Collection of Data	
	Treatment of Data	
V.	HISTORY OF HIGHER CORRESPONDENCE EDUCATION IN IMPERIAL AND EARLY SOVIET RUSSIA	25
	Pre-Revolutionary Period	
	Soviet Period, Early Phase, 1919-1929	
	Second Phase, 1929-45	
VI.	SOVIET LAWS AND DECREES ON HIGHER CORRESPONDENCE EDUCA- TION SINCE 1945	33
	Measures Taken During the Fourth Five-Year Plan (1946-50)	
	Measures Taken During the Sixth Five-Year Plan (1956-60), Including the Educational Reform of 1958	
	Measures Taken During the Seventh Five-Year Plan (1961-65), Including the 1964 Educational Reform	
	Measures Taken During the Eighth Five-Year Plan (1966-70)	
	Measures Taken During the Ninth Five-Year Plan (1971-75)	
VII.	ADMINISTRATION OF HIGHER EDUCATIONAL INSTITUTIONS	44
	Role of the Ministries in the Educational System	
	Structure of U.S.S.R. Ministry of Higher and Secondary Specialized Education	
	Work of the U.S.S.R. GOSPLAN (State Plan)	
	VAK (Supreme Attestation Committee)	
	State Inspectorate of Higher Schools	
	The Role of the Union Republic and State Committee in Administration of Higher Schools	
	Internal Administration of Higher Educational Institu- tions (Universities, Institutes, Including Correspond- ence Institutes)	
	Role of the Communist Party in the Educational System	
VIII.	BASIC FEATURES OF THE HIGHER EDUCATION CORRESPONDENCE STUDY SYSTEM IN THE SOVIET UNION	56
	Orientation	
	Written Assignment	
	Grades and Incentives in Higher Correspondence Educa- tion	
	Residence Requirements	
	UKP (Study Consultation Center)	
	Fields of Study - Specialties Offered in the Soviet Higher Education Correspondence System	

Correspondence Aspirantura (Postgraduate) Training
Expenditures in the Soviet Higher Education Correspondence System

IX. ADMISSION TO HIGHER CORRESPONDENCE SCHOOLS	70
Current Admission Procedures	
Admission to Correspondence Higher Party School	
Rules for Admission	
Statistics on the Admission of Correspondence Students from 1917 to Present Time	
Revival of Preparatory Divisions	
X. TYPES OF U.S.S.R. HIGHER EDUCATION CORRESPONDENCE SCHOOLS, INCLUDING LOCATIONS, CURRICULA, AND NUMBER OF STUDENTS	85
Types of Higher Correspondence Schools	
Independent Higher Correspondence Institutes	
Importance of Specialized Higher Training	
Universities with Correspondence Departments	
Comparison of Curricular Offerings by the Day, Correspondence and Evening Divisions of Moscow State University and Samarkand State University	
New Form of Higher Education-- <u>Zavod-VTUZ</u>	
Correspondence Institutes with Aspirantura (Graduate Training)	
Statistics on Aspirants (Graduate Students)	
XI. DRAWBACKS IN HIGHER CORRESPONDENCE EDUCATION	110
Appraisal of Higher Correspondence Study	
Drop-outs in Higher Correspondence Schools	
XII. SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS	122
Summary	
Conclusions	
Recommendations	
GLOSSARY OF SOVIET TERMS AND ABBREVIATIONS	131
APPENDIXES	135
BIBLIOGRAPHY	163

LIST OF TABLES

Table	Page
1. List of Specializations Offered by Soviet Higher Correspondence Schools to Undergraduates - 1971	62
2. Partial List of Specializations Offered by Soviet Higher Educational and Scientific Institutions (Regular, Correspondence and Evening) to Aspirants	66
3. Number of Independent Correspondence Institutes, Branches, Departments, Including the Number of Students Enrolled, Admitted and Graduated in Various Specializations for the 1963/64 Academic Year	71
4. Admission to Higher Educational Institutions According to Various Forms of Training (i.e. Day, Evening, Correspondence), By Selected Years: 1928-1971	77
5. Preparatory Divisions of Higher Educational Institutions and the Total Number of Students Attending Them for Selected Years: 1960, 1971-72	84
6. Number of Higher Educational Institutions and Students (Day, Evening, Correspondence) Attending Them by Selected Years: 1922-1971	88
7. Total Number of Graduates From Correspondence and Evening Divisions of Higher Schools, By Selected Years, 1940-1966	90
8. Graduates From Higher Educational Institutions According to Forms of Training by Selected Years: 1928-1971	91
9. Total Higher Educational Day and Correspondence Students for Selected Union Republics for 1963	92
10. Number of Students (Evening and Correspondence) According to Union Republics, in Higher Educational Institutions Who Are Continuing Production Work While Studying: 1958/59 to 1964/65	95
11. Independent Higher Education Institutes in the Soviet Union: 1972	96

Table	Page
12. A Partial Listing of Universities With Correspondence Departments	101
13. Comparison of Curricular Offerings in Three Divisions of Moscow State University	103
14. Comparison of Curricular Offerings in Three Divisions of Samarkand State University	105
15. Percentage of Failures Among Kazan University Correspond- ence Students Working in Their Specialties and Those Working Outside of Their Specialties, 1962-63	118
16. The Number of Drop-outs (Full-time and Correspondence) in Proportion to the Total Number of Students by Years in the Higher Schools	119



LIST OF CHARTS

Chart	Page
1. Structure of U.S.S.R. Ministry of Higher and Secondary Specialized Education	46
2. Structure of the Internal Administration of a Higher Educational Institution	52
3. Structure of the Central Committee of the CPSU	55
4. Number of Higher Correspondence Students Admitted to Higher Schools, for Selected Years, 1940-1971	78
5. Number of Graduates from Higher Educational Institutions According to Full-time, Correspondence and Evening Instruction, for Selected Years: 1940-1971	93

LIST OF APPENDIXES

Appendix

- I. Admission to Higher Educational Institutions according to Various Specializations, by Selected Years: 1928-1971.
- II. Number of Students Attending Higher Educational Institutions According to Various Specialties, by Selected Years: 1914-1971.
- III. Number of Higher Educational Institutions and Number of Students in them in the Various Union Republics by Selected Years: 1940/41--1969/70.
- IV. Distribution of Students Attending the Higher Educational Institutions According to Nationalities, by Selected Years: 1962/63 and 1970/71.
- V. Total U.S.S.R. Universities, Including Enrollment, Admissions, Graduates, by Selected Years: 1914-1971.
- VI. Network of Universities at End of 1970, According to Union Republics, Including Enrollment, Admissions and Graduates.
- VII. Specialists Graduating from Higher Educational Institutions: 1914, 1918 to 1971.
- VIII. Number of Graduates from Higher Educational Institutions According to Various Branches, by Selected Years: 1940-1966.
- IX. Number of Graduates from Higher Educational Institutions According to Specialties, by Selected Years: 1950-1971.
- X. Distribution of Graduate Students (Aspirants) by Branches of Science as of 1969.
- XI. Total Number of Aspirants Attending and Graduating Higher Educational and Scientific Institutions, by Selected Years: 1960-1969.
- XII. Distribution of Aspirants According to Various Specialties, at End of 1970.
- XIII. Number of Scientific Institutions, by Selected Years: 1940-71.

CHAPTER I

THE PROBLEM AND ITS COMPONENTS

Introduction

With regard to Soviet education Lenin once said: "The contents of education . . . and, in particular, instruction in philosophy, the social sciences and communist moral education, must be determined solely by the Communist Party."¹

It must be noted that what Lenin asserted is still the guiding force of Soviet education. This idea not only includes the political and ideological aspects of education, but all the areas including the technological. Therefore, the Communist Party through the Central Committee determines the educational requirements; this is done on the basis of the feedback received from enterprises reporting type and number of specialists needed for their operations.

Although there were many changes effected from the time of Lenin to Khrushchev, 1958 can be considered the beginning of a new era in Soviet education. In his speech concerning the Educational Reform of 1958, Khrushchev declared: "In the work of our schools and higher educational institutions there are fundamental shortcomings. . . . We cannot go on like this. . . . The time has come to reshape radically the entire

¹V. I. Lenin, Sochinenia (Works) (4th ed.; Vol. 32; Moscow: n.p., 1950), p. 100.

system of education for our school youth."¹

With regard to these shortcomings, Khrushchev asserted that the Soviet school was "separated from life and production." This criticism implied that too many students were shut off from the actual life situation, living in their ivory towers completely isolated from realities. Therefore, the way of coping with this problem was to curtail the regular day school enrollment and expand the correspondence and evening programs.

The Educational Reform of 1958 enhanced the role of part-time higher education causing a large portion of the Soviet secondary students to be channelled directly into full-time employment, leaving them the alternative of enrolling either in correspondence or evening study. In addition, in order to encourage students to enroll in correspondence study, incentives were provided such as a reduced workweek and furlough benefits for employed students taking correspondence courses.

As a result of these measures, correspondence instruction at higher schools was to become one of the mainstays of Soviet education. Today, although the correspondence program has been somewhat diminished, it is still one of the main sources of providing the economy with specialists.

Based on the evidence collected, it is possible to assess some of the qualitative and quantitative aspects of Soviet higher education correspondence study. With regard to the statistical sources, it must be noted that many difficulties were encountered working with Soviet statistics which sometimes were contradictory. Therefore, although some appropriate tables were used in the text itself, others which were either too lengthy or remotely connected with the subject, were placed in the appendix.

¹ Pravda (Truth), April 19, 1958, p. 1.

There are many gaps and confusing totals in the statistical data which make analysis very difficult. Since the expansion of correspondence study in the late fifties and early sixties, the Soviet statistics for higher education very often combine correspondence and evening students with the total number of regular students in arriving at the total number of students attending higher schools. The inclusion of correspondence students in the total number of students naturally creates the impression that there has been an enormous expansion of higher education since World War II.

Background Information to the Problem

After making an exhaustive search of the pertinent publications in the Library of Congress, the author discovered that although Soviet higher education correspondence study has been touched upon in secondary sources, there are no U.S. publications which treat this subject as an entity. These publications are primarily focused on the regular levels of education, such as preschool, primary, secondary and higher education, vocational and professional training, with very little information on correspondence studies. On the other hand, the author found many Soviet government publications, i.e. official handbooks, statistical yearbooks, monographs, periodicals and newspapers, which covered various phases of this subject.

It should be emphasized that since the educational reforms of the late fifties, correspondence study has become an integral part of the U.S.S.R. higher educational system, with many students (specialized) starting their higher education with correspondence study and eventually phasing into the regular establishment.

Statement of the Problem

Inasmuch as the Soviet government has placed a great emphasis on higher correspondence study, this report is designated to explore the development and show the importance of this subject, sketching its history, and indicating the types of schools, methods of study, the numbers of students enrolled, reasons for drop-outs, and so forth. In addition, the educational reforms of 1958 and 1964 affecting correspondence study were analyzed, including the reasons for their adoption.

It should be mentioned that as a result of the 1958 reforms, correspondence study in the U.S.S.R. has become a part of the unified regular higher school program, consisting of the regular, evening, and correspondence programs. In discussing the reforms, Minister V. P. Eliutin of the Ministry of Higher and Secondary Specialized Education in 1958 stated that many of the students graduating from secondary schools would phase into higher education correspondence study for the first two years and then into the regular day system. In other words, during the first two years students were to be fully employed while taking correspondence courses. In actual practice, however, only the better students phased into the regular day system with the major portion of them remaining in correspondence study.

As a result of the 1958 reforms, there was a serious cutback in full-time education, obviously causing a great reduction in the cost of specialized education. For example, by concentrating on correspondence study, the government was able to save a considerable amount of money by not having to construct new buildings. In addition, there was no need to provide elaborate equipment or to pay additional teachers' salaries.

Besides, many students who would normally be enrolled in the regular higher school system were working at their specialties in the national economy, and studying part-time (correspondence or evening study).

The Educational Reform of 1964 called for a return to the ten-year schooling system, which was virtually abolished in 1958. The main feature of the new ten-year school was to raise the scientific level of the schools so that they could meet the challenge of modern science. There was to be a transformation in the secondary curriculum with a greater stress on the theoretical aspects of the sciences. The result of this new system was to more adequately prepare secondary students for regular university studies or for work with a continuation of their studies by correspondence.

Consequently, in the late sixties there was a tendency to cut back on the number of correspondence students and increase the number of regular day students. The reason for the decision can be explained partially by the dissatisfaction of industry with the performance of workers who had graduated from vocational or higher correspondence schools. The main complaint was the lack of theoretical knowledge required for the performance of professional tasks by the technicians graduating from vocational schools and the specialists graduating from higher correspondence schools.

Purpose of the Study

Inasmuch as there is very little material on the subject of U.S.S.R. higher education correspondence study in our country, the author feels that this report will be a contribution to U.S. education, particularly

indicating how higher correspondence study is conducted in the U.S.S.R., citing some of the problems involved, also emphasizing the influence of the reforms upon correspondence education. Although the author does not intend to dwell on the political or military implications of the changes in education, he wishes simply to say that the methods of Soviet education are constantly changing and will undoubtedly change in the future. However, it is necessary to note that behind these changes is the ever-present Central Committee of the Communist Party of the Soviet Union which determines what educational policies will be followed.

Need and Significance of the Study

This study is designed to give American educators useful information on the little-known subject of the U.S.S.R. higher education correspondence system. The knowledge of how this system functions, its problems, and the reforms, can be of value to the planners of American higher education, including those who plan for the U.S. National University Extension Association. For instance, a study of the U.S.S.R. higher education correspondence system can be extremely useful for comparison purposes, indicating to U.S. educators some of the positive and negative elements of the system, pointing out the pertinent statistical data, thus enabling them to use this information in any future planning concerning U.S. higher education.

In order to understand the Soviet educational system, readers are expected to keep in mind the marked differences between the U.S.S.R. and U.S. basic philosophies. It should be remembered that the Soviet Union has a centralized, authoritarian, restrictive type of educational system which is in sharp contrast to the U.S. educational system.

CHAPTER II

ASSUMPTIONS, HYPOTHESES, DEFINITIONS AND DELIMITATIONS

Assumptions

This work is written with the following assumptions: that higher correspondence study is one of the mainstays of Soviet education; that correspondence education functions as a lever for the national economy; that correspondence instruction is the most economical and feasible form of education; and that the statistical information is fairly accurate. Thus, it can be safely assumed that higher correspondence study is a very important factor in accomplishing the economic goals of the Soviet Union.

Hypotheses

A study of higher correspondence instruction in the Soviet Union caused the author to formulate the following hypotheses:

1. Higher education correspondence study is an important feature of Soviet education.
2. U.S.S.R. higher education correspondence system is highly centralized extending throughout the entire country.
3. Soviet educational reforms of the late fifties played a big role in causing changes in the higher correspondence study system.

4. Correspondence study as a part of the regular higher educational establishment is the most economical of the three forms of instruction; it requires less money for the following: training students, teachers' salaries, and equipment and buildings.

5. Higher correspondence study enables Soviet students to be employed as technicians and specialists in critical industries.

6. The continued concentration on higher education correspondence study indicates that there is still a shortage of specialists in various fields of specialization.

7. Most of the Soviet educational statistics are fairly accurate and reliable.

8. There are more correspondence students enrolled in education than in any other professional specialty.

Definitions

In order to clarify and explain certain abbreviations which are constantly used in Soviet educational literature, the author has compiled a glossary with each item transliterated followed by the appropriate English translation, such as: VUZ (Vysshoe Uchebnoe Zavedenie, higher educational institution); ZVFSH (Zaochnaia Vysshaia Partiinaia Shkola, Correspondence Higher Party School); VTUZ (vysshoe tekhnicheskoe uchebnoe zavedenie, higher technical educational institution); and so forth. In addition, governmental administrative organizations dealing with education are included, such as: MVSSO (Ministerstvo Vyshego i Srednego Spetsial'nogo Obrazovaniia, Ministry of Higher and Secondary Specialized Education); MARKCMPROS (Narodnyi Komissariat Prosveshcheniia,

Peoples' Commissariat of Education; and others. Also included are terms such as: "ucება bez otryva ot proizvodstva," study without interrupting production (meaning correspondence or evening instruction); "ucება s otryvom ot proizvodstva," study with interruption of production (meaning full-time instruction); "uchebno-konsul'tativnyi tsentr," educational consultation center; "profilirovannoe obrazovanie," specialized education; and so forth.

Delimitations

Since the general subject of Soviet education is very broad and consists of many facets, the author has limited himself to the subject of higher education correspondence study only. Briefly summarizing, this report covers the following topics related to this subject: history, structure, method of operation, curricula, required examinations, number of students, types and number of correspondence institutions and divisions, educational consultation centers, reasons for drop-outs, educational reforms, drawbacks, conclusions.

CHAPTER III

REVIEW OF RELATED LITERATURE

Introduction

In reviewing the available U.S. literature on Soviet education, the author discovered that the regular higher level schools are treated in detail; whereas the correspondence schools are sometimes completely ignored or mentioned only briefly. In this regard, the author scanned many U.S. publications, including some of George S. Counts' books on Soviet education, finding only fragmentary information on correspondence study. Although more information was available on this subject in Nicholas de Witt's book on Education and Professional Employment in the U.S.S.R., and in Seymour Rosen's HEW pamphlet on Part-time Education in the U.S.S.R., these publications were somewhat outdated. On the other hand, in reviewing Soviet educational literature, many pertinent newspapers, journals, monographs, official statistical handbooks, etc. were found to contain information on various aspects of higher education correspondence study, emphasizing its importance in the Soviet educational system.

Philosophical Foundations

In order to understand the philosophical basis for Soviet educational literature, it would be appropriate first to mention the U.S. approach to education.

The U.S. philosophy of education is based on the principle that education is good only if it is conceived primarily for the sake of the individual; that its mission is to teach the individual how to think, how to act, how to develop and perform skills of his own choosing and for his own benefit within the bounds and restraints set by our democratic system. Therefore, education in the United States is not nationally planned, but instead adjusts itself to individual demands. Nevertheless, in a free society it is the individual who determines what kind of education he will seek and not the state which imposes its own choice on him.

On the other hand, the basic aims of Soviet education are altogether different. The educational system is designed to serve, not the individual, but the state which subordinates the individual and his rights and choices to the common good of the state. This concept of service to the state, instead of the concept of individual benefit, constitutes the fundamental distinguishing characteristic of Soviet educational philosophy.

Consequently, Soviet educational literature consists of much propaganda, whose object is to impress the world with its tremendous accomplishments. In addition, Soviet literature has to be carefully scrutinized in order to understand the real meaning of trends; since some of the statistics contain gaps, exaggerations and distortions in order to support propaganda statements.

In conclusion, it should be noted that in order to understand the Soviet philosophy of education, one must constantly be aware of the shifts in Soviet educational statistics which can only be explained by investigating the labor, military, and educational requirements of the period involved. Therefore, throughout the study, the author has made an attempt

to explain the implications behind certain changes, especially as related to higher correspondence study.

Historical Evidences

Since 1917 higher education has grown considerably in the number of students and schools. According to Czarist sources, in 1914 there were only thirteen universities having a total enrollment of 43,000, added to which there was a small number of higher correspondence students. Whereas, according to Soviet sources, in 1971 the total enrollment had grown to over four and a half million students studying in 805 higher schools. Furthermore, it was reported that of the above-mentioned total, over one and a half million students were enrolled in higher correspondence instruction.

Although correspondence study prior to World War II was considered as a supplement to regular education, by 1960 it became a very important factor in Soviet education with many new correspondence institutes organized to handle the great influx of students.

One of the oldest universities in the U.S.S.R. is the Moscow State University, which was founded in 1755 and is currently the largest higher institution in the Soviet Union. It has many research centers, 13 faculties (one of which is a correspondence faculty), 233 departments, 4 research institutes, 250 laboratories, 163 study rooms, and so forth. Presently, the total number of students attending this university is over 25,000, of which 2500 are correspondence students.

Of great importance are the specialized higher technical schools which have grown tremendously since World War II. For example, in the

academic year 1945/46 only 21 percent of the total number of students were studying engineering specialties; by 1964/65, over 40 percent of the total were enrolled in the same categories.

It has been estimated that between 85 percent and 90 percent of the total number of students (day, correspondence, evening) are enrolled in scientific and specialized schools and only 8 percent to 10 percent in regular universities. Over 70 percent of Soviet higher educational institutes are devoted to industry, agriculture, and economics.

Economic Circumstances

It is a practical economic consideration which influences Soviet planners to operate a highly selective educational system which is designed to train specialists of the type and number required by the various Five and Seven-Year Plans.

Since the Educational Reform of 1958, there was a deemphasis of full-time education with an expansion of correspondence and evening training, reducing considerably the amount expended on stipends, tuitions, scholarships and other expenses.

By 1965, there were 1,708,000 correspondence students enrolled in higher schools, as compared with 1,584,000 regular day students. It is important to note that correspondence study has somewhat declined since 1965, possibly because of certain qualitative factors. Specialists with better theoretical backgrounds were needed at this time to phase into the new programs dealing with atomic, rocket and space research.

It has been reiterated on many occasions that the emphasis on correspondence and evening study has brought down the cost of training higher level students. According to a 1968 Soviet source, expenditures for

training one specialist by correspondence for the entire period, as compared with training one specialist in a regular higher school was in a ratio of 1:10.

However, it was estimated that if we consider the total cost of correspondence instruction, including items such as repeating courses, lack of progress, travel costs, furloughs for taking examinations, drop-outs, etc., the ratio of expenditures per student for correspondence and day instruction would be 1:4 respectively.

Soviet sources have constantly stressed that the drop-out rate for higher correspondence students is rather excessive. It was estimated in 1967 that the drop-out rate for day students amounted to about 7 percent, whereas for correspondence students it was over 50 percent.

Another major complaint expressed by Soviet educational literature has been that, in general, school facilities are inadequate and outmoded, and that they would become even worse if an additional number of students were allowed to study in them on a full-time basis. Apparently the Soviet Government, in wishing to reduce the heavy burden of financing education, has not been willing to invest more funds in new buildings, facilities, and equipment.

Another problem has been the lack of persons in the eighteen to twenty-five age group, causing a shortage of workers in the national economy. Suffice it to say that as a result of the enormous World War II manpower losses, followed by a constant state of mobilization of armed forces, causing the birth rate to drop, the Soviet Union has been faced with a serious deficit in the annual flow of eighteen-year-old graduates into the labor force. Consequently, the country has been forced to concentrate on "study without interruption of production," meaning that the

students would be employed during the day and be enrolled in either correspondence or evening instruction. By limiting the number of day students and opening up wide opportunities for part-time study, the Soviet Union has been able to more or less supply the national economy with a sufficient number of workers and also keep the financial burden of higher education within tolerable bounds.

In 1972, Economist L. Tulchinskii emphasized that correspondence students "studying without interruption of production" actually brought the Government a revenue. His rationalization was that the expenditures for correspondence study were nil because of the increased qualifications that workers obtained by taking correspondence courses; whereas, for higher school day students the lag before the expenditures for education were considered as paid up was almost five years. In other words, the Government considered its outlay for specialized education paid up only after a specialist had worked for five years after graduation.

Sociological Conditions

One of the reasons for the 1958 educational reforms was the desire to break down the social stratification which had taken place as a result of the rewards which had been given for educational achievements. Education became an important means of individual achievement developing a severe competition among students attempting to attain the highest possible level of education. As a result, a new Soviet intelligentsia was created which was comparable to what we may call "eggheads." As opportunities for obtaining a higher education became restricted to children of higher officials and professionals in the national economy, education became a factor in contributing and perpetuating social inequalities.

One of the purposes of the 1958 reforms was to adjust the Soviet educational system so that it would be more equal. The reforms stressed the practical aspects of production as being more important than academic proficiency. Consequently, correspondence education became the favored method of obtaining a specialty while working in the same field.

Posture of the Central Committee
of the CPSU Regarding Soviet Education

The central organs of the Communist Party enforce and directly formulate the basic educational policies dealing with the types of higher educational schools, their curricula and programs, instructional methods, requirements, etc. These policies are generally embodied in resolutions and decrees which emanate from the Central Committee and then are formally passed as laws by the U.S.S.R. Council of Ministers; the function of the governmental organs are simply to promulgate the party's decisions and execute them through the governmental administrative machinery. Therefore, the party is the originator of educational legislation. Any revisions or additions to the educational establishment are matters for the Central Committee to decide.

Failure to realize the importance of the Central Committee in formulating Soviet educational policy results in misconceptions. Actually, Soviet educators, administrators, and teachers have no power whatsoever in determining basic educational policies; all they can do is suggest, discuss and propose.

Posture of the Administration

In June 1959, the former U.S.S.R. Ministry of Higher Education was redesignated the U.S.S.R. Ministry of Higher and Secondary Specialized

Education. This central ministry was vested with the administrative control of overall planning and policy coordination for both higher and secondary specialized education, while administrative authority over minute details of plans and policies was vested in counterpart ministries or state committees established at the republic level. It should be explained that ministries which exist at both the all-union (central) and republic levels are considered union republic ministries.

The functions of the U.S.S.R. Ministry of Higher and Secondary Specialized Education are to supervise higher educational establishments and secondary specialized schools, including: to assist and coordinate the activities of republic organs and administrations; to provide general direction and methodology for higher educational establishments; to coordinate the production and supply of textbooks and teaching aids; to certify and accredit academic personnel.

On the other hand, the republic ministries were empowered: to study the demands for specialists; to organize work of higher educational establishments; to supervise scientific and research facilities; to administer supplies, construction of facilities, etc.

Despite the efforts to decentralize and give important functions to republic ministries or state committees, the actual administrative control still lies with the U.S.S.R. Ministry of Higher and Secondary Specialized Education which can issue certain directives and orders implementing the educational policies decided by the Central Committee of the CPSU.

Posture of the Instructional Staff

The Russian term "fakul'tet" is considered a division or department of instruction in the Soviet universities and institutes of higher

education. In the functional sense, Soviet fakul'tets are similar to the various schools which are a part of an American university, especially on the graduate level. It should be stressed that throughout the study, fakul'tet is translated as division or department. Therefore, the reader should keep in mind that fakul'tet does not have the meaning of a teaching staff in the American sense. It should also be added that most of the regular full-time institutions of higher education have a zaochnyi fakul'tet (correspondence division) with fields of specialization similar to those offered in the regular programs, though fewer in number.

With regard to staff appointments, higher correspondence schools may recommend persons to fill specific academic jobs; however, the VAK or Supreme Attestation Committee has centralized control over most such appointments. While individual schools may recommend persons for specific positions, the VAK still must certify these appointments.

Each spring the various higher educational institutions announce competitions (Konkurs) for positions to be filled in the fall. The competition is open to qualified persons, and notices are published in the various newspapers and journals.

There have been a number of complaints made about the appointments to higher correspondence institutes, the substance of which is that the more poorly qualified persons are constantly "unloaded" to teach in the correspondence divisions and institutes, whereas the better ones enter the regular higher school system.

In order to improve the qualifications of the teaching staff in institutions of higher education, directives have recently authorized the U.S.S.R. Ministry of Higher and Secondary Specialized Education to create special institutes and divisions for the purpose of giving three-to

six-month refresher courses in higher education. In this manner, it is expected that the entire 220,000 members of the instructional staffs of higher educational establishments will have the opportunity every five years to bring their professional knowledge up-to-date by taking advance work.

Current Problems and Issues

Presently, there has been a decrease in the numbers studying by correspondence in the higher schools. One of the problems has been that the higher correspondence schools are not supplying the national economy with enough graduates, nor are they supplying graduates with a sufficient theoretical background to handle adequately some of the sophisticated specialties required by industry. Consequently, the Central Committee of CPSU, in seeking the most economical and yet the most practical solution to the manpower requirements, has decided that full-time higher instruction is the answer to the current problems of the national economy, with a deemphasis on correspondence or evening instruction.

One of the methods proposed for solving the problem of qualitative and quantitative factors in higher education has been the preparatory division. Of late, there has been an upward surge in the number of preparatory divisions; many of these have been organized as divisions in most of the higher schools. The purpose of these divisions is to offer refresher courses in critical subjects enabling secondary students to pass higher education entrance examinations. It should be stressed that these preparatory courses are particularly directed to the rural secondary school graduate, whose academic background does not equal his urban counterpart's.

Summary

In spite of the considerable growth in the number of students preparing for specialties in higher education, there is evidence to show that there is still an insufficient number graduated each year to take care of the manpower requirements of the national economy.

Although the concentration has been on correspondence study for many years, the pendulum seems to be swinging back to regular day instruction. The reasons for this have been the great number of drop-outs in correspondence instruction which occur every year, also the inferior quality of instruction provided by higher education correspondence institutions, which does not meet the current requirements of industry.

In order to increase the number of specialists, the Central Committee of the CPSU has recently ordered that preparatory divisions be expanded to be included in almost all of the higher schools. As mentioned previously, these divisions are currently offering pertinent courses which are designed primarily to assist rural secondary students to pass the difficult State examinations for admission to institutions of higher education.

The development of Soviet higher education should be viewed mainly in the context of the total Soviet advances, including the political, economic, military requirements. There is a much closer relationship between educational and manpower policies in the Soviet Union than in the United States. In this regard, the Central Committee sets the enrollment quota for higher education and for each specialized field in accordance with its national objectives. It also determines the content of instruction, the kind of facilities, and the size of the staff.

CHAPTER IV

METHODOLOGY, COLLECTION AND TREATMENT OF DATA

Methodology

At the present time, there are many schemes of transliterating the Russian alphabet into English. However, the Library of Congress method, which is used in this study, is perhaps the best.

In the case of the transliterated alternatives of the Russian "e," "ye," the former is used at the beginning of a word, or following a vowel, soft sign, or hard sign; the short "i" in Russian, used in conjunction with another vowel, is rendered as "i"; the soft sign is always rendered as an apostrophe.

In reference to the titles of Soviet books and encyclopedic articles appearing as footnotes or in the bibliography of this work, they are transliterated and translated; whereas the originating government agency, place of publication and the name of the publishing house are only translated. With regard to newspaper articles, inasmuch as most titles did not suggest the contents of the article, such as "Where Are We Going?", etc. a more appropriate title was supplied in English. Therefore, for uniformity every newspaper title was either translated, or, if necessary, a more appropriate title in English was provided.

Incomplete and scattered information was collated and related to the decrees and resolutions revealing certain trends and developments in Soviet education. In many cases, economic information was interwoven into the

educational plans in order to illustrate certain patterns. For example, this method was used to explain the ramifications of the Educational Reform of 1958.

Collection of Data

Since the author has been a Russian translator and senior research analyst in Soviet Affairs at the Library of Congress for over twenty years, he is thoroughly familiar with the available literature on this subject. Incidentally, he was given a study desk by the Library with permission to use the stacks for a period of one year to complete his dissertation. As a result, he was able to scan all the available Soviet educational material (from 1945 to present time) published by the U.S.S.R. Ministry of Education and Ministry of Higher and Secondary Specialized Education, including other governmental organizations.

Some of the material scanned included official Soviet books such as: General Education in the U.S.S.R.; Correspondence Study at the Universities; Handbooks for Entrants to Higher Schools; and statistical yearbooks. These publications contained information on the following subjects: types of higher correspondence schools; number of higher-level students admitted, enrolled and graduated; number of higher educational institutes; types of specialties; and other data.

Soviet monographs and pertinent Soviet journals and newspapers were also scanned for available information, particularly those items covering higher correspondence study, including the general educational items found in the various Five-Year and Seven-Year Plans.

It should be noted that the author's search revealed educational articles dealing with higher correspondence study which contained official

statements, regulations, laws and decrees, revisions, polemics, propaganda, self-criticism, statistics, and so forth.

Lastly, the author wishes to state that he was extremely fortunate in being able to consult with many experts on Soviet education representing the Division of International Education, HEW, and the Slavic Division, Library of Congress.

Treatment of Data

The first part of the presentation is a background survey of higher correspondence study during Czarist and early Soviet times, and it is intended to give some of the early trends and policies which guided correspondence education.

Attention was also devoted to early and later Soviet decrees and resolutions affecting the development of higher correspondence study, particularly concentrating on the Educational Reform of 1958.

Inasmuch as the primary object of the author was to update the knowledge on Soviet higher correspondence study, most of the sources covered the educational developments during the post-World War II period up to 1972. In this regard, sources were scanned concerning drop-out problems, quantitative and qualitative factors, manpower shortages in the national economy, etc. An attempt was made to interpret the statistical data in light of the above-mentioned problems. At times, this was difficult inasmuch as figures for certain years were missing; others were contradictory or lumped together, such as combining the number of students for the three forms of instruction (regular, correspondence, evening), without giving a breakdown for each item.

Despite these shortcomings, in the opinion of the author, the presentation gives a fairly accurate overview of the Soviet higher education correspondence system up to 1972.

It should be noted that the charts dealing with the administration of the Soviet higher education and curricula offerings by higher correspondence divisions were appropriately placed in the text. The statistical tables were placed immediately following their first mention in the text; however, those that were either too lengthy or not directly related to the subject were placed in the Appendix. Furthermore, a list of specialties offered to higher correspondence students was also placed in the text.

CHAPTER V

HISTORY OF HIGHER CORRESPONDENCE EDUCATION IN IMPERIAL AND EARLY SOVIET RUSSIA

Pre-Revolutionary Period

Correspondence education was introduced in Russia during the latter half of the nineteenth century by many private cultural and educational organizations. These groups consisted of members of the upper classes who were liberal intellectuals interested in propagating education among the masses. They held conferences, seminars, and lectures; published journals; and organized home assignments for self-education.¹

In 1893, the "Commission for Organizing Correspondence Study" was created in Moscow. This commission consisted of professors, docents, and holders of master's degrees, who assisted in establishing a university--type correspondence school in Moscow. Courses for home study were published, covering many specialties and disciplines.

During the period from 1895-99, over 1,473 students participated in various correspondence programs at the above-mentioned school. In 1899, there were 585 students enrolled in correspondence courses at this school. Of this total, 415 students had completed the first course; 128 completed the second course; and 42 completed the third course.²

¹"Samoobrazovanie" (Self-Study), Entsiklopedicheskii Slovar' (Encyclopedia), 1902, XXXIV, 807-809. Hereafter cited as "Self-Study."

²Ibid.

In 1894, the "Department for Promoting Self-Education" was established at the Pedagogical Museum in Leningrad. This department provided correspondence instruction on a university level and also was responsible for publishing textbooks and developing procedures and methods to be used in home study. Shortly thereafter, similar departments were organized in Odessa, Kharkov, Kiev and Kazan, significantly increasing the number of students studying by correspondence.¹

Among other important societies and schools which participated in correspondence study was the "Society for the Promotion of Technical Knowledge," and the many so-called "People's Universities" which had many students enrolled in various higher correspondence programs. Besides correspondence study, these organizations also provided adult education and evening courses.²

In January 1908, the first All-Russian Congress of Rectors of People's Universities and Other Private Educational Institutes met. Among the topics of discussion were subjects such as required courses, methodology, procedures, and textbooks to be used in correspondence study. Furthermore, a resolution was passed by this congress emphasizing the necessity for initiating standard university courses. It also indicated that those correspondence students who had completed their course work should be allowed to enroll as regular day students at any higher educational institution. By 1917, Russia had a few thousand correspondence

¹Ibid.

²U.S. Department of Health, Education and Welfare, Office of Education, Part-time Education in the U.S.S.R. by Seymour M. Rosen, Bulletin 1965, No. 17 (Washington, D.C.: U.S. Government Printing Office, 1965) p. 3. Hereafter cited as Rosen, Part-time Education.

students studying at various higher correspondence schools.¹

Soviet Period
Early Phase, 1919-1929

After the Revolution of 1917, different forms of correspondence study were introduced, such as the "School at Home," "People's University at Home," "Technical Education at Home," and so forth. In 1922, the GLAVPOLITPROSVET (Main Administration for Political Education) of the NARKOMPROS (People's Commissariat of Education) created the All-Russian Commission for Assistance in Self-Education.²

On September 11, 1919, the NARKOMPROS of the R.S.F.S.R. (Russian Soviet Federated Socialist Republic) passed a resolution known as "On the Organization of Workers' Faculties at Universities," and on September 17, 1920, it was further confirmed by the decree of SOVNARKOM (Soviet People's Commissariat) entitled "On Workers' Faculties" which started the system of higher education for workers and peasants. This system was called RABFAK or Rabochii Fakul'tet (Workers' Faculty). There were hundreds of RABFAKs organized as preparatory divisions attached to higher educational institutions providing accelerated day, evening, and correspondence courses for workers and peasants. In 1940, this form of education was phased out and replaced by other types.³

¹"Self-Study," p. 809; Rosen, Part-time Education, p. 3.

²"Zaochnoe Obuchenie" (Correspondence Training), Pedagogicheskaiia Entsiklopediia (Pedagogical Encyclopedia), 1965, II, 79. Hereafter cited as "Correspondence Training."

³"RABFAK" (Workers' Faculties), Pedagogicheskii Slovar' (Pedagogical Dictionary), 1960, II, 245-246; K. Nozhko; E. Monoszon; V. Shamin; V. Severisev, Educational Planning in the U.S.S.R., trans. into English (Paris: UNESCO, 1965) p. 118. Hereafter cited as K. Nozhko, et al., Educational Planning.

In 1924, the Workers'-Peasants' Radio University was established, offering many courses via radio to teachers, technicians, and others wishing to advance themselves. The Moscow and Leningrad branches of the radio university gave courses in social science, natural history, agriculture, pedagogy, and so forth. These radio universities were not accredited and were not a part of the higher educational system.¹

During 1925-29, correspondence study began to expand, and several correspondence schools were established. Most of them offered courses in foreign languages, communism, Russian literature, trade union relations, and so forth. One of the largest schools organized during this period was the Communist Correspondence University. In addition, the Collegium of the NARKOMPROS of the R.S.F.S.R. on August 17, 1926 organized a correspondence department at the Moscow University and also at one of the largest Moscow VTUZs (Higher Technical Educational Institutions) known as the Mechanical Institute im. K. A. Timiriazeva. Furthermore, other correspondence departments were established at several Moscow VUZs (Higher Educational Institutions), with over 37,000 students participating. At this time, the functions of these departments were primarily to assist the youth in preparing for university entrance examinations.²

In 1927, the Scientific-Technical Section of the State Scientific Council decided to develop a system of correspondence study for schools throughout the entire country. In 1929, the Collegium of the NARKOMPROS of the R.S.F.S.R. established the basic principles for correspondence

¹"Correspondence Training," p. 80.

²Ibid.; "Zaochnoe Obrazovanie" (Correspondence Education), Bol'shaia Sovetskaia Entsiklopediia, 3d ed., 1972, IX, 330. Hereafter cited as "Correspondence Education."

study on all levels including its organization, methodology, procedures, examinations, home assignments and required textbooks. In 1928, the method of supervising higher and secondary correspondence schools was established by the GLAVVTUZs (Main Administration of the Higher Technical Educational Institutions) of the VSNKh (Supreme Economic Council) of the U.S.S.R. In addition, a correspondence department was organized at the Central Institute in Moscow. In 1929, several higher schools created external divisions; however, these proved to be inadequate for preparing specialists and were converted into correspondence departments.¹

It is interesting to note that the Central Committee of the CPSU, at its plenary meeting in July 1928, stated that if the level of industrial development of the leading capitalist countries was to be reached and then surpassed in a relatively short space of time, sufficient numbers of appropriately trained technical staff would have to be made available to industry, transportation, and agriculture. As a result, measures were introduced to improve the work of higher educational institutes and to expand their activities by providing correspondence and evening courses.²

Second Phase, 1929-45

During 1929-30, a great deal of attention was given to correspondence study as a supplement to the regular higher educational establishment because of the dire need for specialists and qualified workers in industry. Tens of thousands of youths were encouraged to enroll in correspondence study during this period; students were given many incentives such as paid leaves for attending lectures and seminars, extra increments

¹"Correspondence Training," p. 80; "Correspondence Education," p. 330.

²Nozhko, et al., Educational Planning, p. 120.

for participating in laboratory experiments and taking examinations. At the beginning of 1931, there were over 350,000 students in correspondence study in higher and secondary education.¹

The first legislative act concerning correspondence study was passed by the SOVNARKOM (Soviet People's Commissariat) of the R.S.F.S.R. on March 3, 1931. This decree, entitled "System of Correspondence Study," stated that in order to liquidate the backwardness of the working masses, it was necessary to supplement the regular school system by correspondence study on all educational levels. Furthermore, a special section for handling correspondence study was organized by the NARKOMPROS, establishing entrance and course examinations for all higher correspondence educational establishments.

At this time, several large higher correspondence institutes were created, such as: the All-Union Industrial Institute (Moscow), Leningrad Industrial Institute, All-Union Finance-Economic Correspondence Institute (Moscow), and others. Institutes were also set up as component parts of factories to train workers on the factory premises to become engineers and technicians without loss of work time. These were later revived in the 1960's and were called ZAVOD-VTUZs (Plant-Higher Technical Educational Institutions).²

During the 1930's, many regular full-time VUZs throughout the country organized correspondence departments, offering a considerable number of home courses; in addition, consultations, conferences, laboratory sessions, and lectures were given on campus to correspondence

¹"Correspondence Training," pp. 80-81.

²Ibid.; Rosen, Part-time Education, p. 6.

students.¹

On August 29, 1938, the SOVNARKOM of the U.S.S.R. passed a decree on "Higher Correspondence Education" emphasizing the importance of correspondence study in preparing specialists for industry. This document established the nomenclature for the various specialties offered by the VUZs, and also set up a network of independent correspondence VUZs. According to this decree, higher correspondence programs were to be organized for different disciplines, and paid leave for taking examinations and attending lectures was to be authorized.²

On March 13, 1939, the SOVNARKOM of the U.S.S.R. passed a statute concerning "Correspondence Aspirantura (Post-graduate Training)" which set up the system of research and procedures in writing dissertations for graduate degrees by correspondence study.³

Although the SOVNARKOM of the U.S.S.R. decreed measures in December 1943 to strengthen the system of correspondence study throughout the country, the number of correspondence students decreased by three times because of the war conditions.⁴

In December 1943 and December 1945, decrees by the Council of People's Commissars specifically stressed the development of correspondence pedagogical training. As a result, many correspondence departments

¹"Correspondence Training," p. 81.

²M. I. Movshovich, comp., Vysshaya Shkola: Osnovnye Postanovleniya, Prikazy i Instruktsii (Higher School: Basic Decrees, Resolutions and Regulations) (2d ed.; Moscow: State Publishing House, "Soviet Science," 1948), p. 57.

³Ibid., pp. 177-179; "Correspondence Education," p. 330.

⁴Nozhko, et al., Educational Planning, p. 34; "Correspondence Training," p. 82.

were organized at various pedagogical institutes to handle the increasing numbers of teachers studying by correspondence.¹

In March 1946, the Supreme Soviet of the U.S.S.R. passed a law for reconstructing and developing the national economy during the fourth five-year plan (1946-50). With regard to education, it proposed to restore and expand the network of schools which had been destroyed during World War II. Actually, it took several years to restore the higher and secondary specialized institutes of education destroyed by the war. In 1945, it was reported that the number of graduates from these institutes was two and one-third less than in 1940.²

¹Rosen, Part-time Education, p. 7.

²Nozhko, et al., Educational Planning, p. 125.

CHAPTER VI

SOVIET LAWS AND DECREES ON HIGHER CORRESPONDENCE EDUCATION SINCE 1945

Generally speaking, all the important directives concerning the development of the Soviet educational system originate from decisions and resolutions taken at the Congresses of the Communist Party of the Soviet Union or the plenums of the Central Committee. In addition, most of the directives are related to the targets of the five-year plans.

Measures Taken During the Fourth Five-Year Plan (1946-50)

Because of the heavy toll of specialists taken by World War II, the U.S.S.R. suffered an acute shortage of specialized personnel during the Fourth Five-Year Plan, with too few specialists graduating to meet the demands of the national economy.¹ Consequently, hereafter many decrees and resolutions on education were specifically pointed toward increasing the number of higher correspondence students, so they would be available for the labor market.

In April 1946, the U.S.S.R. Council of Ministers passed a decree "On Correspondence Training of Specialists" extending correspondence study a year longer than the regular day studies, including several course changes. The Committee on Radio Information and Broadcasting was also instructed to broadcast lectures via radio for correspondence students.²

¹Nozhko, et al., Educational Planning, p. 125.

²Rosen, Part-time Education, p. 7.

In February 1950, a decree concerning "Directives on Evaluating Control Tasks of Correspondence Students"¹ was initiated by the Teaching Methods Administration of the U.S.S.R. Ministry of Higher Education. According to this decree, the instructors in higher correspondence education were required to evaluate a student's work, to indicate errors, and to make suggestions, thereby improving a student's performance.²

The U.S.S.R. Council of Ministers and Central Committee of the CPSU passed a resolution on August 30, 1954 "On the Improvement of the Preparation, Distribution, and Use of Specialists with Higher and Secondary Specialized Education." In reference to instruction, it emphasized the need for properly trained correspondence students to meet the requirements of the national economy.³

It was reported during this period that owing to the shortage of specialists, particularly in power engineering, mechanical engineering, construction, and so forth, there were only eighty-nine engineers for every 10,000 industrial workers as against ninety-three in 1940.⁴

Measures Taken During the Sixth Five-Year
Plan (1956-60), Including the
Educational Reform of 1958

During the Sixth Five-Year Plan, higher correspondence education was greatly expanded so as to train those employed in practical engineering

¹Control Task consists of a comprehensive report covering the salient items studied in a given discipline. It is similar to a long term paper, requiring footnotes and a bibliography. For further explanation, see Chapter VIII, p. 2.

²Rosen, Part-time Education, p. 8.

³V. P. Eliutin, Vyschaia Shkola SSSR za 50 LET (U.S.S.R. Higher School for 50 Years) (Moscow: "Higher School" Publishing House, 1967), p. 109. Hereafter cited as V. P. Eliutin, U.S.S.R. Higher School for 50 Years.

⁴Nozhko, et al., Educational Planning, p. 125.

and technical jobs, as well as workers and collective farmers, without taking them away from productive work.¹

In February 1956, the rules for admission were laid down by the U.S.S.R. Ministry of Higher Education in which it was stated that Soviet citizens of both sexes would be accepted in higher correspondence schools with no age restrictions, providing they had completed their secondary education and had taken competitive entrance examinations, both in academic subjects and in the specialties at which they were working at the various enterprises.² It is important to note that these rules have since been subject to periodic revisions.

During the same period, the U.S.S.R. Ministry of Higher Education issued a decree "On Rules for the Further Improvement of Correspondence Study in the Higher Schools" calling for a system of correspondence branch units attached to higher schools to be scattered throughout the country, including UKPs (study consultation centers) to assist higher level correspondence students with their studies. The consultation centers were to handle instructional guidance and provide lectures, seminars, and laboratory facilities for correspondence students.³

¹Nozhko, et al., Educational Planning, p. 126.

²U.S. Joint Publications Research Service, Higher School System of the U.S.S.R.: Main Decrees, Orders and Instructions, Part I, JPRS Report 891-D, September 11, 1959, p. 240; Geo. Z. F. Bereday, Wm. W. Brickman, Gerald H. Read, eds., The Changing Soviet School (Boston: Houghton Mifflin, 1960), p. 276.

³"Uchebno-Konsul'tativnyi Tsentr" (Study Consultation Center), Pedagogicheskaya Entsiklopediia (Pedagogical Encyclopedia), 1963, IV, 415; Hereafter cited as "Study Consultation Center"; Rosen, Part-time Education, p. 8.

The Educational Reform Act of December 1958, which was decreed by the U.S.S.R. Supreme Council, was sparked by Nikita Khrushchev's public indictment of Soviet education as not meeting the needs of production but instead breeding "contempt for labor."¹ Actually, the critical shortage of young workers from eighteen to twenty-five years, because of the huge losses suffered by the U.S.S.R. in World War II, could explain the seriously reduced manpower situation at this time. As a consequence, there arose an urgent need for drawing students into productive work. The programs were adjusted to intensify higher correspondence education to meet the requirement.

The above-mentioned decree also emphasized the need for establishing separate publishing and printing facilities for correspondence and evening study and also the necessity for scheduling lectures for correspondence students via radio and television.²

In this regard, Minister V. P. Eliutin of the Ministry of Higher and Secondary Specialized Education in November 1958 officially stated:

The character of the existing regular education will be changed. Along with the elimination of the division between education and practice, will come the obliteration of the distinction between regular, correspondence and evening programs. A unified system combining all three forms of education will be established. Therefore, this system will integrate, at different stages of instruction, part-time study of the correspondence and evening type with full-time study during the day. The system will be adopted in the vast majority of higher educational establishments in the fields of engineering, agriculture and the humanities.³

According to Minister Eliutin, these programs were to go through a period of experimentation for sometime to come. It was decided that

¹"Khrushchev's Memo on School Reorganization," Pravda (Truth), September 21, 1958, pp. 2-3.

²Ibid.

³V. P. Eliutin, Vysshaya Shkola Strany Sotsializma (Higher Education in the Country of Socialism) (Moscow: "Higher School" Publishing House, 1959), p. 73.

students entering higher education directly from secondary schools were to enroll for the first two years in a correspondence program supervised by the regular departmental staff, and then phased into the regular day program in the third year. In addition, Eliutin stated that correspondence and evening education must be improved to meet the new conditions. The main weakness mentioned was that the level of theoretical training for specialists in higher evening and correspondence schools was, in many instances, below the level of the day school. Therefore, he stressed that the faculties and departments of higher correspondence and evening schools should be staffed with the most qualified professors and instructors in sufficient numbers to assure a normal study program and permit a reduction in the number of students per instructor. He also asserted that preference for admitting students to higher correspondence schools should be given to persons already working in a branch of production related to their chosen field.¹

The U.S.S.R. Council of Ministers passed a decree on September 18, 1959, entitled "Concerning the Participation of Industrial Enterprises, Sovkhozes and Kolkhozes in Recruiting Students for VUZs and Technicums." The purpose of this decree was to survey the various enterprises for workers who could be trained as specialists while continuing their work in their respective organizations.²

In order to further entice workers to enroll in higher correspondence schools, in early 1960 a decree of the U.S.S.R. Council of Ministers was issued by which all correspondence students would receive a

¹ Ibid., pp. 73-79.

² V. P. Eliutin, U.S.S.R. Higher School for 50 Years, p. 120.

15 percent increase in their stipend. Besides, extra leave without a decrease in salary for higher correspondence students was authorized as follows: first and second-year students--thirty days; third-year students and higher--forty days; students preparing and defending diploma projects--four months. In addition, students were to be given a day off each week at half pay for a period of ten months to work on a diploma project.¹

Measures Taken During the Seventh Five-Year
Plan (1951-65), Including the
1964 Educational Reform

The number of students in training without interrupting production (part-time) increased further but at a slower rate during the Seventh Five-Year Plan. According to K. Nozhko, the number of part-time students admitted to higher education was 57 percent of the total in 1964 as against 56 percent in 1960.²

In October 1961, the 22nd Congress of the CPSU adopted a resolution containing long-term targets in education. It called for a further increase in evening and correspondence schools of all levels, including the extensive development of regular higher and secondary specialized schools in order to meet the requirements arising from the economic expansion anticipated by 1980.³

The U.S.S.R. Council of Ministers and Central Committee of the CPSU issued a decree on May 9, 1963 entitled "On Measures to Further

¹Ibid.

²Nozhko, et al., Educational Planning, p. 271.

³U.S. Department of Health, Education and Welfare, Office of Education, Higher Education in the U.S.S.R., Bulletin 1963, No. 16 (Washington, D.C.: U.S. Government Printing Office, 1963), p. 93; Nozhko, et al., Educational Planning, p. 272.

Development of Higher and Secondary Specialized Education, also Improving the Preparation and Utilization of Specialists." The decree indicated that there was an unequal distribution of VUZs among the various economic regions; therefore, it called for an increase in the number of higher schools, including correspondence institutes to handle the growing number of students.¹

In April 1964, a U.S.S.R. decree "On the Further Improvement of Higher and Secondary Specialized Correspondence and Evening Education" was issued stressing that the major objective of Soviet education throughout the 1960's was to expand the whole system of correspondence study. The decree also noted that preparing specialists "without interruption from production" had become the mainstay for raising the technical level of the masses of workers. It was also mentioned that in order to increase the number of higher correspondence students, it would be necessary to prepare workers for the required entrance exams. To accomplish this goal, a wide network of preparatory school divisions would be organized near the various enterprises. It was also stressed that measures should be taken to attract the best qualified professors, instructors, and industrial specialists so as to carry out properly the educational tasks for those studying at correspondence and evening educational institutions.²

In late 1964, changes were made in the Soviet educational system which were known as the 1964 Educational Reforms. The main change effected was the return to ten-year schooling, inasmuch as the former

¹V. P. Eliutin, U.S.S.R. Higher School for 50 Years, p. 126.

²"Correspondence Study and the Resolution of April 9, 1964," Izvestia (News), April 23, 1964, p. 4; V. P. Eliutin, U.S.S.R. Higher School for 50 Years, p. 120.

eight-year schooling system, instituted by Khrushchev, inadequately prepared students for higher education. The main feature of the new curricula was to raise the scientific level of the polytechnical schools so that they could meet the challenges of modern science. In addition, greater stress was to be placed on theory rather than practical experience. In order to accomplish this, new teaching methods were introduced requiring independent work by students. Also, new textbooks were published containing the main theoretical concepts of modern science which constituted the backbone of the curriculum.¹ In other words, manual and practical work were no longer considered as ends in themselves. They had to be linked to scientific and technological problems.

The main reason for the changes was the fact that, at this time, there was a great need for technicians and specialists with a theoretical background in order to meet the demands of modern science, namely, space, rocketry, cybernetics, electronics, and so forth. This need was not being met by the secondary eight-year school or higher correspondence graduates who were considered inferior by the various enterprises. As a result, higher correspondence study, to some degree, began to decline with the emphasis being placed on regular full-time instruction.

Nevertheless, in 1965, it was announced that by having raised the level of instruction in the new ten-year and higher schools, including correspondence institutes, only 11 percent of the total number of specialist positions were filled by praktiki (non-graduates). The replacement of praktiki by graduates was accomplished primarily by increasing the theoretical qualifications of the part-time students.²

¹Nozhko, et al., Educational Planning, p. 241.

²Ibid., pp. 144, 272.

Measures Taken During the Eighth
Five-Year Plan (1966-70)

The basic task during this period was to improve the quality of the training and education of all specialists, taking into account the requirements of production. Also, the priorities for admittance to higher education were to be given to agricultural and industrial workers.

A great role in increasing the effectiveness of VUZ education was to be attained by the decree issued on September 3, 1966 by the Central Committee of the CPSU and the U.S.S.R. Council of Ministers. This decree was to give preference to correspondence and evening students enrolling at VUZs who were ordered by their kolkhozes, sovkhoses, enterprises, and institutions to study the specialties in which they were engaged.¹

In August, 1968, the CPSU Central Committee and the U.S.S.R. Council of Ministers issued a resolution on measures for improving the training of specialists and perfecting the guidance given to higher and secondary specialized education in the country. In this regard, a State Inspectorate of Higher Schools was established which was to inspect all higher educational institutions (day, evening and correspondence) in the U.S.S.R., regardless of departmental subordination. The purpose of this inspectorate was to increase the quality of specialized training in all higher educational institutions, to oversee the admissions procedures, and to check the placement and proper utilization of higher school personnel.²

¹Ibid., p. 156; V. N. Stoletov, "Priorities in Correspondence Study," Izvestia (News), September 15, 1966, p. 5.

²"State Inspectorate of Higher Schools," Pravda (Truth), August 30, 1968, p. 3.

Measures Taken During the Ninth
Five-Year Plan (1971-75)

The current measures being formulated continue to emphasize the further improvement of theoretical training of all specialists. Priorities for admission to higher educational correspondence institutes are being given to those studying specialties in which they are currently employed. In addition, there is a concerted effort being made to improve the qualifications of the teaching staff of higher correspondence education.

In July 1972, the Central Committee of the CPSU and the U.S.S.R. Council of Ministers issued a decree entitled "Concerning Measures for Future Improvement of Higher Education in the Country." Among the many stipulations, the decree stressed the importance of preparing highly qualified specialists for the national economy, criticizing the level of theoretical and professional knowledge of graduates of higher correspondence schools and evening divisions as being unsatisfactory. In addition, it was noted that many higher correspondence and evening schools and divisions did not have adequate academic plans, programs and textbooks to cover the new developments in science and technology. It also specified that higher correspondence and evening students should have practical experience in the specialty selected for study; these students should be given priority over others in enrolling for these courses; also, the instructional staff of higher correspondence schools should be reinforced by highly qualified instructors. In addition, it was emphasized that the preparatory divisions of the various higher educational institutions should be improved so that they could become an

important source of recruiting students for higher education.¹

In summing up, it is noteworthy to state that the Educational Reform of 1958 did not yield the results expected of correspondence instruction, primarily because it did not have qualified teachers, and also because the curriculum did not meet the needs of modern science. Therefore, to rectify this situation, the stress was placed on scientific theory both in the secondary and higher correspondence schools, a trend which still continues. Also, the concentration on the ten-year cycle of education was considered as essential for those students going into university studies or skilled practical work.

¹"On Measures for Further Improvement of Higher Education in the Country," Pravda (Truth), July 30, 1972, pp. 1-2; "On Measures for Further Improvement of Higher Education in the Country," Uchitel'skaia Gazeta, (Teachers' Newspaper), August 1, 1972, p. 1.

CHAPTER VII

ADMINISTRATION OF HIGHER EDUCATIONAL INSTITUTIONS

Role of the Ministries in the Educational System

Until the Educational Reform of 1958, the higher educational establishments throughout the Soviet Union (except in the Ukraine which had its own Republic Ministry of Higher Education) were under the central control of the U.S.S.R. Ministry of Higher Education. Since the educational reforms, a policy of decentralization has existed to some degree. In other words, the prerogatives previously exercised by Moscow were partially delegated to the union republic ministries and committees of higher and secondary specialized education, with the overall supervision remaining under the control of the Central Ministry known as the U.S.S.R. Ministry of Higher and Secondary Specialized Education, established on June 22, 1959. However, it must be pointed out that even the central ministry does not exercise immediate control over all higher educational institutions, especially those that come under the direct supervision of other ministries or state committees such as agricultural and forestry institutes, which are supervised by union republic ministries of agriculture; transportation and communications institutes, which are supervised by various U.S.S.R. and R.S.F.S.R. ministries of railroads, communications, maritime, river fleet, and

civil aviation; medical institutes¹ which are supervised by the U.S.S.R. Ministry of Health; and so forth.²

Structure of U.S.S.R. Ministry of Higher
and Secondary Specialized Education

The structure of the Central Ministry includes the minister, two deputy ministers, a scientific-technical council, two administrations for methodology (responsible for both full-time and evening and correspondence study)--one for higher education and the other for specialized secondary education, and an international administration. In addition, a division of planning and finance and some smaller independent divisions are included. Moreover, the methodology administration on higher schools organizes commissions of higher school professors and instructors who advise on teaching methods and textbooks for various technical specialties. These commissions also deal with evening and correspondence study.³

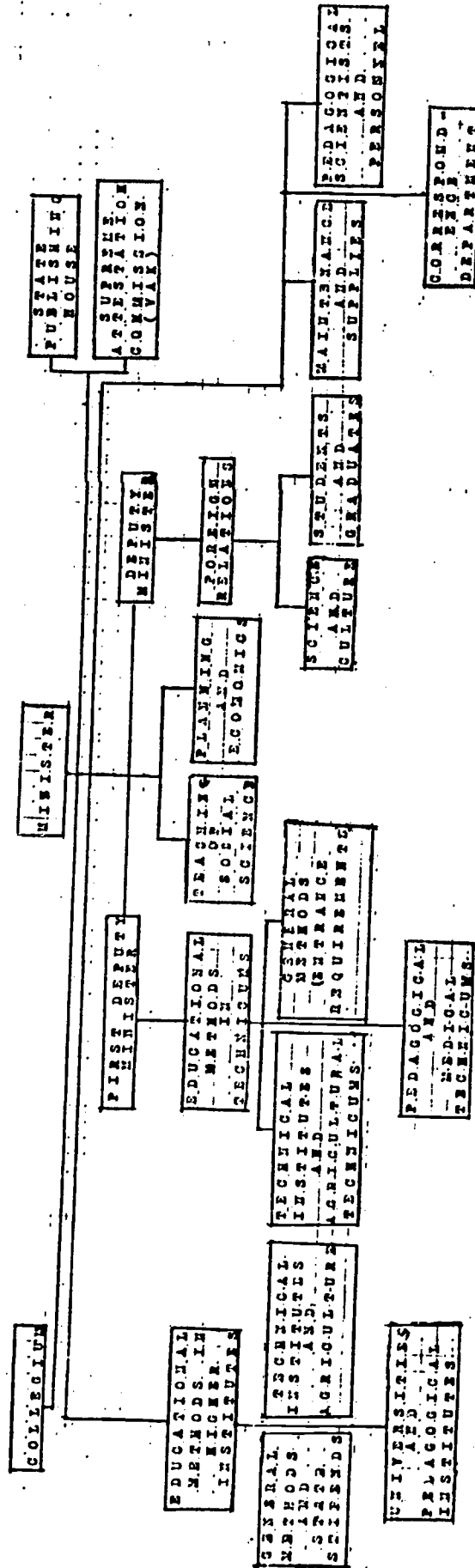
The Central Ministry has control over top-level planning and policy coordination and also has overall responsibility for training specialists and coordinating research in higher and graduate schools. It determines the overall program of higher educational activity, lines of specialization, and also has final control over the teaching staff, accreditation,

¹There are no higher correspondence educational institutions offering medical courses.

²U.S.S.R. Ministry of Higher and Secondary Specialized Education, Spravochnik dlia Postupaiushchikh v VUZy SSSR v 1972 godu (Handbook for Those Entering U.S.S.R. Higher Schools in 1972), (Moscow: "Higher School" Publishing House, 1972), pp. 211-224. Hereafter cited as MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1972; Harold J. Noah, Financing Soviet Schools (New York: Teachers' College Press, Columbia University, 1966), p. 39. Hereafter cited as Noah, Financing Soviet Schools.

³See Chart 1; Herbert C. Rudman, The School and State in the U.S.S.R., (New York: MacMillan Co. 1967), pp. 82, 90; Noah, Financing Soviet Schools, p. 39.

Chart 1.--Structure of U.S.S.R. Ministry of Higher and Secondary Specialized Education.



Source: Herbert C. Rudman, The School and State in the U.S.S.R. (New York: Macmillan Co., 1967), p. 82.

appointments, enrollment quotas, textbooks, and methodology of instruction.¹

Work of the U.S.S.R. GOSPLAN (State Plan)

The planning departments of the ministries of education and higher and secondary specialized education prepare a tentative plan for the development of education in their republic. These plans are periodically sent by the union republics to the U.S.S.R. GOSPLAN; they consist of the different types of education, total number of admissions, total numbers enrolled in the various schools, estimated expenditures, and so forth. Based on these estimates, the GOSPLAN draws up a summary report which is successively submitted to the U.S.S.R. Council of Ministers and then to the Congress of the CPSU for final approval.²

VAK (Supreme Attestation Committee)

In addition to the supervision and overall planning of higher education, the U.S.S.R. Ministry of Higher and Secondary Specialized Education has retained one of its most important weapons of control, i.e. the power of selecting higher educational establishments, as well as all other research organizations, to engage in advanced training and research. This power is actually vested in the all-important VAK (Supreme Attestation Commission) which is directly attached to the U.S.S.R. Ministry of Higher and Secondary Specialized Education. The VAK grants permission to higher educational establishments and research

¹Nozhko, et al., Educational Planning, p. 237.

²Ibid., pp. 81-82.

institutes to engage in advanced training and to conduct the public defense of advanced degree dissertations. It also reviews the decisions of the educational establishments concerning the award of candidate degrees, as well as appointments to advanced academic rank (professor, associate professor, senior researcher). It designates the fields in which research institutes may conduct advanced degree training and accept dissertations. It may also revoke advanced rank certification. Besides, VAK keeps a file of all the recipients of advanced degrees, including advanced teaching and research personnel.¹

State Inspectorate of Higher Schools

In 1968, the State Inspectorate of Higher Schools was empowered to inspect all the higher educational institutions (including all higher correspondence and evening schools) in the U.S.S.R., regardless of their ministerial, administrative or departmental subordination. Among others, the functions of this organization are to oversee admission procedures and student placement so that students are properly utilized in the various enterprises.²

The Role of the Union Republic and State Committee in Administration of Higher Schools

The union republic ministries of higher and secondary specialized education follow the same structure as the Central Ministry, varying

¹Nicholas DeWitt, Education and Professional Employment in the U.S.S.R., National Science Foundation, (Washington, D.C.: U.S. Government Printing Office, 1961), p. 41. Hereafter cited as DeWitt, Education in the U.S.S.R.; "VAK" (Supreme Attestation Commission), Pedagogicheskaja Entsiklopedia (Pedagogical Encyclopedia), 1966, I, 444.

²"State Inspectorate of Higher Schools," Pravda (Truth), August 30, 1968, p. 3.

only slightly from each other. In other words, they all have the usual ministerial subordination--ministry (ministerstvo); main administration (glavnoe upravlenie); administration (upravlenie); and division or department (otdelenie or otdel). Two deputy ministers serve under the union republic minister, one having overall supervision of the administration of higher educational institutions and secondary specialized schools; whereas the other deputy minister has supervision over the remaining independent divisions or departments, school construction, and trade schools. There are no departments or divisions for correspondence and evening education on a ministerial level as such; however, every division has inspectors who are responsible for part-time education (correspondence and evening study).¹

Rather than a ministerial setup, some republics, such as the Georgian and Armenian S.S.R.s, have State Committees for Higher and Secondary Specialized Education. The chairman of the State Committee, however, ranks as a minister in the Union Republic Council of Ministers. In general, state committees will be found in less developed republics, having a smaller number of educational institutions to supervise. Most state committees directly supervise the universities and institutes, including the subordinate committees handling textbooks and research methodology. The deputy chairman supervises the main administrations for higher education and secondary specialized education and divisions for personnel, finance and others. Each division or department, under the appropriate main administration, has a chief, deputy chief, and

¹ DeWitt, Education in the U.S.S.R., p. 224; Rosen, Part-time Education, pp. 50-51.

inspectors, among whom are those who handle correspondence and evening education.¹

The State Committees control the operations of higher correspondence and evening schools through inspectors. They inspect these schools regularly, checking on the specialized curriculum, teaching, and textbooks, reporting regularly to the chairman of the State.²

Internal Administration of Higher Educational
Institutions (Universities, Institutes,
Including Correspondence Institutes)

Every higher educational institution is headed by a rector³ who has several deputies (vice rectors) for pedagogical, scientific, and administrative problems. The rector is the chairman of the school council whose members are the pedagogical and scientific vice rectors, the dean of faculties, the professors in charge of departments, and certain lecturers. Besides, the rector approves plans for scientific research, including general scientific theoretical problems concerning industry or other branches of economy.⁴

The councils are vested with broad powers in different areas of the VUZ activities. They discuss problems of teaching and methodology, draw together the teaching experience of the various departments, award titles of assistant instructors, and consider applicants for positions of docent or professor. The larger higher educational institutions

¹ Rosen, Part-time Education, p. 52.

² Ibid.

³ There are some institutes which are headed by directors, whose positions are similar to a rector's.

⁴ Nozhko, et al., Educational Planning, pp. 68-69.

confer the degree of candidate (kandidat) and recommend the award of doctoral degrees. They also have the right to accept or refuse candidates for academic degrees of "candidate" of science or doctor of science.¹ It should be mentioned here that the above actions can all be revoked by the VAK which was previously discussed.

The faculty prepares specialists in one or more related fields. It is headed by a dean selected by competition from a number of professors representing the important disciplines. The dean has charge of teaching and scientific work and also directs the practical work of students.²

In the larger educational institutions, the faculty councils, under the chairmanship of the deans, have practically the same function as the VUZ councils. The larger faculties even have the right to examine students for degrees.³

The primary educational and scientific unit of each VUZ is the department known as the Kafedra, which deals with the teaching methods and scientific research in a related field.⁴

The department is headed by the supervisory professor. He has charge of the laboratories and classrooms; gives lectures on basic courses; directs the work of other professors, assistant professors and lecturers; and verifies the quality of the lectures. He directs

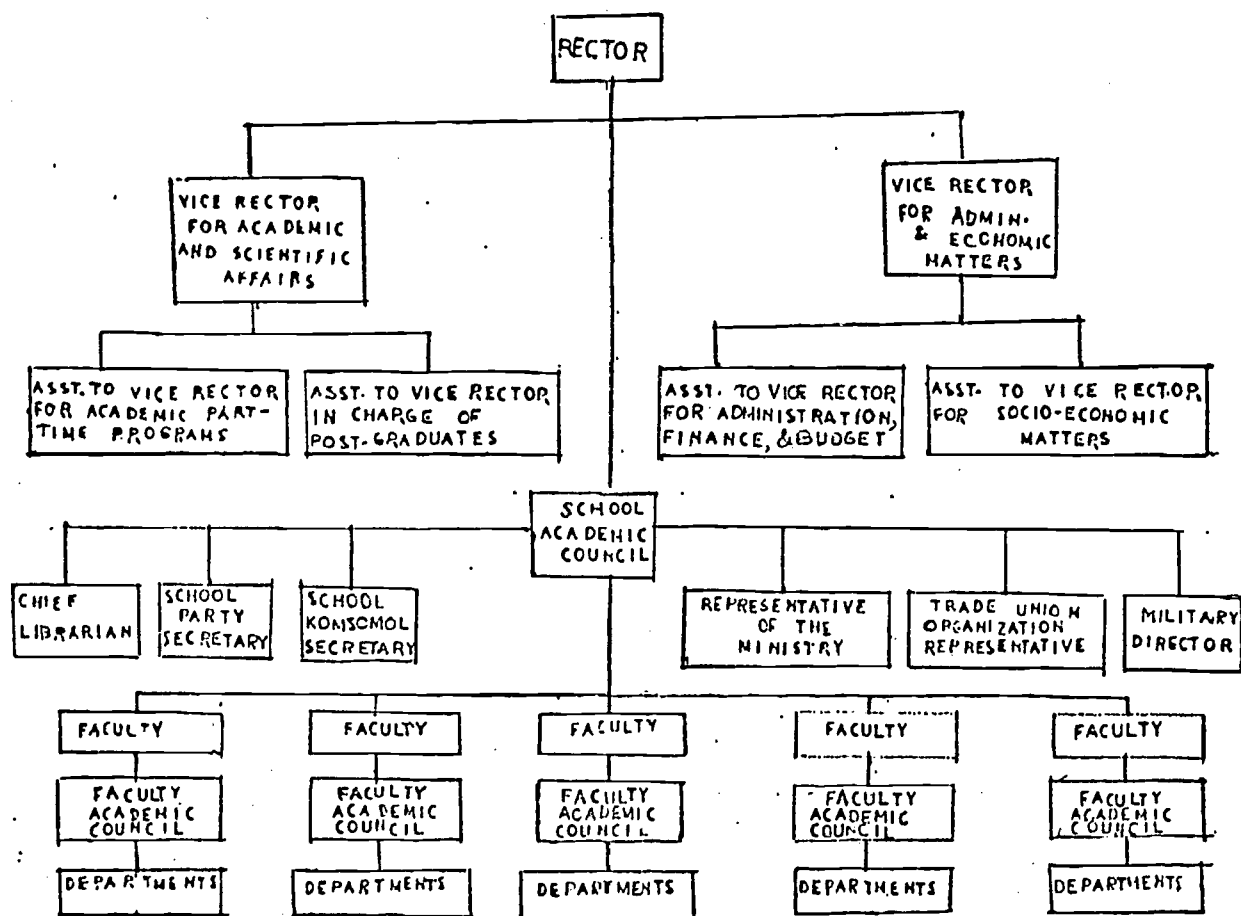
¹Ibid., p. 68.

²Ibid., p. 69.

³Ibid.

⁴Ibid.

Chart 2.--Structure of the Internal Administration of a Higher Educational Institution.



Source: U.S. Department of Health, Education, and Welfare, Office of Education, Education in the U.S.S.R., Bulletin 1957, No. 14 (Washington, D.C.: United States Government Printing Office, 1957), p. 176.

the work of students and the training of aspirants (graduate students), and offers suggestions to the other professors and instructors in the department.¹

The staff of a department usually is comprised of professors, senior lecturers, lecturers, and assistants. In addition, there is usually a group of laboratory assistants attached to the staff.²

Role of the Communist Party in
the Educational System

As the supreme authority in the Soviet system, the CPSU has complete control, both directly and indirectly, over every phase of Soviet education. The CPSU central organ directly formulates basic educational policies covering types of schools, curricula, programs, instructional methods, schooling, requirements, and making sure they are enforced. These policies are generally incorporated in resolutions, decrees or directives which emanate from the Central Committee of the Party and then are formulated as decrees or laws of the U.S.S.R. Council of Ministers. Actually, the function of government organs is solely to promulgate the Party's decisions in legal form and to execute them through the State administrative machinery. Therefore, the party is actually the initiator of educational legislation.³

One of the main departments of the Central Committee of the CPSU is the Department of School Affairs, Higher Education and Scientific

¹Ibid.

²Ibid.

³DeWitt, Education in the U.S.S.R., p. 43; George S. Counts, Khrushchev and the Central Committee Speak on Education (Pittsburgh: University of Pittsburgh Press, 1960), pp. 1, 17.

Research (Otdel, VUZov i Nauki), whose relationship to the Politburo is shown in Chart 3. The counterparts of this department exist in the party central committees of each union republic and are known as sections; these are also included on the regional, city, and district levels. These departments and sections supervise educational institutions and periodically report to the higher party levels.¹

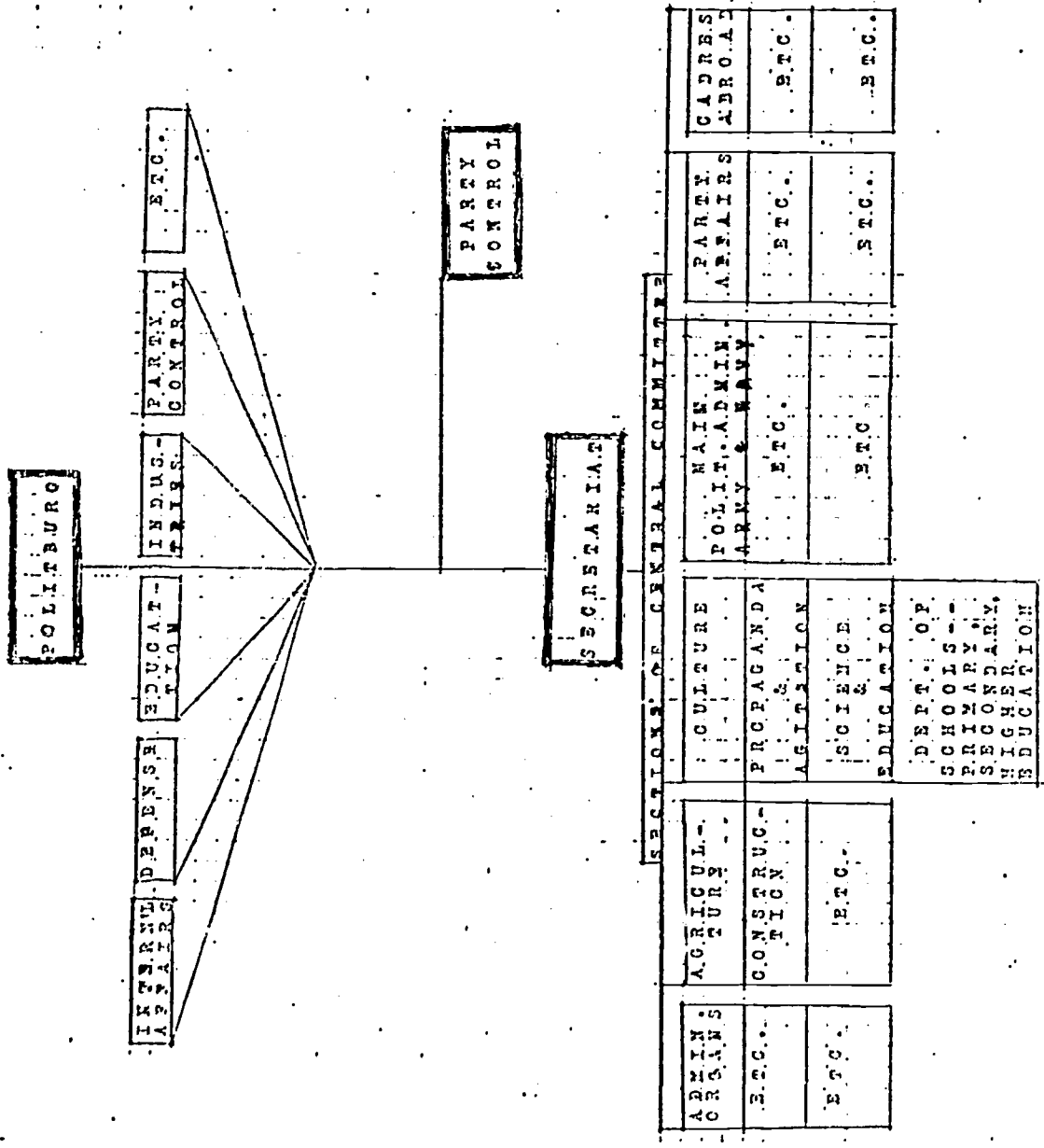
Of importance in the administration of Soviet higher education is the surveillance maintained by the secret police on the political reliability of administrative personnel, instructors, students, and others, operating down to the lowest levels. The secret police operate through the special department (spets-otdel), which is an integral part of every administrative unit. It is the duty of the police to keep a close watch on the administrative machinery, maintaining dossiers on all persons involved in the higher educational process.²

In summarizing, it is important to bear in mind that alongside the hierarchy of the regular organs of the Soviet State, there exists a parallel organization of the CPSU whose role is decisive.

¹ DeWitt, Education in the U.S.S.R., pp. 43-44; William Taubman, The View from Lenin Hills (New York: Coward-McCann, Inc., 1967), p. 9.

² DeWitt, Education in the U.S.S.R., p. 42.

Chart 3. -- Structure of the Central Committee of the CPSU.



Source: U.S. Department of Army, U.S.S.R.: Strategic Survey: A Bibliography, Pamphlet 550.6 (Washington, D.C.: n.p., 1968), p. 187.



CHAPTER VIII

BASIC FEATURES OF THE HIGHER EDUCATION

CORRESPONDENCE STUDY SYSTEM IN

THE SOVIET UNION

The U.S.S.R. correspondence educational system is one of the most important ways of providing specialists with higher education and of encouraging others to raise their qualifications without having to leave production work. To accomplish this, the student is subjected to a series of orientations, consultations, examinations, laboratory sessions and written assignments as prescribed by the U.S.S.R. Ministry of Higher and Secondary Specialized Education for correspondence study.

Orientation

After the entrance examinations are completed, a student is generally given a ten-day orientation course, by the institution or university he has chosen, during which time the staff explains the curriculum, specific features of correspondence study, mailing of assignments, and the methods to be followed in using textbooks and reference materials. Furthermore, every student receives a basic book entitled "Organization, Forms, and Methods of Teaching Correspondence Students," in addition to information about: the university or institute; paid leave for correspondence students; how to organize independent study; the use of the

library; required textbooks and control tasks (kontrol'nye raboty).¹

Written Assignment

Written work, for which provision is made in the curriculum, and which must be mailed at regular intervals to the respective school or UKP (study consultation center), is the principal means of checking a student's progress. The purpose of the written assignment is to enable the instructional staff to ascertain the amount of progress made by a student, to determine what difficulties he may have, and what should be emphasized during review lectures. It should be indicated that written assignments must be completed and graded before a student is allowed to work on his control tasks.²

Grades and Incentives in Higher Correspondence Education

The standard Soviet school five-point marking system is used in grading higher correspondence students.

¹M. N. Morozova, "Kontrol'naia Rabota" (Control Task), Chapter IV of Zaochnoe Universitetskoe Obrazovanie (Correspondence University Education) No. 4. (Moscow: Moscow University Publishing House, 1969), pp. 88-90; "Voprosy Obrazovaniia Bez Otryva Ot Proizvodstva" (Problems of Education for Those Studying Without Disrupting Production), Vestnik Vysshei Shkoly (Journal of Higher Education), No. 5 (May, 1972), p. 72; Control Tasks are problems which are assigned after certain grade work and readings have been completed in a given specialty, such as social science, literature, mathematics, chemistry, etc. The questions asked usually stress both the theoretical and practical aspects of a given problem. The answers must be written in a comprehensive report form with the proper citations given for any sources used. The quality of the control task is assessed on the basis of how accurately, creatively, and independently the student answers the questions. These tasks are mailed in according to a set schedule.

²Iu.Iu. Veingold "Metody Obucheniia Zaochnikov" (Methods of Teaching Correspondence Students), Chapter II of Zaochnoe Universitetskoe Obrazovanie (Correspondence University Education) No. 4 (Moscow: Moscow University Publishing House, 1969), p. 7.

- 5 - otlichno - excellent
- 4 - khorosho - good
- 3 - udovletvoritel'no - satisfactory
- 2 - neudovletvoritel'no - unsatisfactory
- 1 - plokho - poor (failure)¹

The grades of higher correspondence students are only sent to the employer if they are unsatisfactory or poor. Since advancement and salary increases may be affected by bad grades, most students strive to do good school work.²

Other factors which contribute to the success of higher correspondence study are: (1) the student receives paid leave from his job in addition to his regular vacation for the period he spends at higher schools or UKP's; (2) the student is also given a rebate for all mailing costs pertaining to assignments, and he receives half the cost of transportation to and from the school.³

Residence Requirements

It is required that once or twice a year each correspondence student attend the university or specialized institute in which he is enrolled for a period of five to seven weeks, during which time he is subjected to lectures, laboratory sessions, seminars, consultations, and examinations. A correspondence student enrolled in a university or pedagogical institute spends two periods a year--thirty days in the summer and ten in the winter at his respective school. During this

¹DeWitt, Education in the U.S.S.R., p. 305.

²Ibid., p. 235.

³U.S.S.R. Ministry of Education and U.S.S.R. Academy of Pedagogical Sciences, Narodnoe Obrazovanie v SSSR, 1917-1967 (Public Education in U.S.S.R., 1917-1967), (Moscow: "Education" Publishing House, 1967) p. 283.

period, the student receives leave with pay. Those students who live great distances away from higher schools are required to attend nearby UKP_S either once or twice weekly, or for protracted periods during the summer, or once or twice during the winter.¹

Most higher correspondence schools also use audio-visual aids, such as tape recorders, films, filmstrips and phonograph records to supplement the regular lectures. Also, students are required to listen to pertinent lectures given on various subjects via radio and television.²

UKP (Study Consultation Center)

In addition to the branch units, most higher correspondence establishments have UKP_S which could be located as far away as Vladivostok. These centers accommodate students who, because of distances, cannot attend the required seminars, lectures, or help-sessions given at their institutes.³

The UKP_S hold periodic lectures, laboratory sessions, seminars, and conferences for correspondence students. These centers are particularly directed toward assisting students in passing required examinations. Special attention is given to problems that students may have--required reading lists, techniques used in studying correspondence courses, and so forth.⁴

¹"Ochno-Zaochnaia Sistema Zhiznenna" (Residence-Correspondence System of Education), Vestnik Vysshei Shkoly (Journal of Higher School) No. 5 (May, 1972), p. 29.

²V. P. Eliutin, U.S.S.R. Higher School for 50 Years, p. 122.

³"UKP" (Uchebno-Konsul'tatsionnyi punkt), Pedagogicheskaja Entsiklopedia (Pedagogical Encyclopedia), 1968, IV, p. 415.

⁴Ibid.

These centers are staffed by specialists on various subjects, who lecture and tutor correspondence students. Classes are usually formed on the basis of 10-15 students and are called group consultations. Students who cannot attend these consultations because of work schedules or because of long distances to be travelled, can arrange for individual consultations.¹

In order to organize an UKP, it is necessary to have no less than a total of 200 correspondence students attending; however, in remote areas and at military bases, it is possible to organize one with as few as seventy students.²

After required class and laboratory work are completed, students must prepare and submit diploma projects in engineering or diploma theses in other fields and pass State examinations. Graduates of correspondence courses are said to be accorded the same professional status as graduates of regular programs. Correspondence students are generally expected to take a minimum of one extra year to complete a higher education curriculum. According to several articles which appeared in Soviet educational journals, it was emphasized that many higher correspondence students are not able to finish the required courses in twice the regular time.³

Fields of Study - Specialties Offered in the
Soviet Higher Education Correspondence System

In the Soviet Union, a student's field of study in higher education

¹ Ibid.

² "Correspondence Training," p. 82.

³ M. Rutkevich, "Higher School Admissions," Izvestija (News), March 16, 1971, p. 3; M. Rutkevich, "Why a Student Does Not Arrive at the Finish" in the Contemporary Soviet Education, ed. by Fred Ablin (White Plains, New York: International Arts and Sciences Press, 1969), pp. 155-159.

is called a "specialty" (spetsial'nost'). All the students acquire a specialty as a result of higher education study. No higher education institution offers non-specialized instruction, such as is common in the U.S. Specialization in the U.S.S.R., therefore, has a much narrower meaning than in the U.S.

Availability of individual specialty training varies widely throughout the Soviet Union. Therefore, a city such as Moscow, with its many higher schools, has the greatest diversification, with training available in many specialties. By comparison, some provincial towns have either one higher school or none; and, as a consequence, under these conditions it is difficult for some students to find a suitable specialty. Consequently, correspondence study is the only answer to their problems.

Soviet regular higher education presently offers over 400 specialties, identified by a four-digit decimal classification code (from 0100 to 2299). By comparison, in 1972, there were only seventy specialties offered to higher correspondence students, who had completed secondary specialized education, as shown in Table 1.¹

It can be ascertained from the list of specialties that the concentration is mostly on technical subjects such as engineering, aeronautics, electronics, chemistry, and so forth.

¹ U.S.S.R. Ministry of Higher and Secondary Specialized Education, Spravochnik dlia Postupalushchikh v Vysshie Uchebnye Zavedeniia SSSR v 1971 godu (Handbook for Entrants to Higher Educational Institutions in the U.S.S.R. in 1971), (Moscow: "Higher School" Publishing House, 1971), pp. 11-12. Hereafter cited as MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1971.

TABLE 1

LIST OF SPECIALIZATIONS OFFERED BY SOVIET HIGHER
CORRESPONDENCE SCHOOLS TO UNDERGRADUATES - 1971

<u>Specialty</u> <u>Code</u>	<u>Specializations</u>
0105	Geophysical Methods of Prospecting for and Exploring Mineral Deposits
0201	Mine Surveying
0204	Enrichment and Concentration of Minerals
0514	Shipbuilding and Repair
0524	Shipboard Machinery and Mechanisms
0525	Shipboard Power Installations
0530	Optical Instruments
0535	Aircraft Construction
0537	Aviation Engines
0604	Dielectrics and Semi-conductors
0606	Automation and Telemechanics
0608	Electronic Computer Instruments
0611	Electronic Instruments
0617	Aviation Instrument Construction
0621	Technical Operations of Aircraft Instruments and Electrical Equip- ment
0629	Semi-conductors
0639	Automation and Composite Mechaniza- tion of Chemical Technological Proc- esses
0642	Information Measurement Techniques
0701	Radio Engineering
0703	Radio Communications and Broadcasting
0705	Construction and Production of Radio Equipment
0706	Operations of Aviation Radio Equip- ment
0708	Multi-channel Electric Communications
0801	Chemical Technology of Processing Petroleum and Gas
0803	Technology of Nonorganic Compounds and Chemical Fertilization
0805	Technology of Electrochemical Proc- esses
0806	Chemical Technology of Astringent Materials
0807	Technology of Basic Organic and Oil Chemical Synthesis

TABLE 1--Continued

<u>Specialty</u> <u>Code</u>	<u>Specializations</u>
0810	Chemical Technology of Plastic Masses
0811	Chemical Technology of Varnishes, Paints, and Non-metallic Coatings
0812	Technology of Rubber
0813	Chemical Technology of Cinematographic-- Photographic Materials
0830	Chemical Technology of Ceramics and Refractories
0831	Chemical Technology of Glass
0833	Technology of Chemical Fibers
0903	Chemical Technology of Wood Processing
0904	Technology of Cellulose and Paper In- dustry
1106	Technology of Leather and Fur Industry
1107	Technology of Polymerized Coating Syn- thetic Leather Materials
1301	Engineering Geodesy
1302	Astro-geodesy
1303	Aerial Photographic Geodesy
1304	Cartography
1501	Agro-chemistry and Soil Science
1504	Plant Protection
1510	Electrification of Agriculture
1606	Maritime Navigation
1607	Internal Waterway Navigation
1610	Operation of Aircraft and Engines
1612	Operation of Shipboard Power Instal- lations
1613	Operation of Shipboard Electrical Equipment
2019	Biology
2103	Foreign Languages
2105	Physics
2106	Natural Sciences
2109	Drafting and Drawing
2110	Preschool Pedagogy and Psychology
2111	Defectology (Handicapped)
2114	Physical Education
2119	Music and Singing
2120	General Science and Physics
2201	Piano (Organ)
2202	Orchestral Instruments
2203	Folk (Musical) Instruments
2206	Choral Directing
2207	(Musical) Composition
2209	Dramatic Theatre and Cinema Acting
2211	Drama Production, Staging and Direct- ing

TABLE 1--Continued

<u>Specialty</u> <u>Code</u>	<u>Specializations</u>
2215	Cinema Operation Techniques
2220	Graphics

Source: Compiled from data in MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1971, pp. 11-12.

Correspondence Aspirantura (Post-graduate) Training

Aspirantura training (day, evening and correspondence) is considered the principal means of preparing teaching and research personnel for higher educational establishments and research institutes of the Soviet Union. It should be stated here that aspirantura training does not necessarily result in the award of a higher degree. However, it prepares graduate students for candidate degrees and for the defense of a dissertation,¹

Aspirantura students are selected from among applicants under forty-five years of age on a competitive basis. The program lasts for three years; however, for correspondence students, it usually takes longer. Applicants must have completed higher education in the field they wish to specialize, must have demonstrated an aptitude for research work, and must have had research training and industrial experience for at least two years in the specialties chosen.²

After the completion of aspirantura training at either a higher educational or scientific institution, students are eligible for candidate and doctor degrees. These are usually sequential and are awarded for outstanding work, such as a dissertation of high quality.³

¹ U.S.S.R. Ministry of Higher and Secondary Specialized Education, Spravochnik dlia Postupalushchikh v Aspirantura i Soiskatelei Uchenoi Stepeni Kandidata Nauk (Handbook for Entrants to Graduate Study and Scientific Research for the Degree of Candidate of Sciences), (Moscow: "Higher School" Publishing House, 1963), pp. 18-19. Hereafter cited as MV330, Handbook for Entrants to Graduate Study.

² Ibid.

³ Ibid.

TABLE 2

PARTIAL LIST OF SPECIALIZATIONS OFFERED BY SOVIET
HIGHER EDUCATIONAL AND SCIENTIFIC INSTITUTIONS
(REGULAR, CORRESPONDENCE, AND
EVENING) TO ASPIRANTS

Agronomy

530	Agriculture
531	Land Improvement
532	Soil Science
533	Agrochemistry
535	Vegetable Growing
536	Fruit Growing
537	Wine Growing
538	Plant Growing
539	Sub-tropical Culture
540	Phytopathology

Philosophical Sciences

620	Dialectical and Historical Materialism
621	Theory of Scientific Communism
622	History of Philosophy
623	Marxist-Leninist Aesthetics
624	Marxist-Leninist Ethics
625	Scientific Atheism
626	Logic
627	Philosophical Problems of Natural History

Source: Compiled from data in MVSSO, Handbook for Entrants to Graduate Study, pp. 210-211.

Expenditures in the Soviet Higher Education
Correspondence System

The quality of specialist training is related to the economics of higher education; in other words, low graduation rates, grade repeating and drop-outs all play an important role in determining expenditures. Therefore, on the basis of these data, losses caused by deficiencies in the quality of Soviet specialized correspondence training can be fairly well ascertained.

In 1964, only 46.5 percent of the students who had been accepted for correspondence instruction in 1958 were graduated from the higher educational institutions. For example, in the Rostov University, of those who graduated in the years 1959-1964, only 20 percent completed their specialty in mathematics. In Moscow University in 1964, only 17.8 percent of the students accepted for correspondence instruction in mathematics completed their courses. In the last ten years at Irkutsk University, no more than 40 percent of the correspondence students completed instruction in the Russian language and literature, with the average much worse in mathematics.¹

Therefore, it can be readily seen from the brief statistical data given that correspondence study becomes more expensive as the drop-out rate increases.

According to Soviet educational statistics, the cost of supporting one student in the universities for one year (not including outlays for

¹ B. M. Remennikov, Ekonomicheskie Problemy Vysshego Obrazovaniya v SSSR (Economic Problems of Higher Education in the U.S.S.R.), (Moscow: "Higher School" Publishing House, 1968), p. 100. Hereafter cited as Remennikov, Economic Problems of Higher Education.

capital construction) amounts to 970 rubles for day instruction and 80 rubles for correspondence instruction. Therefore, the entire period of training for one specialist in a university amounts to 4,850 rubles (970 times five years) and 480 rubles (eighty times six years) for a correspondence student. Consequently, based on these figures, the ratio of expenditures for training one specialist by correspondence instruction as compared with regular full-time instruction is 1:10. However, in taking into consideration the expenditures involved in training drop-outs, it was estimated that the total expenditure becomes about 1,300 rubles which brings the ratio down to about 1:4.¹

In order to obtain a more exact figure for correspondence instruction, the enterprises' contribution to the cost of training a student must also be considered, including the travel pay, furloughs for correspondence lectures and examinations, etc. Also, the outlays for awards, stipends and scholarships have to be included in the expenditures.

In 1972, Economist L. Tulchinskii stressed that correspondence students "studying without interrupting production" actually brought the Government a revenue. He explained that the expenditures for correspondence study were nullified because of the increased qualifications that workers obtained in taking correspondence courses. It was estimated that for higher school day students the lag between what the Government expended for specialized education and the time it took after graduation before it was considered paid up was usually five years; for correspondence students there was no lag reported between the expenditures and the time

¹ A. Ivanov, "Expenditures for Higher Education Correspondence Study," Novoe Russkoe Slovo (New Russian Word), November 5, 1972, p. 8.

it took before it was considered paid up, since it actually paid for itself.¹

¹ Ibid.; L. Tulchinskii, Finansoye Problemy Professional'nogo Otrazovania v SSSR (Financial Problems of Professional Education in the U.S.S.R.) (Moscow: Publishing House, 1968), p. 106.

CHAPTER IX

ADMISSION TO HIGHER CORRESPONDENCE SCHOOLS

Current Admission Procedures

In order to understand the procedures for admission to Soviet higher correspondence schools, the process has to be understood. It should be emphasized that, presently, Soviet students are not actually forced or coerced into specific fields of study by their government. For example, the Soviet state periodically announces how many specialists are needed in certain categories whereupon the schools will accept students desiring to study in these fields. The individual chooses his own field and competes for a position. Of course, it should be pointed out that the Government, by controlling the admissions, based on projected State needs, in effect is deciding what a student shall study. For example, in Table 3 it is shown that in 1963/64 there were 124,000 students admitted to higher correspondence instruction to specialize in education, and 117,500 students to specialize in industry and construction. Apparently, the above-mentioned specialties were considered the most critical ones for that year. (See Appendix II)

Of course, the Soviet Government uses many techniques to attract students into critical fields, such as awarding stipends, bonuses, scholarships and various extra living expenses. Therefore, in making selections, students tend to choose those specialties which are most lucrative.

TABLE 3

NUMBER OF INDEPENDENT CORRESPONDENCE INSTITUTES, BRANCHES AND DEPARTMENTS INCLUDING THE NUMBER OF STUDENTS ENROLLED, ADMITTED, AND GRADUATED IN VARIOUS SPECIALIZATIONS FOR THE 1963/64 ACADEMIC YEAR

	Number		No. of Students Enrolled	Admitted	Graduated
	Independent VUZ's	Depts. and Faculties			
Total	21/17	607/463	1438,6	356,8	105,1
Of this total:					
Industry and Construction	10/9	155/16	454,1	117,5	20,9
Transport and Communications	2/1	31/16	99,2	22,5	4,9
Agriculture	1/1	94/61	191,1	51,6	9,1
Economics and Law	5/4	25/2	153,3	35,1	16,5
Health, Physical Culture, and Sports	--	29/4	16,8	3,9	2,0
Education	2/2	238/357	515,4	124,0	51,3
Art and Cinematography	1/--	35/7	8,6	2,2	0,4

Notes:

As shown in the table, during the 1963/64 academic year the number of independent correspondence institutes, branches, and departments were curtailed, with the exceptions of the correspondence departments of the pedagogical institutes which were increased by about 50 percent.

Source: "Zaochnoe Obucheniye," (Correspondence Training) Pedagogicheskaya Entsiklopediya (Moscow), 1965, II, 84.

Students may apply for admission to higher correspondence schools of their own choice. However, the admission quotas are not determined by the number of students desiring to study a given specialty, but by the requirement of the Soviet planners. In this regard, it should be further stated that Soviet planners decide the amount and type of education to be offered. For example, they determine how many students shall be trained as engineers, teachers, scientists, physical education specialists, and so forth.¹

Therefore, in summarizing, it is worthy to note that the actual requirements of the various branches of the national economy are used by planners as the basis for determining short- and long-term plans for the admission of specialists to higher education.

On the application form for enrollment, a student is required to indicate what specialty he desires to complete. Therefore, a student commits himself to a specific program of training and to a specific school which offers that form of training. After the application forms and credentials are examined and the necessary security checks are made, the applicant is thereupon either accepted or rejected.²

Admission to higher correspondence instruction is by competitive examination, as in the regular higher school system. The only difference is that applicants are not restricted as they are in the regular higher schools, by the age limitation of thirty-five years; actually, there is no age limit for correspondence students with the exception that they are required to have a minimum of two years work experience prior to admission.

¹DeWitt, Education in the U.S.S.R., p. 243.

²Ibid., p. 245.

Students obtain leaves of absence from their work, without loss of pay, to come to the schools for examination sessions.¹

The national entrance examinations for higher correspondence students are prepared by the U.S.S.R. Ministry of Higher and Secondary Specialized Education. Students take examinations in the Russian language and literature and other subjects, depending on their specialty. For example, students seeking an engineering specialty take entrance examinations in mathematics (written and oral) and physics (oral); whereas, in the social sciences, humanities, arts and teacher training, the students take oral examinations in the history of the U.S.S.R. as well as other subjects related to their specialty. Inasmuch as many examinations are oral, it places a great responsibility upon the admission committee of a higher educational institution to select the best enrollees. The competition for regular day school is much greater than for correspondence or evening forms of study; therefore, it is easier to be accepted to the latter type schools. Applicants for correspondence study may take the entrance examinations at the higher school nearest their residence, as indicated by the correspondence school to which they are applying.²

Teachers, who have completed pedagogical institutes and are working in elementary, secondary, or vocational schools, including technicums, are admitted to higher pedagogical correspondence institutes without entrance examinations if they apply for education courses as their specialty.

¹Rosen, Part-time Education, p. 53; MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1972, pp. 9-10.

²DeWitt, Education in the U.S.S.R., pp. 256-257; "Who Will Enter the Higher Schools," Izvestia (News), August 14, 1971, p. 5; "Admission to Higher Schools," Izvestia (News), May 8, 1971, p. 5.

As in other specialties, correspondence applicants in education must have a minimum of two years work experience prior to admission.¹

Admission to Correspondence Higher Party School

Admission of students to the Correspondence Higher Party School of the Central Committee of the CPSU is carried out by the recommendation of the Party. Members of the CPSU, with a secondary education, may be admitted to this school up to forty years of age, having a minimum of three years of party membership. After passing the admission tests, the students must present the proper credentials and verification of party membership. The admission test consists of the principles of Marxism-Leninism, the Russian language, and geography. Students are given two weeks leave of absence from their work with pay to prepare for the examinations.²

Rules for Admission

According to the 1972 Handbook for students entering higher schools, the following priorities for admittance were established for those studying "without interrupting production":

1. First priority was to be given to those who enroll in technological and agricultural courses related to their work or to those who completed their military service and are in reserve status.
2. The remainder of the enrollees were to include those who are studying subjects not related to their work according to the following priority:

¹Nozhko, et al., Educational Planning, p. 253.

²"Ocherednoi Priem Slushatelei v Zaochnuiu Vysshuiu Partiinuiu Shkolu, etc." (Priorities in Admitting Students to the Higher Party Correspondence School), Partiinaya Zhizn' (Party Life), (March 6, 1971), p. 80.

- a. those who have no less than two years of practical experience in the specialty to be studied.
- b. those who have completed the secondary school with a gold or silver medal, or completed a secondary specialized educational institution with a diploma of distinction.
- c. those who have completed a secondary school and were awarded a certificate for excellent completion of one or more disciplines which are related to the higher educational entrance examinations.
- d. those showing a capacity for certain branches of knowledge corresponding to the selected courses of study, and also those participating in school and other academic circles, including the Olympics, and competitions organized by higher educational institutions and organizations.¹

Any question of priority concerning admission was to be resolved by the higher educational admissions committee.²

In addition to the above rules, in February 1972, it was further stated that only persons working in branches of the national economy, culture, education, and public health would be accepted for higher correspondence or evening instruction. For purposes of admissions, preference was to be given to persons whose job corresponded to the specialty which they had selected to study.³

¹U.S. Joint Publications Research Service, Higher School System of the U.S.S.R.: Main Decrees, Orders, and Instructions, Part I, JPRS Report 891-D, September 11, 1959, p. 240; MVSSO, Handbook for Those Entering U.S.S.R. Higher Education, p. 3.

²Ibid.

³A. A. Bogdanov, "New Regulations for 1972 Admissions to Correspondence Study," Izvestia (News), February 29, 1972, p. 2.

Statistics on the Admission of Correspondence
Students to Higher Schools

Starting with 1940, the number of correspondence students admitted to higher educational institutes steadily rose with the total surpassing the number of day students in 1960; this total reached its highest peak in 1965, numbering 350,100 correspondence students. Since then, there has been a steady decline in the number of correspondence students being admitted with the total in 1971 decreasing to 278,300, representing only 32 percent of the total number of students admitted. At the same time, the regular day students represented about 56 percent of the total admitted. (See Table 4 and Chart 4). The decrease in correspondence students suggests that the Soviet Government probably feels that correspondence study has not lived up to its expectations qualitatively speaking. In this regard, many Soviet educators have complained that higher correspondence study is inferior to the regular higher school instruction. At the end of 1970 there was a total of fifty-one universities in operation in the U.S.S.R. Of these, forty-five had day, evening and correspondence divisions; four had day and correspondence divisions; and two were exclusively day schools. The total number of students admitted to the fifty-one universities in 1970 was 96,289 of which 25,588 or 26 percent were correspondence students. Detailed admission of university students, including day, correspondence, and evening students are given in Appendixes V and VI.

Admissions Committee

The implementation of the admissions policy and the processing of applicants are handled by members of an admissions committee for correspondence study of a given higher school. This committee consists of 8

TABLE 4

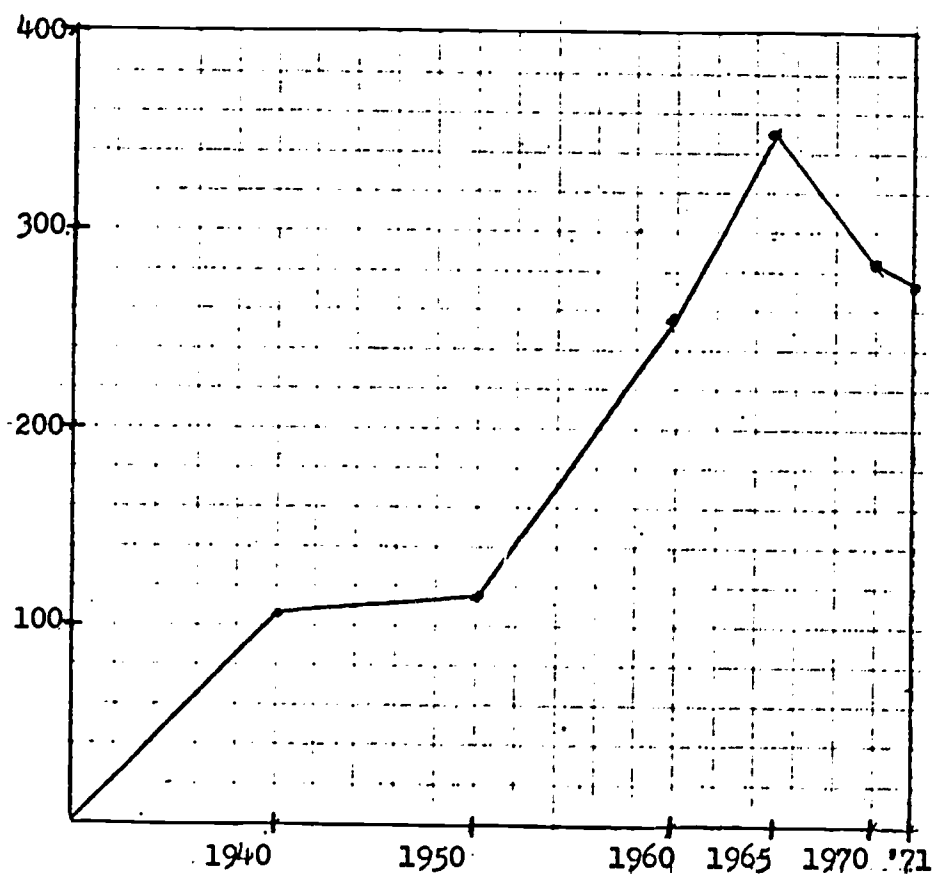
ADMISSION TO HIGHER EDUCATIONAL INSTITUTIONS ACCORDING TO VARIOUS FORMS OF TRAINING (i.e. DAY, EVENING, CORRESPONDENCE), BY SELECTED YEARS: 1928-1971 (Figures in Thousands)

	1928	1940	1950	1960	1965	1970	1971
Admission of students in higher educational institutions	42,8	263,4	349,1	593,3	853,7	911,5	920,3
Of this number:							
day students	42,8	154,9	228,4	257,9	378,4	500,5	516,6
evening students		6,6	9,1	77,2	125,2	127,4	125,4
correspondence students	--	101,9	111,6	258,2	350,1	283,6	278,3

Sources: Central Statistical Administration, *Narodnoe Khoziaistvo SSSR* (National Economy of the U.S.S.R.) 1922-1972, (Moscow: Statistical Publishing House, 1972), p. 440; UNESCO, *Access to Higher Education*, National Studies, UNESCO and International Association of Universities, Vol. III (Paris: UNESCO, 1965), p. 44.

Chart 4. -- Number of Higher Correspondence Students Admitted to Higher Schools, for Selected Years, 1940-1971.

(in thousands)



Source: Central Statistical Administration, *Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-1972*, (Moscow: Statistical Publishing House, 1972), p. 440; UNESCO, *Access to Higher Education, National Studies, UNESCO and International Association of Universities, Vol. III* (Paris: UNESCO, 1965), p. 44.

to 25 members. The vice rector or prorector for correspondence or evening study is a member of the committee, whereas the rector is the chairman. Other members are usually deans of various faculties, chairmen of departments, and others who represent the CPSU, trade union and Komsomol (Young Communist League) organizations. Therefore, this committee does not consist solely of academic persons, but has many individuals who represent the political structure of the Soviet Union.¹

The Admissions Committee examines quite a number of documents relating to an applicant before he is permitted to take the entrance examination and appear for final screening. For example, an applicant has to present the following documents: a passport, military service record, autobiography, medical certificate, residence certificate, maturity certificate, and recent photographs. Besides, character references and an employment record are required. In the recommendations, the character references should also include statements by either the CPSU, Komsomol, or trade union organizations.²

In addition to the admissions committee, the director of a higher educational institution appoints an examination committee which grades entrance examinations and conducts oral examinations. The board of examiners consists of members who are specialized in the various subjects which they grade. They handle no more than 150 examinees; any excess is handled by another board. It should be emphasized that members of the admissions committee cannot serve on the examination board.³

Usually at the beginning of summer the higher correspondence establishments announce, through various newspapers, journals and bulletin

¹Nozhko, et al., Educational Planning, pp. 69-70.

²DeWitt, Education in the U.S.S.R., p. 245.

³Ibid., pp. 243-244.

boards, that they will accept applicants for training in specific specialties. According to the rules, an applicant can only apply to one establishment at a time. However, if he is not accepted, he can try for another institution if there are vacancies. If the applicant passes the preliminary screening of the admissions committee, he is then eligible to take the competitive entrance examinations. This leads to a second screening by the admissions committee who either accept or reject an applicant based on his examination grades.¹

Government Policies on the Selection of
Students from 1917 to Present Time

Academic admission criteria were virtually in total disuse in the Soviet Union from 1917 until about 1935. During the 1920's and early 1930's, preference in admission was given to all those who were workers by origin and their descendants, whether they had the necessary educational qualifications or not. Although discrimination against applicants based on social origins was officially abolished in 1935, political and social screening is still a fact of life. However, Soviet higher educational establishments today do require that applicants must have a secondary education and must take qualifying entrance examinations.²

The requirement of prior employment as a condition for preferential admission status to higher education has led many youths to take production jobs in industry or agriculture merely to fulfill this requirement. This situation has not always produced satisfactory results. Many enterprises have complained that youths working toward fulfilling admissions

¹"Admission of Students to Moscow Oblast Pedagogical Institute," Uchitel'skaja Gazeta (Teachers' Newspaper), May 25, 1972, p. 4; DeWitt, Education in the U.S.S.R., p. 244.

²"Correspondence Training," p. 80; MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1972, p. 6.

requirements are merely "passing the time of day" and are completely disinterested in their work.¹

Revival of Preparatory Divisions

The new policy of admitting applicants to higher education after two or more years of work experience has revived the preparatory type of instruction. In the 1930's a number of higher educational establishments set up preparatory courses for students who had completed secondary education but needed refresher courses in order to pass entrance examinations for admission to higher educational establishments. These courses were usually offered in the summer and were scheduled so that applicants could take their entrance examinations in August.²

By 1958, as the number of applicants with work experience increased, two types of preparatory courses were offered: the full academic year course or the summer course. Besides these courses, special lectures were offered by the Society for the Dissemination of Political and Scientific Knowledge, which were directed toward assisting students in passing entrance examinations.³

During this period, preparatory courses were also offered by correspondence departments of universities and other higher institutions, supervised by Komsomol organizations, which selected promising youths for these courses.⁴

¹"Role of Correspondence Education," Current Digest of Soviet Press, Vol. XXV, No. 1 (January 31, 1973), 6; "On Measures for Further Improvement of Higher Education in the Country," Pravda (Truth), July 30, 1972, pp. 1-2; DeWitt, Education in the U.S.S.R., p. 253-254.

²DeWitt, Education in the U.S.S.R., p. 24.

³Ibid., p. 253.

⁴Ibid.

For a few years, interest in preparatory courses diminished; however, in 1968, undoubtedly because of the shortage of specialists, the Ministry of Higher and Secondary Specialized Education again revived the preparatory programs for higher-school-bound students. It asserted that students from large cities did considerably better than those from rural areas on their entrance examinations; this was attributed partly to the inferior rural secondary schools which did not adequately prepare students for higher education.¹

Concerning the above-mentioned problem, V. Eliutin, Minister of Higher and Secondary Specialized Education, in July 1969 stated:

. . . The chief thing is that we must help the young people to enter higher school. The preparatory courses are one of the tested ways to do this. . . . Such courses must be extended in the rural localities directly to the enterprises. Valuable has been the experience of correspondence school preparation for the entrance examinations, which is exceptionally important to the young people who live and work in districts far from the higher school centers.

It is common knowledge that among those who finish secondary education there are young men and women who for various reasons fail to receive high marks. The argument for non-competitive enrollment of graduates of secondary schools do not take into account the fact that young people must not only pass the entrance examinations successfully but should also continue to succeed in their course work. Lowering the demand for admission will lead to a decline in the quality of training of specialists. This must not be allowed.

Therefore, the preparatory courses are one of the tested ways to do this. It would be expedient to create methods in the higher schools for preparing secondary graduates so that there is a gradual transition from secondary to higher school levels.

In July 1969, the CPSU Central Committee and the U.S.S.R. Council of Ministers passed a resolution to raise the general education of young industrial, kolkhoz and sovkhoz workers by organizing preparatory divisions at higher schools to prepare them for admission to higher education.

¹A. Yemelianov, "Assist Rural Youth to Enter Higher Education Institutes," Pravda (Truth), November 1, 1968, p. 3.

²V. P. Eliutin, "Preparatory Courses," Pravda (Truth), July 19, 1969, p. 3.

As a consequence, in September 1969, more than 20,000 students were enrolled in preparatory divisions. Over 190 preparatory divisions went into operation at various higher educational institutions. In Moscow, 17 preparatory divisions were placed into operation at the following institutions: The Moscow State University, Institute of Railroad Engineers, Institute of Economics, and others. In Leningrad, preparatory divisions at the following institutes went into operation: polytechnical, ship-building, electronics, and others. All these higher schools were to have day, evening and correspondence preparatory divisions.¹

The entrance examinations and curriculum for these divisions were established by the U.S.S.R. Ministry of Higher and Secondary Specialized Education. The ministry also stipulated that the period of study in preparatory divisions was to be eight months for those who studied full-time, and ten months for those who studied in the evenings or by correspondence.²

In 1970, it was reported that the preparatory divisions (regular, evening and correspondence) attached to the various Moscow and Leningrad higher schools, including others located throughout the Soviet Union, had proven to be most effective in preparing rural youth for admission to higher schools. Many of those who formerly were not able to pass the entrance examinations now were able to compete very favorably with the urban students and had successfully entered higher educational establishments.³

After three years of operation, the U.S.S.R. Ministry of Higher and Secondary Specialized Education announced in 1972 that there were 524

¹V. Vinocur, "Interview Concerning Preparatory Divisions," Pravda (Truth), October 31, 1969, p. 3.

²Ibid.

³"Preparatory Courses," Pravda (Truth), July 24, 1970, p. 3.

preparatory divisions in operation serving 68,000 students throughout the country. Of this number it was emphasized that the performance of evening and correspondence students was somewhat lower than those studying during the day. (See Table 5)

TABLE 5

PREPARATORY DIVISIONS OF HIGHER EDUCATIONAL INSTITUTIONS
AND THE TOTAL NUMBER OF STUDENTS ATTENDING
THEM FOR SELECTED YEARS: 1960, 1971-72

Years	Total Number of Preparatory Divisions	Total Number of Students Attending Them (Day, Evening, and Correspondence)
1960	191	20,000
1971	491	62,000
1972	524	68,000

Source: Central Statistical Administration of the U.S.S.R. Council of Ministers, Narodnoe Khoziaistvo SSSR (U.S.S.R. National Economy) 1922-1972, (Moscow: Statistical Publishing House, 1972), p. 27.

CHAPTER X

TYPES OF U.S.S.R. HIGHER EDUCATION CORRESPONDENCE SCHOOLS, INCLUDING LOCATIONS, CURRICULA, AND NUMBER OF STUDENTS

Types of Higher Correspondence Schools

Education by correspondence at the higher levels is offered in the Soviet Union largely through specialized independent correspondence institutes, officially accredited as higher educational institutions, and by correspondence departments (fakul'tety) of regular higher schools, such as universities and institutes. Many regular full-time higher education institutions have a correspondence department with fields of specialization similar to those offered by regular programs.¹

Independent Higher Correspondence Institutes

Independent higher correspondence institutes have many branches scattered throughout the country, as well as study consultation centers, known as UKP's. These institutes are of two types: All-Union (Vsesoiuznyi) and local institutes, with the former having many branches and the latter having either no branches or a very limited number.²

In 1972, there were fourteen independent Soviet higher correspondence institutes (devoted exclusively to correspondence training) of which

¹Nozhko, et al., Educational Planning, p. 66.

²Dewitt, Education in the U.S.S.R., p. 234.

ten were All-Union, with many affiliates (filialy) or branches, including study consultation centers located throughout the Soviet Union. Of the total number of institutes, eleven were located in Moscow, two were located in R.S.F.S.R. but outside of Moscow, and one was located in the Ukrainian SSR.¹

In summarizing, it should be emphasized that in 1967 there were eighteen independent higher correspondence institutes in operation. Since then, the number was diminished to fifteen in 1969 and fourteen in 1971-72. It should be noted that the four institutes no longer mentioned as being in operation are as follows: Kirov Polytechnical Correspondence Institute, All-Union Power Correspondence Institute (Moscow), All-Union Correspondence Institute for Timber Engineering (Leningrad), Armenian Pedagogical Correspondence Institute (Erevan).² Consequently, it can be assumed that these institutes are no longer in operation as independent correspondence schools, but have been attached to the regular technical institutes by the same name, such as the Kirov Polytechnical Institute. The trend seems to be toward including correspondence instruction into the regular higher school system rather than being an independent entity.

In addition, it should also be pointed out that four correspondence institutes which were under the supervision of the R.S.F.S.R. Ministry of Higher and Secondary Specialized Education in 1967, are now supervised by the U.S.S.R. Ministry of Higher and Secondary Specialized

¹ MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1972, p. 303.

² Ibid.; MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1967, p. 323; MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1969, p. 291.

Education. These include the following: All-Union Polytechnical Correspondence Institute, All-Union Agricultural Correspondence Institute, All-Union Finance-Economics Correspondence Institute, and the All-Union Juridical Correspondence Institute.¹

Importance of Specialized Higher Training

The importance of specialized technical higher training is seen in the proportion of students enrolled in technical subjects and in the number of such institutions.

In the school year 1965/66, 45 percent of all the students (day, evening, and correspondence) were engaged in engineering specialties (industry, construction, transportation and communications), and by the school year 1971/72 the proportion was still about 45 percent (See Appendix II).

It has been estimated that in 1967/68 between 85 percent and 90 percent of all students were enrolled in scientific and specialized schools and only 8 to 10 percent were enrolled in the universities. Over 70 percent of Soviet higher educational institutions are devoted to industry, agriculture and economics.²

In the academic year 1971/72, the Soviet Union had 811 institutes of higher education with an enrollment of over four and a half million students; of these, 1,640,000 were correspondence students. (See Table 6).

¹MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1967, p. 323; MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1972, p. 303; "Vsesoiuznyi Iuridicheskii Zaachnyi Institut" (All-Union Juridical Institute), Bulleten' (Bulletin), No. 7, (July 1971), 6; "All-Union Juridical Institute," Izvestia (News), November 24, 1970, p. 6.

²Eugene K. Keefe, et al., Area Handbook for the Soviet Union, DA-PAM 550-95 (Washington, D.C.: U.S. Government Printing Office, 1971), p. 296.

TABLE 6

NUMBER OF HIGHER EDUCATIONAL INSTITUTIONS AND STUDENTS
(DAY, EVENING, CORRESPONDENCE) ATTENDING THEM,
BY SELECTED YEARS: 1922-1971
(At the Beginning of the Academic Years,
Student Figures in Thousands)

	1914-15		1922	1940	1950	1960	1965	1970	1971
	According to Current U.S.S.R. Boundaries	According to U.S.S.R. Boundaries in Sept. 1939							
Total Higher Educational Institutions	105	91	248	817	880	739	756	805	811
Students Studying in Them (Figures in Thousands)	127	112	217	812	1247	2396	3861	4581	4597
According to Forms of Training:									
Day	127	112	217	558	818	1156	1584	2241	2309
Evening	...	...	...	27	27	245	569	658	647
Correspondence	...	...	...	227	402	995	1708	1682	1641

Notes: Although the number of correspondence students in higher schools in 1965 surpassed the number of day students, in 1971 the number of correspondence students only amounted to about 37 percent of the total as compared with over 50 percent of the total for day students.

Source: Central Statistical Administration, Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-72 88
(Moscow: Statistical Publishing House, 1972), p. 430.

Examination of the number of higher institutes, shown in Table 6, from 817 in 1940 to a low of 739 in 1960 and then a steady rise to 811 in 1971 calls for a comment. The main expansion in the network of higher schools occurred in the early years and since then, the increased student enrollment has been handled by consolidating and expanding the physical plants of the existing higher schools, also by establishing branches, such as evening and correspondence departments at higher schools, and at the Plant VTUZ-type schools.¹

Detailed statistics concerning graduates of higher correspondence establishments, as well as the total number of evening students, are shown respectively in Tables 7 and 8.

Soviet schools for higher education have developed as multinational institutions. The national origin of students attending VUZs is shown in Appendix IV. It is evident that four nationalities--Russians, Georgians, Armenians and Jews--had larger representation among students than their respective share in the population.

The heavy representation of Russians is particularly striking. This accounted for about 60 percent of all the students,² while they represented about 55 percent of the population. The high proportion of Russians can be explained because of the heavy concentration of schools in the R.S.F.S.R.

In 1963, it was mentioned that R.S.F.S.R. had 881,900 correspondence students enrolled in higher schools, whereas there were only 840,700 full-time students enrolled. (See Table 9).

¹V. F. Eliutin, Higher School for 50 Years, pp. 121-122.

²See Appendix IV.

TABLE 7
 TOTAL NUMBER OF GRADUATES FROM CORRESPONDENCE AND
 EVENING DIVISIONS OF HIGHER SCHOOLS, BY
 SELECTED YEARS: 1940-1966

Year	Evening Division	Correspondence Division
1940	4,400	23,900
1950	2,000	29,000
1957	7,200	72,500
1960	15,500	99,200
1966	56,000	146,500

Source: V. P. Eliutin, ed., Vyssshaya Shkola SSSR za 50 let (U.S.S.R. Higher School for 50 Years) (Moscow: "Higher School" Publishing House, 1967), p. 119.

TABLE 8

GRADUATES FROM HIGHER EDUCATIONAL INSTITUTIONS ACCORDING TO
FORMS OF TRAINING BY SELECTED YEARS: 1920-1971
(Figures in Thousands)

	1914		1928	1940	1950	1960	1965	1970	1971
	According to Current U.S.S.R. Boundaries	According to U.S.S.R. Boundaries in Sept. 1939							
No. of Graduates from Higher Educational Institutions	12,2	10,7	28,7	126,1	176,9	343,3	403,9	630,8	672,4
Day Students	12,2	10,7	28,7	97,8	145,9	228,7	224,8	334,8	379,7
Evening Students	...	...	...	4,4	2,0	15,4	43,5	82,1	86,3
Correspondence Students	...	...	...	23,9	29,0	99,2	135,6	213,9	206,4

Notes:

The number of specialists who graduated by correspondence from higher schools in 1971 was 30.6 percent of the total, as compared with 56.4 percent of the total who graduated from regular higher day schools.

Source: Central Statistical Administration, Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-1972 (Moscow: Statistical Publishing House, 1972), P. 441.

TABLE 9

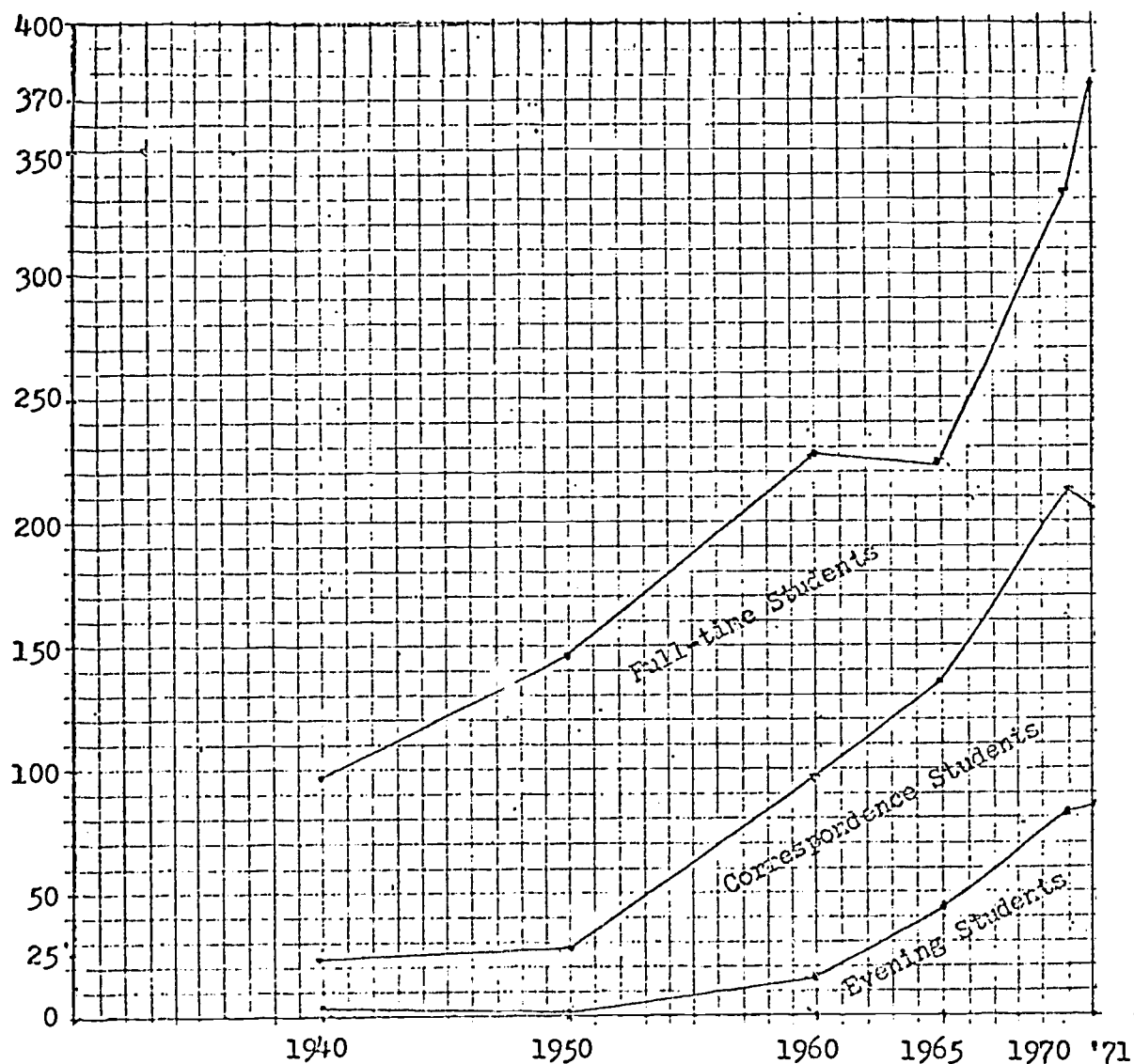
TOTAL HIGHER EDUCATIONAL DAY AND CORRESPONDENCE
STUDENTS FOR SELECTED UNION REPUBLICS FOR 1963

Union Republic	Total Day Students	Total Correspondence Students
R.S.F.S.R.	840,700	881,900
Ukrainian SSR	231,300	266,900
Uzbek SSR	59,500	67,400
Georgian SSR	23,600	37,400

Source: Nozhko, et al., Educational Planning,
p. 134.

Chart 5.--Number of Graduates from Higher Educational Institutions According to Full-time, Correspondence and Evening Instruction, for Selected Years: 1940-1971.

(in thousands)



Source: Central Statistical Administration, Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-1972 (Moscow: Statistical Publishing House, 1972), p. 441.

In addition, the numbers of part-time (correspondence and evening) students in the fifteen republics are given for selected years: 1958/59-1964/65 in Table 10.

Chart 5 shows the trend in total numbers of graduates (day, correspondence, and evening) from higher schools, by selected years, 1940-71. Of the total number of students graduating in 1971, only 14 percent were evening students as compared with 56 percent day students, and over 30 percent correspondence students. (See Table 8).

The number of students enrolled in correspondence institutes are considerable. Several of these institutes for which data is available had an enrollment of 20,000 or over, with the largest one having over 40,000. (See Table 11).

Universities with Correspondence Departments

Today, most Soviet universities are multidivisional training establishments. Each division (fakul'tet) of a university offers a number of programs leading to a professional specialty for graduates who complete the program. The majority of Soviet universities have six to eight divisions, of which one is a correspondence division offering several specialties.

A sample listing of universities having a correspondence department offering varied specialties is shown in Table 12.

Comparison of Curricular Offerings by the Day, Correspondence and Evening Divisions of Moscow State University and Samarkand State University

The Moscow State University had 25,468 students in 1971 of which 2,026 were correspondence students. In June 1971, 536 correspondence

TABLE 10

NUMBER OF STUDENTS (EVENING AND CORRESPONDENCE), ACCORDING
TO UNION REPUBLICS, IN HIGHER EDUCATIONAL INSTITUTIONS
WHO ARE CONTINUING PRODUCTION WORK WHILE STUDYING:
1958/59 TO 1964/65
(Beginning of Academic Year, Figures in Thousands)

Union Republics	1958/59	1960/61	1963/64	1 7/65
U.S.S.R.	999,8	1240,6	1877,9	2093,8
R.S.F.S.R.	656,9	797,5	1172,9	1295,0
Ukrainian SSR	168,6	218,7	345,5	386,5
Belorussian SSR	23,4	27,0	45,2	50,3
Uzbek SSR	37,0	50,0	79,8	90,2
Kazakh SSR	25,0	34,4	55,8	69,3
Georgian SSR	21,4	31,1	46,2	50,0
Azerbaijani SSR	14,8	17,5	30,9	34,4
Lithuanian SSR	8,8	11,1	18,4	21,2
Moldavian SSR	6,8	8,8	14,1	18,0
Latvian SSR	6,8	9,0	14,4	15,8
Kirghiz SSR	5,5	6,6	12,0	14,7
Tadzik SSR	7,5	8,6	11,6	13,6
Armenian SSR	8,0	9,3	14,5	16,4
Turkmen SSR	4,5	5,1	7,6	8,4
Estonian SSR	4,3	5,9	9,0	10,0

Source: Soviet Education, IX, No. 12, (October, 1967), 22.

TABLE 11

INDEPENDENT HIGHER EDUCATION INSTITUTES IN THE SOVIET UNION: 1972

Institutes and Year Established	Location (and Cities with Branches)	Administration	Faculties	Enrollment
All-Union Polytechnical Correspondence Institute (Vsesoiuznyi Zaochnyi Politekhniceskii Institut) (1932)	Moscow (Gubkin, Magadan, Podol'sk Ryazan')	U.S.S.R. Ministry of Higher and Secondary Specialized Education	Mining; Petroleum; Metallurgy; Machine Building; Automechanics; Chemical Technology; Electric Power; Engineering-Economics; Light Industry; Transportation	40,000 (in 1960)
Northwestern Polytechnical Correspondence Institute (Severo-Zapadnyi Zaochnyi Politekhniceskii Institut) (1929)	Leningrad (Cherepovets, Pskov, Vologda)	R.S.F.S.R. Ministry of Higher and Secondary Specialized Education	Power and Automation; Chemical Technology and Metallurgy; Instrument and Machine Building; Mechanics-Technology; Technical Cybernetics; Radio Engineering; Evening faculty attached to Izhorsk Plant.	20,000 (in 1960); 22,000 (in 1965)
Ukrainian Polytechnical Correspondence Institute (Ukrainskii Zaochnyi Politekhniceskii Institut) (1936)	Kharkov (General Technical Faculties in: Artemovsk, Konstantinovka, and Slavyansk)	Ukrainian SSR Ministry of Higher and Secondary Specialized Education	Electric Power; Metallurgy; General faculty attached to institute.	..

TABLE 11--Continued

Institutes and Year Established	Location (and Cities with Branches)	Administration	Faculties	Enrollment
All-Union Food Industry Correspondence Institute (Vsesoiuznyi Zaachnyi <u>Pishevoi Promyshlennosti</u>) (1953)	Moscow (Krasnolarsk, Rostov-Na-Donu, Baku)	R.S.F.S.R. Ministry of Higher and Secondary Specialized Education	Food Production; Technology; Technology of Preserving and Processing of Grain; Mechanics; Fish Economy; Engineering-Economics; Economics and Organization of Agricultural Food Product Procurement	9,000 (in 1960)
All-Union Textile and Light Industry Correspondence Institute (Vsesoiuznyi Zaachnyi Institut <u>Tekstilnoi i Legkoi Promyshlennosti</u>) (1932)	Moscow (Barnaul, Omsk)	R.S.F.S.R. Ministry of Higher and Secondary Specialized Education	Technology of Textile Industry; Technology of Light Industry; Chemical Technology; Mechanics; Engineering-Economics	7,000 (in 1960)
All-Union Engineering-Construction Correspondence Institute (Vsesoiuznyi Zaachnyi <u>Inzhenerno-Stroitel'nyi Institut</u>) (1944)	Moscow (Alma Ata; Evening Faculty Liubertsy)	R.S.F.S.R. Ministry of Higher and Secondary Specialized Education	Production-Construction; Design-Architecture; Technology; Mechanics; Road Buildings; Sanitation; Urban Construction; Engineering-Economics; Evening faculty attached to GLAVMOSSTROI (Main Administration for Moscow Construction) for handling housing and civilian construction	22,000 (in 1960); 24,000 (in 1965)

TABLE 11--Continued

Institutes and Year Established	Location (and Cities with Branches)	Administration	Faculties	Enrollment
All-Union Correspondence Institute for Railroad Transport Engineers (Vsesoiuznyi Zaochnyi Institut Inzhenerov Zheleznodorozhnogo Transporta)	Moscow (Gorkii, Kuibyshev)	U.S.S.R. Ministry of Railroad Transportation	Mechanics; Electrical Engineering; Electrification of Railroad Transport; Exploitation; Construction; Engineering-Economics	..
All-Union Electro-Technical Communications Correspondence Institute (Vsesoiuznyi Zaochnyi Elektro-Tekhnicheskii Institut Sviazi)	Moscow (Minsk, Tbilisi)	U.S.S.R. Ministry of Communications	Radio Communications and Radio Broadcasting; Automated and Multi-channel Electrical Communications; Engineering-Economics	..
All-Union Agricultural Correspondence Institute (Vsesoiuznyi Sel'skokhoziastvennyi Institut Zaochnogo Obrazovaniia)	Balashikha, Moscow Oblast	U.S.S.R. Ministry of Agriculture	No faculties listed, only specialties: Agronomy; Agrochemistry; Soil Science; Poultry Raising; Fur Farming; Economics and Organization of Agriculture; Accountancy	..
All-Union Finance Economics Correspondence Institute (Vsesoiuznyi Zaochnyi Finansovoi Ekonomicheskii Institut) (1930)	Moscow (Lipetsk, Penza, Ufa, Cheliabinsk, Barnaul, Briansk, Belgorod, Vladimir, Volgograd, Voronezh, Gorkii, Kemerovo, Omsk, Grenburg, Smolensk, Tula, Khabarovsk, Yaroslavl')	U.S.S.R. Ministry of Higher and Secondary Specialized Education	General Economics; Economy of Industry; Finance-Credit; Accounting-Statistics	20,000 (in 1960); 24,900 (in 1965)



TABLE 11--Continued

Institutes and Year Established	Location (and Cities with Branches)	Administration	Faculties	Enrollment
Soviet Trade Correspondence Institute (<u>Zaochnyi Institut Sovetskoi Torgovli</u>)	Moscow (Alma Ata, Volgograd, Irkutsk, Kazan, Krasnodar, Kuibyshev, Riga, Rostov-Na-Donu, Khabarovsk, Cheliabinsk, Saratov, Voronezh, Kishinev)	R.S.F.S.R. Ministry of Trade	Trade Economics; Accounting-Economics; Trade Turnover of Food Products	..
All-Union Juridical (Law) Correspondence Institute (<u>Vsesoiuznyi Iuridicheskii Zaochnyi Institut</u>) (1932)	Moscow (Gorkii, Ivanovo, Krasnodar, Kuibyshev, Orenburg, Khabarovsk)	U.S.S.R. Ministry of Higher and Secondary Education	Law Framework of the Soviet Union	10,000 (in 1960)
Moscow Pedagogical Correspondence Institute (<u>Moskovskii Zaochnyi Pedagogicheskii Institut</u>)	Moscow	R.S.F.S.R. Ministry of Education	No faculties listed in source, except specialties: History, Russian Language and Literature; Mathematics; Physics, Biology and Chemistry; Geography; Handicapped Children; Fresh and Mechanical Drawing; Methods of Elementary Education; Pre-school Pedagogy and Psychology; Music and Singing	..



TABLE 11--Continued

Institutes and Year Established	Location (and Cities with Branches)	Administration	Faculties	Enrollment
All-Union Machine-Building Correspondence Institute (1936) (<u>Vsesoyuznyi Zaochnyi Mashinostroitel'nyi Institut</u>)	Moscow (General Technical Faculty; Orel; Evening Fac- ulty; Khimki)	R.S.F.S.R. Min- istry of Educa- tion	Mechanics-Machine Building; Instrument Making; Auto-Tractor and Transport Machine Building; Thermal Processing of Metals	20,000 (in 1960)

Sources: "Correspondence Training," p. 84; "U.S.S.R. Universities, Institutes, Libraries, etc." The World of Learning, 1972, 22d ed., V, 1333-1341; WVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1971, pp. 94-249.

TABLE 12

A PARTIAL LISTING OF UNIVERSITIES
WITH CORRESPONDENCE DEPARTMENTS

University	Location	Specialties Offered by Correspondence Departments
Azerbaijani State University im. S.M. Kirov	Baku	History; Russian and Azerbaijani Languages and Literature; Library Science; Biology; Mathematics; Geography
Belorussian State University im. V. I. Lenin	Minsk	History; Russian and Belorussian Languages and Literature; Journalism; Law; Mathematics; Geography; Biology; Philosophy
Bashkir State University im. Forty Years of the October Revolution	Ufa	History; Russian, Bashkir, Tatar Languages and Literature; Geography; Biology
Gorkii State University im. N.I. Lobacheskii	Gorkii	History; Russian Language and Literature; Industrial Planning
Moscow State University	Moscow	Russian Language and Literature; Journalism; Philosophy; Political Economics; Geography; Meteorology; History of Art; History
Voronezh State University im. Lenin Komsomol	Voronezh	Russian Language and Literature; Journalism; History; Biology; Geography; Law; Geology; Applied Mathematics

Source: MVSSO, Handbook for Those Entering U.S.S.R. Higher Schools in 1972, pp. 94-295.

students graduated in various specialties. (See Appendix VI).

By comparison, the Samarkand State University had 11,749 students in 1971, of which 4,623 were correspondence students; in addition, 947 correspondence students graduated in the above-mentioned year. It should be noted that this school had a greater selection of technical courses offered by correspondence than those offered by the Moscow State University. (See Tables 13 and 14 and Appendix VI).

Therefore, based on the statistics given in Appendices V and VI, it can be readily seen that the size of an university apparently does not determine the size of a correspondence division. For example, the Moscow State University only had 10 percent of the total number of students enrolled in correspondence instruction; whereas, the Samarkand State University had almost 40 percent.

The difference in enrollment may be attributable to the accessibility of a university. For example, there are no apparent transportation difficulties for Moscow students; whereas this could be a problem for Samarkand students. Consequently, for some Soviet students, correspondence instruction is the only feasible way to attain a higher education.

New Form of Higher Education--Zavod-VTUZ

In 1960, there was a significant transformation in day, correspondence and evening forms of higher education, ensuring a higher level of trained specialists. The new form of higher school for technical education, called Zavod-VTUZ or plant-higher technical educational institution, was specially organized for workers in industrial enterprises,

TABLE 13

COMPARISON OF CURRICULAR OFFERINGS IN THREE
DIVISIONS OF MOSCOW STATE UNIVERSITY

Specialty	Full-time	Evening	Correspondence
History	X	X	X
Russian Language and literature	X	-	X
Romance-Germanic Languages (including English, German, French, and Spanish languages and literature)	X	-	-
Classical Languages	X	-	-
Journalism	X	X	X
Philosophy	X	X	X
Psychology	X	X	-
Political Economics	X	X	X
Law	X	X	-
Physics	X	-	-
Astronomy	X	-	-
Mathematics-Mechanics	X	-	-
Applied Mathematics and Cybernetics	X	-	-
Chemistry	X	-	-
Biology	X	-	-
Geology	X	-	-
Geography	X	X	-
Scientific Communism	-	X	-
Planning National Economy	-	X	-
Geological Survey and Search of Fossils	X	X	-
Geophysical Methods of Search and Exploration of Fossils	X	X	-
Geochemistry	X	X	-

TABLE 13--Continued

Specialty	Full-time	Evening	Correspondence
Geophysics	X	-	-
Hydrogeology and Engineering Geol- ogy	X	X	-
Geography	X	X	X
Cartography	X	X	-
Hydrology	X	X	-
Metecrology	X	X	X
History of Art	-	X	X
Slavic Languages and literature	-	X	-
Economics of Labor	-	X	-
Eastern Languages (Arabic, African, Chinese, Korean and Japanese)	X	-	-

Source: MVSSO, Handbook for Those Entering Higher Schools in 1972, pp. 77-78.

TABLE 14

COMPARISON OF CURRICULAR OFFERINGS IN THREE
DIVISIONS OF SAMARKAND STATE UNIVERSITY

Specialty	Full-time	Evening	Correspondence
History	X	X	X
Geography	X	X	X
Russian, Tadzik, Uzbek language and literature	X	X	X
Romance--Germanic languages (includ- ing English, German, French and Spanish languages and lit- erature	X	X	-
Mathematics	X	X	X
Applied Mathematics	X	-	-
Physics	X	X	-
Chemistry	X	X	-
Biology	X	X	-
Technology of Ma- chine Building	-	-	X
Metal Cutting Lathes and Instruments	-	-	X
Auto Transport	-	-	X

Source: MVSSO, Handbook for Those Entering Higher Schools in 1972, pp. 80-81.

including sovkhoses and kolkhoses. Before World War II this type of school was in operation for a short period of time and then discontinued. The Zavod-VTUZ is considered a basic part of a plant. Furthermore, the training entails the use of plant facilities, laboratories and equipment.¹

The courses of study at the Zavod-VTUZ are based on combining the practical and theoretical aspects of production. Specialists at the plant carry on some of the instruction; whereas professors and other instructors handle the regular course work.²

The advantage of this type of study as compared to other forms of day, evening and correspondence study, is that it relates the course work to its actual application. The student-worker can systematically and continuously apply his studies to the processes of production which will be connected with his future specialty. Students have access to laboratories in the plant. During the first three years of study, the students remain in their usual job. After this period, a student is rotated in the different shops and design bureaus, eventually being given a higher level position. The whole course of study lasts from five to six years, depending on whether it is done by day or part-time (evening or correspondence) study. In the final year of study a student combines the scientific research methods learned with the actual design processes and prepares a diploma project.³

The following plants have the Zavod-VTUZ type of education: Moscow Automobile Plant im. Ikhacheva, Leningrad Metals Plant, Rostov Agricultural Machinery Building Plant, and the Dneprodzerzhinsk

¹V. P. Eliutin, U.S.S.R. Higher School for 50 Years, pp. 121-123.

²Ibid.

³Ibid.

Metallurgical Plant. All these plants offer correspondence study in the general technical faculty.¹

Correspondence Institutes with Aspirantura
(Graduate Training)

One of the most important higher correspondence schools which conducts aspirantura training is the All-Union Finance-Economics Correspondence Institute in Moscow which offers the following graduate courses in the economic sciences: political economics, economic geography, organization and planning of industry, finance, exchange and credit, organization and planning of technical supplies, economic statistics, accounting, and others. In addition, this institute also offers graduate students opportunities to work on independent studies and research projects, which are required in order to earn higher degrees.²

It should be noted that during 1964, the following higher correspondence institutes were given the right to conduct oral examinations on the defense of a candidate's dissertation: Northwestern Polytechnical Correspondence Institute and Moscow Pedagogical Correspondence Institute. Also, aspirantura divisions were organized during this period at nine All-Union Correspondence Institutes as follows: polytechnical, power, food, textile and light industry, engineering-construction, railroad transportation engineers, electrical communications.³

¹Ibid.

²"Aspirantura" (Post-Graduate Training), Pedagogicheskaja Entsiklopedia (Pedagogical Encyclopedia), 1964, I, 131; Nozhko, et al., Educational Planning, p. 77.

³U.S.S.R. Ministry of Higher and Secondary Specialized Education, Spravochnik dlia Postupaiushchikh v Aspiranturu (Handbook for Entrants to Graduate Training) (Moscow: "Higher School" Publishing House, 1964), p. 160.

Statistics on Aspirants (Graduate Students)

Postgraduate study by correspondence is very widespread in the U.S.S.R. It attracts assistants, lecturers, teachers, also scientific workers employed in educational and research institutes; in addition, many professionals in industry, also lawyers, doctors, and so forth, are included.

The rate at which aspirants are being trained seems to be increasing each year. In 1969, there were 99,532 students attending scientific and higher educational institutes. In this connection, 55,603 aspirants were full-time; whereas 43,929 were part-time students. The breakdown according to the numbers of aspirants in scientific institutes as compared with those in higher institutes were 42,522 and 57,010 respectively. (See Appendix XI).

The total number of aspirants graduating in 1969 was 25,810, of which 10,627 graduated from scientific institutes; whereas 15,186 graduated from higher educational institutions. Of the latter totals, 4,763 (about 45 percent) and 4,643 (about 30 percent) respectively, were part-time students. (See Appendix XI).

Appendix XII shows the number of aspirants by branch of study at the end of 1970. According to these statistics, there was a total of 99,427 (day, evening, and correspondence) students doing graduate work whereas 56,909 or 57 percent were in higher educational institutes. It can readily be seen that the most popular field was engineering, with a total of 39,979 students, followed by physico-mathematics with a total of 11,729. The specialties with the least students enrolled were in

the fields of psychology and pharmacy.

It can readily be seen from the above-mentioned statistics that correspondence instruction plays a big role in postgraduate study. Apparently, over 45 percent of the aspirants are employed full-time, either in higher educational or scientific institutions while working on their candidates¹ or doctors degrees.

¹ Candidate degree - it should be noted that this degree is comparable to a master's degree obtained in the U.S.

CHAPTER XI

DRAWBACKS IN HIGHER CORRESPONDENCE EDUCATION

In reviewing many Soviet articles on higher correspondence study, which appeared in newspapers and periodicals, it was quite evident that many Soviet educators considered this form of instruction inferior to the regular full-time instruction. Some of the criticisms mentioned were the lack of textbooks, equipment, laboratories and libraries for correspondence students. Also of concern were the following: the enormous drop-out rate of correspondence students each year; the lack of theoretical background among these graduates; the preponderance of inferior instructors in correspondence study as compared with the regular higher school faculty. In addition, it was emphasized that too many correspondence institutes were concentrated in Moscow and that their branches, located throughout the country, were inferior to the mother institutions. Recently, the U.S.S.R. Ministry of Higher and Secondary Specialized Education stated that the Plant-VTUZ¹ type of school might very well be the answer to solving many of the defects existing in the higher correspondence system.

A Praisal of Higher Correspondence Study

Although the Soviet Government in 1958 announced that the higher correspondence system would be greatly expanded, it also emphasized

¹V. P. Eliutin, U.S.S.R. Higher School for 50 Years, p. 121.

that many changes would have to be effected in order to meet the new conditions. In this regard, V. P. Eliutin, Minister of Higher and Secondary Specialized Education, in September 1958 asserted:

Since a large number of students will complete their entire higher education by means of correspondence or evening courses, it is necessary to introduce certain changes in the system of correspondence and evening study. At present this system has many shortcomings. . . .

It is desirable to reorganize correspondence and evening education in such a way that it will be largely based at the day higher educational institutions having qualified professors and instructors and adequate material and teaching facilities; while the network of branches and UKP's will be based at large-scale enterprises.

. . . In order to assure the successful work of students studying by means of correspondence, it is particularly important to provide them with modern textbooks and study aids. In view of the large scope of the higher education correspondence and evening systems, it is necessary to establish large-scale publishing facilities to assure textbooks and study materials for all those studying under this system.¹

Continuing with the same theme, in December 1958, Minister Eliutin said:

. . . Correspondence and evening education must be improved to meet the new conditions. The main weakness is that the level of theoretical training of specialists in correspondence and evening higher schools in many instances is below the level of the day higher school system.

Since the higher schools will develop over the next four years mainly through the expansion of correspondence and evening education, this system must be reorganized in such a way as to guarantee that the level of theoretical training of specialists will be raised to meet the new standards made necessary by the uninterrupted development of science and teaching. . . .

Preference for admitting students to correspondence schools should be given to persons already working in a branch of production related to their chosen field.

In the higher technical schools, students will, as a rule, pursue their studies for the first two years without taking time out from production and will enroll in the system of correspondence or evening study. They will then shift to the day system. In their senior years (fourth and fifth years) the students will spend six months to a year working as regular junior technical personnel to learn skills of management and production organization.²

¹V. P. Eliutin, "Proposals for Changes in Correspondence Study," Pravda (Truth), September 17, 1958, pp. 3-4.

². "On Higher Correspondence and Evening Instruction," Izvestiia (News), December 24, 1958, p. 10.

Although some of the shortcomings mentioned by Minister Eliutin were remedied by the return to ten-year schooling (as expressed in the Reform of 1964), therefore better preparing the secondary student for higher education, many of the quantitative and qualitative problems of higher correspondence study remained unresolved. Only recently it was emphasized that the fundamental drawback regarding the requirements for specialists is the fact that the number of technicians and specialists has not increased in proportion to the need for them by the national economy. Even though higher correspondence study has filled the gaps to some degree, it has been plagued by deficiencies in the qualitative aspects and the unusually high drop-out ratios. Recent criticism by enterprises concerning the lack of theoretical background of higher correspondence students has caused the Communist Party and government to move toward full-time schooling as the answer to the manpower shortages.

It is also important to note that, according to many Soviet educators, the audio-visual approach to higher correspondence education is still more or less in its infancy in the Soviet Union. Although many regular higher schools have adequate audio-visual equipment, this does not always apply to correspondence schools. For example, it was revealed by the faculty of the correspondence department of the Kazan University in 1968 that in addition to the need for programmed instruction, this department also needed filmstrips, television kinescopes, transparencies for overhead projectors, records, and audio tapes for use in the teaching-learning process.¹

¹Nozhko, et al., Educational Planning, p. 67; Remennikov, Economic Problems of Higher Education, p. 116.

It is also extremely important to mention that in taking a poll of university correspondence students concerning the most effective method of teaching, 95 percent decided that the seminar and consultation sessions were the most productive in correspondence instruction; whereas only 5 percent considered the control task assignments as essential.¹

Drop-outs in Higher Correspondence Schools

All correspondence study programs have been afflicted with the problem of drop-outs. In 1968, it was reported that the drop-out figure for higher day school students averaged 5.7 percent; whereas for higher correspondence students, the figure was about 50 percent.²

Although the initial enrollment of higher correspondence students has always been very high, the numbers graduating have been small. In Rostov University, for example, it was reported that in 1964 only 46.5 percent of the correspondence students, who started in 1958, graduated. In the Moscow State University from 1959-1964, only 17.8 percent completed their studies in mathematics of those accepted from 1953-1958. In Irkutsk University in 1967, it was disclosed that only 40 percent of the correspondence students completed their specialties in the Russian language and literature in the past ten years. Furthermore, it was noted that the drop-out rate of engineering specialists at correspondence VUZ's has been consistently higher than their counterparts at the

¹ Ibid.

² Remennikov, Economic Problems of Higher Education, p. 107.

regular universities; in 1964, it was reported that 56.8 percent of the correspondence students enrolled in 1959 had dropped out.¹

In recent years, the basic reason for the drop-out situation in higher correspondence education has reportedly been the lack of progress made in course work. For example, in the Ural University, it was estimated that the percentages of correspondence students studying in various fields, who dropped out because of lack of progress for the five years (from 1958/59 to 1963/64), were as follows: mathematics, 60.2 percent; philosophy, 52.7 percent; history, 45.8 percent. In addition, other students left for other reasons including: family complications, moving to other cities or localities, transfers to day school, and so forth.²

In the 1963-64 academic year the percentage of correspondence students receiving failing grades was 31.9 percent in Moscow State University, 38.5 percent in Rostov University, and 29.4 percent in Ural University.³

In an effort to remedy the critical drop-out ratio in higher correspondence education, a student questionnaire was prepared by the Ministry of Higher and Secondary Specialized Education and forwarded to Leningrad, Belorussian and Tashkent Universities. The questionnaire was distributed to over 3,000 correspondence students enrolled in the various university correspondence departments, with the following questions asked:

¹Remennikov, Economic Problems of Higher Education, pp. 100-101.

²Ibid., p. 101.

³Ibid., p. 112.

1. How much longer does it take a correspondence student to complete his studies as compared to a regular student?
2. What are the main reasons for failing examinations?
3. In your opinion, are there more effective methods of teaching correspondence students, besides written assignments, lectures, seminars, and consultations?
4. What are some of your reasons for selecting a certain specialty?
5. What influence does correspondence study have on promotions in industry?
6. Are correspondence students provided with proper textbooks?¹

Many correspondence students drop out because their employers deliberately create barriers to their school attendance. The cry by managers of some enterprises is that "we need workers, not students." For example, many employers either require that correspondence students work overtime or assign them work-shifts conflicting with school schedules. Finally, it has been acknowledged by some educators that there is actually no incentive for studying since there is no assurance of any job benefits or advancement because of a student's increased qualifications.²

The 20th Party Congress in 1956 noted that the distribution of higher educational institutes throughout the country was not equal. For example, it was indicated that although the number of correspondence students had grown considerably in the Urals, Siberia, Far East and Kazakhstan, there were not enough correspondence centers in these

¹ Ibid., p. 102.

² DeWitt, Education in the U.S.S.R., p. 95.

areas to handle the student load. Furthermore, it was also stated that there was no correspondence training provided in Semipalatinsk, Kustanai, Gur'ev, Amur or Chita Economic Administrative Regions. This Congress also declared that there was a great need for new polytechnical higher correspondence institutes in the Eastern part of the country. In order to meet this need, it was proposed that correspondence institutes be built in Sverdlovsk, Novosibirsk, and Irkutsk.¹

Although higher correspondence education had improved in quality by 1966, this form had still not achieved equality with the regular higher establishment. In this regard, the 23rd Party Congress adopted a resolution calling for the further improvement of the quality of higher correspondence and evening education to be accomplished in the near future.² Achievement of this target was still behind schedule in 1968 as reflected in a statement made by economist B. M. Remennikov, who stressed that the problem of higher correspondence study was not whether the number of correspondence students should be increased but how the quality of correspondence study can be improved. He suggested that a permanent commission for correspondence study be organized in each city having many correspondence students; this commission was to work with the VUZ's in improving the quality of correspondence studies.³ It is interesting to note that an article appearing in a Russian periodical published in West Germany in 1972 sharply criticized the Soviet higher

¹ A. Botvinkin, et al., "Attention and Support for Higher Correspondence Education," Pravda (Truth), January 24, 1958, p. 3.

² "Changes in Correspondence and Evening Schools," Izvestia (News), September 15, 1966, p. 5.

³ Remennikov, Economic Problems of Higher Education, p. 122.

correspondence system as having fallen to a new low in quality. In this regard, it was cited that many enterprises were known to have actually rejected students who had graduated from higher correspondence schools, accepting only the graduates from the regular full-time Moscow and Leningrad VUZ's.¹

The decree of September 1966 gave preference to those who were recommended by enterprises, kolkhozes, sovkhozes and institutions to take correspondence courses in their respective specialties. However, despite the efforts of the Soviet Government to give preference to students entering higher correspondence education, who had work experience in their field of specialization, many were enrolled in subjects outside their specialty.²

According to a study, which was conducted in 1964, it was confirmed that correspondence students studying outside of their specialty in the majority of cases did very poorly in their course work. For example, it was estimated that 58 percent of the first-year students studying in correspondence departments of the R.S.F.S.R. universities were taking courses outside of their work experience and performing poorly.³

This was again demonstrated by another study showing the degree of progress made by Kazan University correspondence students in subjects related and unrelated to their work experience for the academic year 1962-63. (See Table 15).

¹V. Maslov, "Ot Klassa Do Klassa Studenty Zhivut Blagopoluchno . . ." (From Class to Class Students Live Happily . . .), Posev (Sowing Time), (September, 1972), 31.

²"Changes in Correspondence and Evening Schools," Izvestiia (News), September 15, 1966, p. 5.

³Remennikov, Economic Problems of Higher Education, p. 120.

TABLE 15

PERCENTAGE OF FAILURES AMONG KAZAN UNIVERSITY CORRESPONDENCE STUDENTS WORKING IN THEIR SPECIALTIES AND THOSE WORKING OUTSIDE OF THEIR SPECIALTIES, 1962-63

Specialty Groups	Failures Among Those Working in Their Specialty (percent)	Failures Among Those Not Working in Their Specialty (percent)
Mechanics-Mathematics	31.7	45.3
Biology	13.0	23.4
History-Philosophy	16.7	21.3
Geography	10.2	13.2
Law	12.2	14.5

Source: Remennikov, Economic Problems of Higher Education, p. 119.

Observation of the data in the above table illustrates that the differences in percentages of failures between those who work in their specialty and those who do not are not significant in the social sciences; however, they become greater in the sciences.

In 1972, a survey was made of the drop-out situation in a number of universities and technological and agricultural institutes, with the following data presented: In the correspondence divisions of many higher schools, up to 40 percent of the students were dismissed during the first year, and up to 25 percent during the second year. (See Table 16). As a rule, no more than one-third of the correspondence students finished the higher school within the established period of six or six and a half years. Finally, the quality of the training of specialists by correspondence instruction was also a cause for serious

TABLE 16

THE NUMBER OF DROP-OUTS (FULL-TIME AND CORRESPONDENCE) IN
PROPORTION TO THE TOTAL NUMBER OF STUDENTS
BY YEARS IN THE HIGHER SCHOOLS

Forms of Training and Education	1st Year	2nd Year	3rd Year	4th Year	5th Year	6th Year
<u>Regular day classes</u> Technical, agricultural, engineering, economics	0.85	0.91	0.95	0.97	0.99	1.00
<u>Correspondence Courses</u> Technical, agricultural, engineering, economics	0.60	0.70	0.80	0.90	0.97	1.00

Notes:

As shown in the above table, the percentage of drop-outs for the designated specialties decreases as a student progresses toward graduation. It is noteworthy to mention that 40 percent of the correspondence students drop out in the first year as compared with 15 percent of the regular day students. By the sixth year, the drop-out rate is almost nil for both forms of instruction.

Source: Nozhko, et al., Educational Planning, p. 157.

concern. In twenty-three Uzbek higher schools, 42 percent of the correspondence students received unsatisfactory marks at an examination session, 48 percent had satisfactory marks, and only 10 percent received marks of good or excellent. In the Moldavian and Belorussian Polytechnical Institutes, the absolute number of correspondence students with passing grades was less than 40 percent; while for students in the day divisions, the figure was 90 percent.¹

The survey also stressed that in many of the educational institutions the nature of work done by more than half of the correspondence students did not coincide with their chosen specialty in the higher school. Up to 70 percent of the correspondence students at the Kishinev Agricultural Institute, the Volgograd Institute of Engineering, and the Tashkent Institute of Light and Textile Industry did not choose courses in their work specialty.²

It was also stated that admission to the first year of higher education quite often was handled without consideration for the practical experience of the entering students, inasmuch as many correspondence divisions, due to the lack of competition, accept virtually anyone who passes the examination. Moreover, enrollment usually took place after admission to the day divisions had been completed. Therefore, many of those who could not enter day school enrolled in correspondence divisions.³

Other items indicated in the survey were that successful training by correspondence could not be attained in subjects such as physics,

¹M. Anuchin, "Problems of Correspondence Education," Izvestiia (News), January 6, 1973, p. 5; "The Role of Correspondence Education," Current Digest of Soviet Press, Vol. XXV, No. 1, January 31, 1973, p. 6.

²Ibid.

³Ibid.

chemistry, electronics and radio engineering, and so forth, which required a great deal of theoretical study in addition to a large amount of laboratory work. Also cited was the fact that the period of study for correspondence students should be doubled, and the field of specialty should be narrowed.¹

To sum up, it was concluded that however much the network of correspondence branches, divisions, and UKPs are expanded, they cannot replace the full-time institutional departments with their scientific potential and highly qualified personnel, including their adequate educational and laboratory facilities.

¹Ibid.

CHAPTER XII

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

Summary

Although the study is limited to those aspects of Soviet higher education which most directly affect correspondence study, other forms of instruction are also discussed for purposes of comparison. In this reference, some of the aspects treated were: the historical survey of the development of higher correspondence education, including its related decrees and laws; administration of higher educational institutes; admission rules and teaching process in the higher correspondence schools; types of higher correspondence schools and departments; the rate of drop-outs in correspondence instruction, including statistics covering admissions, enrollment, and graduation. Attention was also devoted to the Educational Reform of 1958, which perhaps played the greatest role in making correspondence study one of the most important forms of instruction in the Soviet educational system; this reform was amended to some degree by the Reform of 1964.

To facilitate and complement the factual material, the author prepared several charts showing the administrative structure of Soviet higher education, including the role of the correspondence department. Also contained are Soviet educational statistics, some of which were readily available in statistical yearbooks and journals, monographs,

and so forth. Although some of the statistics contained gaps, missing years, and revealed some juggling of numbers, basically the figures seemed to be fairly reliable. It should be noted that to create a favorable impression, the Soviets on occasion used questionable procedures of "lumping" together day, correspondence, and evening students, or correspondence and evening students (known as those studying without interrupting production).

The importance of specialized technical higher education is seen in the proportion of students enrolled in technical subjects and in the number of such institutions. With regard to the number of higher educational schools in 1972, there were fourteen independent higher correspondence institutes and 632 regular higher institutions with correspondence departments.

In the academic year 1960/61, 49 percent of all the students were engaged in engineering specialties, and by 1967/68 the proportion had increased to over 50 percent. In 1970, it was estimated that between 85 percent and 90 percent of the students were enrolled in scientific and specialized fields, and only 8 to 10 percent were enrolled in regular universities. Besides, over 70 percent of the Soviet higher institutions were devoted to industry, agriculture and economics. In summing up, it should be noted that, in general, the universities provide the theorists and scholars, while the institutes provide professionals in the applied fields.

Perhaps the most spectacular achievement of Soviet higher education has been the large number of Soviet students who study by correspondence in the Soviet Union. Since the post-World War II period, the

number of correspondence students in higher education has increased dramatically, so that by 1965 there were 1.7 million correspondence students and only 1.5 million regular students. Since then, however, there has been a steady decline in the numbers of correspondence students enrolled in higher schools; in 1972, this total was 1.6 million. Nevertheless, in early 1973, it was announced that one third of the students in higher education were studying by correspondence.

Of serious concern to the Soviet Government are the great numbers of drop-outs and failures in higher correspondence instruction. In early 1973, it was reported that up to 40 percent of the students in the correspondence divisions of higher schools dropped out during the first year, and up to 25 percent during the second year. As a rule, no more than one third of the correspondence students finish higher schools within the established period of six years.

Finally, another matter for deep concern has been the lack of quality in the training of specialists by correspondence. For example, it was stated that in twenty-three Uzbek higher schools, 48 percent of the correspondence students received unsatisfactory marks in their specialties, and only 10 percent received marks of good or excellent. In the Moldavian and Belorussian Polytechnical Institutes, the absolute number receiving passing grades was less than 40 percent, while for students in the day school division the figure was 90 percent.

Conclusions

Before the conclusions can be discussed, the U.S. and U.S.S.R. basic philosophies of education should be briefly mentioned.

In the U.S. the basic ideal which has guided our educational system has been the principle that education is good only if it is designed for the individual. On the other hand, the Soviet basic philosophy is that education is to serve the State and not the individual. It is designed not only to produce specialists whose knowledge and skills will be more useful to the State, but also to remold the character of a person so that it is compatible with the Communist ideology.

In the free society of the U.S., students who satisfy the requirements can study pretty much what they like, become pretty much what they so desire. There are some restrictions, of course, such as the limited number of students accepted in medical, dental and veterinary schools, including some of the top schools. But there is no pressure from the state, for example, to increase the number of electronic specialists the economy can support. Also, there are no compulsory programs set up to balance the needs of the labor market.

Not so in the Soviet Union, where the students are admitted to higher educational institutions only if they study subjects which are closely related to the jobs they plan to hold.

Therefore, the concept of service to the state instead of service for the benefit of the individual constitutes the basic difference between the Soviet and U.S. philosophies of education.

Throughout the presentation, correspondence study is emphasized as one of the most important forms of instruction in the Soviet educational system. This is evidenced by the tremendous numbers of students studying by correspondence, the variety of programs offered by the higher correspondence schools, and the repeated statements made in the decrees and resolutions concerning the further development of correspondence study.

Starting out as a minor segment of the regular higher educational system, correspondence study became a major form of instruction during the sixties; today it is still the second largest in terms of enrollment. Although there has been a downward trend in the numbers of correspondence students studying in higher schools, in early 1973, it was mentioned that over one-third of the total students studying in higher educational institutes were correspondence students.

Inasmuch as the entire Soviet system of government is highly centralized, this also applies to the educational system. Although an attempt was made in 1958 to decentralize the educational structure of the Soviet Union, this was only accomplished on a limited basis. The central ministry in Moscow, known as the All-Union or U.S.S.R. Ministry of Higher and Secondary Specialized Education, through its corresponding ministries and committees in each of the fifteen republics, has the overall responsibility for coordination of research and the training of specialists in all of the Soviet higher schools. Through the VAK, known as the Supreme Attestation or Certification Commission, it controls the appointment of the teaching personnel in Soviet higher education. Nevertheless, it is the Communist Party through its Central Committee and the topmost organ known as the POLITBURO (Political Bureau) which actually determines what path education takes in the Soviet Union.

The Educational Reform of 1958, more than any other piece of legislation, expanded correspondence education in the Soviet Union. Khrushchev's many propaganda statements emphasizing that schools had to relate to life, and that youth should be prepared for labor only, enhanced still further the role of correspondence education.

As mentioned previously, in order to encourage secondary students to enter higher correspondence instruction the government offered many inducements, such as increased furlough benefits, stipends, reduced workweeks, and so forth. Obviously, the reason for this was to keep as many students as possible employed in the national economy because of the existing lack of trained manpower. In this regard, it should be stressed that the sharp drop in the birth rate caused by World War II losses, which is still prevalent to some degree, resulted in a great reduction in the numbers of secondary school graduates available for the labor market.

The rationale used by some Soviets for the Reform of 1958 was that there were no places for secondary students in the higher schools. Therefore, the Soviet Government explained that to solve this problem, it was necessary to include vocational training in all of the academic secondary schools, so that these students could be readily employed by industry. The author feels that a better explanation of this problem was that the critical shortage of technicians, which has existed in many areas of the national economy, caused the academic secondary schools to revise their curricula to include vocational training to meet this shortage. Moreover, the priority for admission to higher schools was given only to those who had worked for two years in industry, therefore forcing many secondary graduates into employment.

The Educational Reform of 1964 modified the Reform of 1958 by extending the eight-year school back to the ten-year system. Apparently the government felt that the eight-year period was insufficient to adequately train students for a vocation or a technical specialty. In

addition, the ten-year school, by raising its scientific level, became more flexible so that graduates could either go on to higher schools or terminate and obtain jobs as technicians in industry.

Reducing the cost of education has been another subject of discussion among Soviet planners and educators. Although some Soviet articles have stressed the need for more buildings and equipment to meet the requirements of additional students, it seems as though the government has been reluctant to do so.

It can be readily seen that if all the secondary school graduates were enrolled in regular higher schools, the cost of Soviet education would skyrocket several times; therefore, the alternative is to achieve a balance between the regular form of instruction and the correspondence type. Nevertheless, in determining the cost of higher correspondence instruction, the drop-out rate and the increments given to students have to be considered. At present, the drop-out rate for higher correspondence students is unusually high, in some cases as much as 50 percent; whereas for full-time day students, it does not exceed 10 percent. As a result, it was estimated by one Soviet economist that the cost ratio between full-time and correspondence instruction in higher schools instead of 10:1 was actually 4:1.

According to the breakdown of expenditures for higher education in 1959, it was estimated that the salaries of professors, lecturers and other academic staff members amounted to more than 44 percent of the total expenditures. The next largest amount was expended on grants to students, which represented over 30 percent of the total. Although the expenditures quoted for salaries and grants represented the total for higher education in general, without specifically indicating the

amount expended on correspondence instruction, it can be assumed that the percentages for salaries for the latter form of instruction were obviously less.

With regard to the addition of vocational training in academic secondary schools, as mentioned in the Reform of 1964, Soviet planners, even today, consider this aspect an important innovation which should be continued. The reason for this can be explained by the fact that there are still many shortages of qualified technicians with an adequate theoretical background in many fields, including industry, construction and agriculture. Consequently, the government desires to channel as many secondary graduates as possible into "study without interrupting production."

Although the reliability of Soviet educational statistics is sometimes questionable, it is still possible to abstract meaningful data. In this regard, efforts were made by the author not to use statistical data which was obviously of a propagandistic nature, released simply to impress the rest of the world with the tremendous progress made by Soviet education.

As mentioned previously, the Soviet higher educational statistics on correspondence study sometimes consisted of juggled figures, missing years, lumping of some categories, making it difficult to determine trends. However, regardless of the problems encountered, by estimating and comparing the numbers of students and institutions, it was still possible to determine certain trends from the various aggregates given.

In summarizing, it should be stated that the basic task which lies ahead for the Soviet higher educational institutions, including

the correspondence institutes and departments, is to improve the quality of the training and education of specialists, taking fully into account the current requirements of production, science, technology and military strategy.

Recommendations

Some of the areas of Soviet higher correspondence education about which we particularly need more information include: How economical is correspondence instruction? What are the true figures for drop-outs in correspondence instruction? How many students are studying in military and party correspondence schools? What is the current enrollment of correspondence students broken down by higher schools? How effective are correspondence student graduates as compared with regular school graduates in the various branches of industry? How long does it really take for a correspondence student to graduate from a higher school? What are the factors involved in Soviet educational planning?

In order to obtain a more comprehensive picture of the U.S.S.R. higher education correspondence system, it is necessary to explore some of the problems posed by the above-mentioned questions.

In conclusion, the author wishes to state that we cannot afford to be indifferent to the educational developments in the U.S.S.R., since they are tied to that country's plans for world supremacy. As a matter of fact, it is through a careful study of educational planning that we could ascertain not only the reasons for fluctuations in Soviet education, but also its implications as far as the financial, economic, political and sociological factors are concerned.

GLOSSARY OF SOVIET TERMS AND ABBREVIATIONS

Akademia Nauk SSSR.--U.S.S.R. Academy of Sciences.

Akademia Pedagogicheskikh Nauk.--Academy of Pedagogical Sciences.

aspirant.--graduate student.

aspirantura.--graduate training or study leading to a candidate's degree.

dnevnyi fakul'tet.--day faculty or division.

doktor.--doctor.

doktorantura.--training program for a doctor's degree (this program has been discontinued).

ekzaminatsionnaia komissia.--examination committee or board.

entsiklopediia.--encyclopedia.

fakul'tet.--division or department.

filiialy.--affiliates or branches.

GLAVPOLITPROSVET (Glavnoe Upravlenie Politicheskogo Prosveshcheniia).--Main Administration for Political Education.

GLAVVtuzy (Glavnoe Upravlenie Vysshikh Tekhnicheskikh Zavedenii).--Main Administration of the Higher Technical Educational Institutions.

Gosplan (Gosudarstvennyi Plan).--State Plan.

GUUZ (Glavnoe Upravlenie Uchebnymi Zavedeniami).--Main Administration of Educational Institutions.

institut.--institute.

izdatel'stvo.--publishing house.

kandidat.--candidate (equivalent to a master's degree).

kandidatura.--candidacy for a candidate's degree.

kolkhoz (Kollektivnoe Khoziaistvo).--collective farm.

Komsomol (Kommunisticheskii Soiuz Molodezhi).--Young Communist League.

konkurs.--competition (for entrance examination).

kontingent.--contingent or number of students.

kontrol'nye raboty.--control tasks; periodic assignments required of correspondence students.

KPSS (Kommunisticheskaia Partia Sovetskogo Soiuza).--CPSU or Communist Party of the Soviet Union.

kursovaia podgotovka.--preparatory courses.

kul'turnoe stroitel'stvo.--cultural construction.

Ministerstvo Prosveshchenia.--Ministry of Education.

Ministerstvo Vysshego Obrazovaniia SSSR.--U.S.S.R. Ministry of Higher Education.

Ministerstvo Vysshego i Srednego Spetsial'nogo Obrazovaniia SSSR.--U.S.S.R. Ministry of Higher and Secondary Specialized Education.

MVSSO SSSR (Ministerstvo Vysshego i Srednego Spetsial'nogo Obrazovaniia SSSR).--U.S.S.R. Ministry of Higher and Secondary Specialized Education.

NARKOMPROS (Narodnyi Kommissariat Prosveshchenia).--People's Commissariat of Education.

ochnaia aspirantura.--training program for resident graduate students.

narodnoe khoziaistvo.--national economy.

narodnoe obrazovanie.--public education.

nauchnyi rabotnik.--scientific worker.

nauka.--knowledge or science.

pedagogicheskie kadry.--teaching personnel.

pedagogicheskoe obrazovanie.--pedagogical education.

politekhnicheskii institut.--polytechnical institute.

praktiki.--nongraduate having practical experience.

prepodavatel'.--instructor.

priemnaia komissia.--committee on admissions.

profilirovannoe obrazovanie.--specialized education.

prosveshchenie.--education or enlightenment.

RABFAK (Rabochii Fakul'tet).--workers' faculty or division.

R.S.F.S.R. (Russkaia Sovetskaia Federativnaia Sotsialisticheskaia Respublika).--Russian Soviet Federated Socialist Republic.

Sovkhoz (Sovetskoe Khoziaistvo).--Soviet State Farm.

SOVMARKOM (Sovet Narodnykh Komissarov).--Council of People's Commissars.

spetsial'noe vysshee uchebnoe zavedenie.--specialized higher educational institutions.

spetsial'nost'.--specialty.

srednee spetsial'noe obrazovanie.--secondary specialized education.

statsionarnoe VUZ.--permanent or regular higher educational institution.

stipend.--stipend or scholarship.

stipendiat.--grantee, recipient of a stipend.

tekhnikum.--technicum; secondary technical school.

Ts SU (Tsentral'noe Statisticheskoe Upravlenie).--Central Statistical Administration.

ucheba bez otryva ot proizvodstva.--study without interrupting production (this applies either to correspondence or evening instruction).

ucheba s otryvom ot proizvodstva.--study with interruption of production (this applies to full-time or day instruction).

uchenik.--apprentice.

uchitel'skii institut.--teachers' institute.

UKP (Uchebno Konsul'tatsionnyi Punkt).--study consultation center.

universitet.--university.

SSSR (Soiuz Sovetskikh Sotsialisticheskikh Respublik).--Union of Soviet Socialist Republics or U.S.S.R.

VAK (Vysshhaia Attestatsionnaia Komissia).--Supreme Attestation (Certification) Commission.

vechernee obrazovanie.--evening instruction.

vechernee obuchenie.--evening training or study.

vechernyi fakul'tet.--evening division or department.

Vsesoiuznyi Zaochnyi Institut.--All-Union Correspondence Institute.

VSNECh (Vysshii Sovet Narodnogo Khoziaistva).--Supreme Economic Council.

VTUZ (Vysshee Tekhnicheskoe Uchebnoe Zavedenie).--higher technical educational institution.

VUZ (Vysshee Uchebnoe Zavedenie).--higher educational institution or establishment.

vysshaia partiinaia shkola.--higher party school.

vysshaia shkola.--higher school.

vysshee obrazovanie.--higher education.

vysshee uchebnoe zavedenie.--higher educational institution.

vysshee uchilishche.--higher school.

VZPI (Vsesoiuznyi Zaochnyi Politekhnicheskii Institut).--All-Union Polytechnical Correspondence Institute.

zaochnaia aspirantura.--graduate training program for correspondence students.

zaochnik.--correspondence student.

zaochnoe vysshee obrazovanie.--correspondence higher education.

zaochnoe obuchenie.--correspondence training.

zaochnoe otdelenie.--correspondence division or department.

zaochnyi institut.--correspondence institute.

zaochnyi VUZ.--correspondence higher educational institution.

Zavod-VTUZ (Zavod-Vysshee Tekhnicheskoe Uchebnoe Zavedenie).--Plant-higher technical educational institution or establishment.

ZVPSH (Zaochnaia Vysshaia Partiinaia Shkola).--Correspondence Higher Party School.

APPENDIX I

ADMISSION TO HIGHER EDUCATIONAL INSTITUTIONS
 ACCORDING TO VARIOUS SPECIALIZATIONS,
 BY SELECTED YEARS: 1928-1971
 (Figures in Thousands)

	1928	1940	1950	1960	1965	1970	1971
Admittance of students to higher educational institutions	42,8	263,4	349,1	593,3	853,7	911,5	920,3
Of this total, the number studying in the various branches were as follows:							
industry and construction	16,8	45,4	74,0	225,4	334,6	367,9	372,7
transport and communica- tions		8,3	12,0	34,1	45,6	48,1	47,7
agriculture	5,4	11,9	28,5	62,7	89,0	85,0	86,0
economics and law	5,0	13,6	25,5	43,9	56,9	72,6	72,4
health, physical education and sports	5,2	23,0	23,7	36,8	49,2	60,5	61,6
education	10,4	159,0	182,6	185,1	271,3	269,0	271,3
arts and motion pictures		2,2	2,8	5,3	7,1	8,4	8,6

Source: Central Statistical Administration, Narodnoe Khozjalstvo SSSR (National Economy of the U.S.S.R.) 1922-1972 (Moscow: Statistical Publishing House, 1972), p. 440.

APPENDIX II

NUMBER OF STUDENTS ATTENDING HIGHER EDUCATIONAL INSTITUTIONS
 ACCORDING TO VARIOUS SPECIALTIES,
 BY SELECTED YEARS: 1914-1971
 (Figures in Thousands)

	1914	1927	1940	1950	1960	1965	1970	1971
Number of students attending higher schools	127,4	168,5	811,7	1247,4	2396,1	3860,6	4580,6	4597,5
According to categories:								
industry and construction.	29,9	40,7	168,4	272,8	873,1	1528,3	1825,7	1834,9
transportation and communi- cations		2,8	36,2	47,9	146,7	221,6	251,7	253,6
agriculture.	4,6	20,5	52,1	104,1	246,5	377,1	423,9	422,8
economics and law.	11,4	18,2	36,3	89,2	161,9	264,1	341,4	344,0
physical education, health and sports	5,0	11,2	109,8	111,5	188,9	238,8	321,0	330,1
education.	81,5	68,2	398,6	607,0	759,6	1198,7	1375,7	1370,3
art and cinema		6,9	10,3	14,9	19,4	32,0	41,2	41,8

Source: Central Statistical Administration, Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.)
 1922-1972 (Moscow: Statistical Publishing House, 1972), p. 431.



APPENDIX III

NUMBER OF HIGHER EDUCATIONAL INSTITUTIONS AND NUMBER
OF STUDENTS IN THEM (IN THOUSANDS) IN THE VARIOUS
UNION REPUBLICS, BY SELECTED YEARS:
1940/41--1969/70
(At Beginning of Academic Years)

	1940-41	1950-51	1960-61	1965-66	1968-69	1969-70
<u>U.S.S.R.</u>						
No. of educational institutions	817	880	739	756	794	800
Enrollment (in thousands)	811,7	1,247,4	2,396,1	3,860,6	4,469,7	4,549,6
<u>R.S.F.S.R.</u>						
No. of educational institutions	481	516	430	432	449	454
Enrollment (in thousands)	478,1	796,7	1,496,7	2,353,9	2,622,5	2,655,8
<u>Ukrainian SSR</u>						
No. of educational institutions	173	160	135	132	138	138
Enrollment (in thousands)	196,8	201,6	417,7	690,1	792,2	804,1
<u>Belorussian SSR</u>						
No. of educational institutions	25	29	24	27	28	28
Enrollment (in thousands)	21,5	31,6	59,3	104,0	131,5	137,3
<u>Uzbek SSR</u>						
No. of educational institutions	30	37	30	32	38	38
Enrollment (in thousands)	19,1	42,2	101,3	165,8	224,1	231,9
<u>Kazakh SSR</u>						
No. of educational institutions	20	26	28	39	43	43
Enrollment (in thousands)	10,4	31,2	77,1	144,7	188,4	195,7

APPENDIX III--Continued

	1940-41	1950-51	1960-61	1965-66	1968-69	1969-70
<u>Georgian SSR</u> No. of educational institutions Enrollment (in thousands)	21 28,5	19 35,0	18 56,3	18 76,6	18 89,3	18 90,1
<u>Azerbaijani SSR</u> No. of educational institutions Enrollment (in thousands)	16 14,6	20 28,6	12 36,0	11 67,0	12 95,0	12 99,2
<u>Lithuanian SSR</u> No. of educational institutions Enrollment (in thousands)	7 6,0	11 11,4	12 26,7	11 46,4	11 54,5	12 55,7
<u>Moldavian SSR</u> No. of educational institutions Enrollment (in thousands)	6 2,5	8 8,7	6 19,2	7 36,3	8 45,4	8 45,5
<u>Latvian SSR</u> No. of educational institutions Enrollment (in thousands)	7 9,9	11 14,2	10 21,6	10 33,1	10 40,1	10 40,4
<u>Kirgiz SSR</u> No. of educational institutions Enrollment (in thousands)	6 3,1	7 8,6	8 17,4	8 32,2	9 43,9	9 46,2
<u>Tadzhik SSR</u> No. of educational institutions Enrollment (in thousands)	6 2,3	8 7,1	6 20,0	7 30,4	7 40,9	7 42,6

APPENDIX III--Continued

	1940-41	1950-51	1960-61	1965-66	1968-69	1969-70
<u>Armenian SSR</u> No. of educational institutions Enrollment (in thousands)	9 11,1	15 15,1	10 20,2	11 38,9	12 51,8	12 53,4
<u>Turkmen SSR</u> No. of educational institutions Enrollment (in thousands)	5 3,0	6 6,6	4 13,1	5 19,8	5 27,3	5 29,2
<u>Estonian SSR</u> No. of educational institutions Enrollment (in thousands)	5 4,8	7 8,8	6 13,5	6 21,4	6 22,8	6 22,5

Source: "Narodnoe Obrazovanie, Nauka, i Kul'tura v SSSR" (Public Education, Science, and Culture in the U.S.S.R.), Vestnik Statistiki (Herald of Statistics), No. 9 (September, 1970), 87.

APPENDIX IV

DISTRIBUTION OF STUDENTS ATTENDING THE
HIGHER EDUCATIONAL INSTITUTIONS
ACCORDING TO NATIONALITIES, BY
SELECTED YEARS: 1962/63
and 1970/71
(At the Beginning of an Academic Year,
Figures in Thousands)

	Students at higher educational institutions	
	1962/63	1970/71
Total	2943,7	4580,6
Of this number according to nationalities:		
Russians	1803,8	2729,0
Ukrainians	426,0	621,2
Belorussians	85,0	130,2
Uzbeks	70,1	150,7
Kazakhs	51,8	100,3
Georgians	58,5	87,8
Azerbaidzhans	36,6	86,0
Lithuanians	31,8	49,8
Moldavians	15,9	30,8
Latvians	19,8	21,8
Kirgizs	11,9	26,4
Tadzhiks	13,5	28,1
Armenians	44,6	81,5
Turkmens	11,8	22,0
Estonians	15,4	17,0
Abhazes	1,3	1,9
Balkars	0,8	1,5
Bashkirs	8,3	14,8
Buriats	6,2	11,2
Ingushes	1,3	1,9
Kabardians	2,8	5,5
Kalmyks	1,3	3,0
Karakalpaks	2,6	4,6
Karelians	1,1	1,6

APPENDIX IV--Continued

	Students at higher educational institutions	
	1962/63	1970/71
Komis	3,5	4,6
Maris	3,1	4,3
Mordvians	6,2	11,6
Dagestans	9,9	20,3
Ossetians	7,8	13,4
Tatars.	51,1	87,0
Tuvinians	1,3	1,8
Udmurts	4,4	7,0
Chechens.	2,5	4,7
Chuvashes	11,5	16,0
Yakuts.	3,5	6,4
Jews.	79,3	105,8
Karachaevs.	1,7	2,5
Khakases.	0,6	1,1
Circassians	0,5	1,1

Source: Central Statistical Administration, Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-1972 (Moscow: Statistical Publishing House, 1972), p. 446.

APPENDIX V

TOTAL U.S.S.R. UNIVERSITIES INCLUDING ENROLLMENT,
ADMISSIONS, GRADUATES, BY SELECTED YEARS:
1914-1971

Years	Number of Universities (at the Beginning of the Academic Year)	Number of Students Enrolled	Number of Students Admitted	Number of Graduates
1914	12	40776	...	...
1940	29	75682	23334	7963
1950	33	109737	27127	15626
1955	33	166256	36690	22866
1960	40	248962	65590	38354
1965	42	401231	87352	43741
1966	42	433140	93937	44432
1967	44	454130	91547	54039
1968	44	470758	89494	57781
1969	48	489197	92801	64335
1970	51	503503	96289	69078
1971	52	509793	98868	78979

Source: Central Statistical Administration, Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-1972 (Moscow: Statistical Publishing House, 1972), p. 432.

APPENDIX VI

NETWORK OF UNIVERSITIES AT END OF 1970, ACCORDING
TO UNION REPUBLICS, INCLUDING ENROLLMENT,
ADMISSIONS, AND GRADUATES

	Total Enrollment	No. of Admitted Students	No. of Graduates
<u>R.S.F.S.R.</u>			
1. Bashkir State University im. 40 Years of the October Revolution-- Total	7,045	1,200	940
Of this number:			
day students.	3,358	700	602
evening students.	1,301	200	150
correspondence students .	2,386	300	188
2. Voronezh State University im. Lenin Komsomol--Total.	12,206	2,555	1,927
Of this number:			
day students.	6,308	1,405	1,119
evening students.	2,412	525	363
correspondence students .	3,486	625	445
3. Gorkii State University im. N. I. Lobachevskii--Total	10,369	2,188	1,650
Of this number:			
day students.	6,023	1,363	1,102
evening students.	3,075	600	383
correspondence students .	1,271	225	165
4. Far Eastern State University--Total	6,006	1,330	1,094
Of this number:			
day students.	3,669	845	749
evening students.	400	75	81
correspondence students .	1,937	410	264

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
5. Dagestan State University im. V. I. Lenin-- Total	7,985	1,350	1,143
Of this number:			
day students.	3,940	950	646
evening students.	1,229	150	202
correspondence students .	2,816	250	295
6. Irkutsk State University im. A. A. Zhdanov-- Total	9,889	1,702	1,514
Of this number:			
day students.	5,132	1,052	944
evening students.	1,090	125	181
correspondence students .	3,667	525	389
7. Kabardino-Balkar State University--Total .	9,487	1,762	1,154
Of this number:			
day students.	4,695	1,002	677
evening students.	574	100	31
correspondence students .	4,218	660	446
8. Kazan State University im. V. I. Ulianov-- Total	9,084	1,701	1,344
Of this number:			
day students.	5,342	1,125	1,034
evening students.	1,565	305	154
correspondence students .	2,177	271	156
9. Kaliningrad State University--Total	4,279	760	694
Of this number:			
day students.	2,104	402	306
evening students.	289	75	--
correspondence students .	1,886	283	388
10. Kalinin State University--Total	5,571	1,316	953
Of this number:			
day students.	2,512	650	518
evening students.	453	275	40
correspondence students .	2,606	391	395

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
11. Kalmyk State University--Total.	3,142	1,119	243
Of this number:			
day students	1,362	479	159
evening students	342	114	--
correspondence students. .	1,438	526	84
12. Krasnoiarsk State University--Total.	2,367	527	390
Of this number:			
day students	1,229	302	189
evening students	253	75	32
correspondence students. .	885	150	169
13. Kuban State University--Total.	8,014	1,812	1,025
Of this number:			
day students	3,898	943	338
evening students	610	302	--
correspondence students. .	3,506	567	687
14. Kuibyshev State University--Total (day)	954	400	--
15. Leningrad State University im. A. A. Zhdanov--Total	19,731	3,959	3,042
Of this number:			
day students	10,645	2,241	1,826
evening students	4,820	937	694
correspondence students. .	4,266	781	522
16. Moscow State University im. M. V. Lomonosov--Total.	25,468	4,953	5,290
Of this number:			
day students	18,225	3,738	3,517
evening students	5,217	962	1,237
correspondence students. .	2,026	253	536
17. Mordvinian State University im. N. P. Ogarev--Total.	16,041	2,675	2,326
Of this number:			
day students	6,679	1,250	1,142
evening students	2,812	425	467
correspondence students. .	6,550	1,000	717

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
18. Novosibirsk State University--Total . . .	3,634	800	778
Of this number:			
day students	3,391	750	647
evening students	162	--	131
correspondence students. .	81	50	--
19. Perm State University im. A. M. Gorkii--Total. . .	9,934	1,925	1,698
Of this number:			
day students	4,861	1,075	859
evening students	1,849	300	339
correspondence students. .	3,224	550	500
20. Petrozavodsk State University--Total.	6,686	1,292	842
Of this number:			
day students	4,028	800	603
evening students	622	188	34
correspondence students. .	2,036	304	205
21. Rostov State University--Total.	9,352	1,859	1,624
Of this number:			
day students	4,885	1,213	851
evening students	1,557	300	255
correspondence students. .	2,910	346	518
22. Saratov State University im. N. G. Chernyshevskii--Total. . .	9,453	2,040	1,641
Of this number:			
day students	5,187	1,115	990
evening students	2,747	600	428
correspondence students. .	1,519	325	223
23. Severo-Ossetian State University--Total.	6,669	1,323	1,048
Of this number:			
day students	2,545	725	487
correspondence students. .	4,124	598	561

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
24. Tomsk State University im. V. V. Kuibyshev--Total	9,829	2,027	1,607
Of this number:			
day students	5,684	1,277	941
evening students	843	125	105
correspondence students. .	3,302	625	561
25. Ural State University im. Gorkii--Total.	6,415	1,375	941
Of this number:			
day students	3,275	825	501
evening students	903	150	112
correspondence students. .	2,237	400	328
26. Chuvash State University im. I. N. Ulianov--Total.	7,448	1,619	602
Of this number:			
day students	4,134	975	322
evening students	1,386	375	103
correspondence students. .	1,928	269	177
27. Yakutsk State University--Total.	6,252	1,125	900
Of this number:			
day students	4,010	750	634
evening students	265	50	35
correspondence students. .	1,977	325	231
28. Yaroslavl' State University, day school.	732	425	--
<u>Ukrainian SSR</u>			
29. Dnepropetrovsk State University--Total.	11,844	2,129	2,176
Of this total:			
day students	6,097	1,228	1,157
evening students	2,994	502	468
correspondence students. .	2,753	399	551

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
30. Donetsk State University--Total	13,402	2,546	1,901
Of this number:			
day students	4,644	1,045	893
evening students	2,440	476	248
correspondence students. .	6,318	1,025	760
31. Kiev State University--Total.	19,510	3,628	3,244
Of this number:			
day students	8,457	1,959	1,458
evening students	3,556	638	487
correspondence students. .	7,497	1,031	1,299
32. L'vov State University--Total.	11,985	2,277	2,120
Of this number:			
day students	5,509	1,233	1,009
evening students	1,797	331	181
correspondence students. .	4,679	713	930
33. Odessa State University--Total.	11,121	1,851	1,955
Of this number:			
day students	4,229	881	815
evening students	2,206	390	309
correspondence students. .	4,686	580	831
34. Uzhgorod State University--Total	10,857	2,041	1,211
Of this number:			
day students	4,056	776	667
evening students	1,222	250	103
correspondence students. .	5,579	1,015	441
35. Khar'kov State University im. A. M. Gorkii--Total.	12,491	2,196	2,413
Of this number:			
day students	6,604	1,353	1,338
evening students	2,361	392	388
correspondence students. .	3,526	451	687

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
36. Chernovtsy State University--Total . .	9,836	2,032	1,152
Of this number:			
day students	3,416	718	672
evening students	1,362	277	137
correspondence students. .	5,058	1,037	343
<u>Belorussian SSR</u>			
37. Belorussian State University im. V. I. Lenin--Total.	17,062	3,413	2,837
Of this number:			
day students	9,137	2,010	1,793
evening students	3,174	643	405
correspondence students. .	4,751	760	639
38. Gomel State University Total.	5,350	1,295	607
Of this number:			
day students	3,297	870	270
correspondence students. .	2,053	425	337
<u>Uzbek SSR</u>			
39. Samarkand State University--Total	11,749	1,907	2,099
Of this number:			
day students	4,743	1,076	946
evening students	2,383	382	206
correspondence students. .	4,623	449	947
40. Tashkent State University--Total	15,450	2,877	2,270
Of this number:			
day students	7,462	1,522	1,317
evening students	3,936	657	468
correspondence students. .	4,052	695	485
<u>Kazakh SSR</u>			
41. Kazakh State University--Total.	10,082	2,064	1,460
Of this number:			
day students	5,240	1,193	836
evening students	1,281	246	163
correspondence students. .	3,561	625	461

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
<u>Georgian SSR</u>			
42. Tbilisi State University--Total	16,331	2,666	2,460
Of this number:			
day students.	8,665	1,586	1,413
evening students.	5,370	915	610
correspondence students .	2,296	165	437
<u>Azerbaijan SSR</u>			
43. Azerbaijan State University--Total	11,530	2,316	1,878
Of this number:			
day students.	4,835	1,062	911
evening students.	2,930	553	456
correspondence students .	3,765	701	511
<u>Lithuanian SSR</u>			
44. Vil'nius State University--Total.	15,826	2,870	1,727
Of this number:			
day students.	7,446	1,610	912
evening students.	2,885	500	381
correspondence students .	5,495	760	434
<u>Moldavian SSR</u>			
45. Kishinev State University--Total.	7,635	1,346	1,412
Of this number:			
day students.	4,035	940	855
correspondence students .	3,600	406	557
<u>Latvian SSR</u>			
46. Latvian State University--Total.	8,641	1,669	1,250
Of this number:			
day students.	3,879	894	767
evening students.	1,724	300	213
correspondence students .	3,038	475	270

APPENDIX VI--Continued

	Total Enrollment	No. of Admitted Students	No. of Graduates
<u>Kirgiz SSR</u>			
47. Kirgiz State University--Total.	13,370	2,246	2,154
Of this number:			
day students	6,268	1,378	922
evening students	1,054	137	289
correspondence students. .	6,048	731	943
<u>Tadzhik SSR</u>			
48. Tadzhik State University in. V. I. Lenin--Total.	12,467	2,448	1,880
Of this number:			
day students	5,551	1,247	846
evening students	2,348	460	325
correspondence students. .	4,568	741	709
<u>Armenian SSR</u>			
49. Erevan State University--Total.	11,912	2,192	1,876
Of this number:			
day students	7,193	1,542	1,121
evening students	2,713	324	414
correspondence students. .	2,006	326	341
<u>Turkmen SSR</u>			
50. Turkmen State University in. A. M. Gorkii--Total.	10,124	2,119	1,470
Of this number:			
day students	5,298	1,218	894
evening students	1,049	216	109
correspondence students. .	3,777	685	467
<u>Estonian SSR</u>			
51. Tartu State University--Total.	6,297	1,391	859
Of this number:			
day students	4,322	1,007	668
correspondence students. .	1,975	384	191

APPENDIX VI--Continued

Source: Central Statistical Administration, Narodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-1972 (Moscow: Statistical Publishing House, 1972), pp. 433-439.

Notes:

(a) In 1972, Mari, Checheno-Ingush, Syktyvkar, Simferopol' and Karaganda Universities were to be organized; (b) at the end of 1970, there was a total of fifty-one universities; of these, forty-five had day, evening, and correspondence divisions; four had day and correspondence divisions; and two were exclusively day schools; (c) the total number of students admitted to the fifty-one universities in 1970 was 96,289 of which 25,588 were correspondence students or over 26 percent of the total.

APPENDIX VII

SPECIALISTS GRADUATING FROM HIGHER EDUCATIONAL
INSTITUTIONS: 1914, 1918 TO 1971
(Figures in Thousands)

Years	Specialists Graduating from Higher Educational Institutions	
	Total	Average Annually
1914	12	--
1918-1928	340	30,9
1929-1932	170	42,5
1933-1937	370	74,0
1938-1940	328	109,3
1941-1945	302	60,4
1946-1950	652	130,4
1951-1955	1,121	224,3
1956-1960	1,498	299,7
1961-1965	1,732	346,3
1966-1970	2,618	523,6
1971	672	--

Notes:

From 1918-1971, the higher educational institutions trained over 9,800,000.

Source: Central Statistical Administration,
Narodnoe Khoziaistvo SSSR (National
Economy of the U.S.S.R.) 1922-1972
(Moscow: Statistical Publishing House,
1972), p. 441.

APPENDIX VIII

NUMBER OF GRADUATES FROM HIGHER EDUCATIONAL
INSTITUTIONS, ACCORDING TO VARIOUS
BRANCHES, BY SELECTED YEARS:
1940-1966
(Figures in Thousands)

	1940	1945	1960	1966
Graduated from higher educational institutions specializing in:	126,1	54,6	343,3	431,9
industry and construction	24,2	8,5	95,2	149,5
transport and communica- tions	5,9	1,6	16,1	20,2
agriculture	10,3	2,9	34,7	35,0
economics and law	5,7	2,4	25,0	35,1
health, physical culture and sports.	17,4	6,6	30,7	32,5
education	61,6	32,0	139,1	155,1
art and cinema.	1,0	0,6	2,5	4,5

Source: U.S.S.R. Ministry of Education and U.S.S.R. Academy of Pedagogical Sciences, Narodnoe Obrazovanie v 1967 (Public Education in 1967), (Moscow: "Education" Publishing House, 1967), p. 95.

APPENDIX IX

NUMBER OF GRADUATES FROM HIGHER EDUCATIONAL INSTITUTIONS, ACCORDING TO SPECIALTIES, BY SELECTED YEARS: 1950-1971 (Figures in Thousands)

	1950	1960	1965	1970	1971
Total	176,9	343,3	403,9	630,8	672,4
Of this number by specialist Groupings:					
Geology and Exploration of Deposits	1,7	3,9	3,2	5,1	6,1
Development of Geological Deposits.	1,4	5,3	4,0	6,3	7,6
Power	2,4	8,4	7,0	10,5	11,7
Metallurgy	1,4	3,9	4,8	6,5	7,8
Machine and Instrument Construction	9,1	30,6	46,0	69,0	75,0
Electrical Machines and Instruments	1,4	8,1	24,6	40,5	45,3
Radio Engineering and Communications	1,4	6,3	14,0	19,8	21,6
Chemical Technology	2,6	5,7	10,1	16,1	18,3
Lumber; Pulp, Cellulose, and Paper	0,7	3,7	2,9	3,3	3,6
Technology of Food Products	2,3	3,5	4,8	7,9	9,3
Consumer Goods Technology	1,2	3,1	3,2	5,4	6,3
Construction	4,9	17,7	21,3	30,3	35,3
Geodesy and Cartography	0,3	0,6	0,9	1,0	1,2
Hydrology and Meteorology	0,4	0,7	1,0	1,1	1,3
Agriculture and Forestry	12,9	34,5	33,9	58,3	55,2
Transportation	3,1	6,6	9,6	14,9	15,4
Economics	10,1	30,7	40,8	75,6	78,7

APPENDIX IX--Continued

	1950	1960	1965	1970	1971
Law	5,7	6,0	6,9	8,1	10,0
Health and Physical Culture	20,7	30,6	31,0	43,8	47,7
Education: universities	12,3	29,9	30,7	48,7	55,6
Pedagogical and Library Institutes	78,5	101,0	99,3	152,2	152,6
Art	2,4	2,5	3,9	6,4	6,8

Source: Central Statistical Administration, Merodnoe Khoziaistvo SSSR (National Economy of the U.S.S.R.) 1922-1972 (Moscow: Statistical Publishing House, 1972), pp. 441-442.

APPENDIX X
 DISTRIBUTION OF GRADUATE STUDENTS (ASPIRANTS)
 BY BRANCHES OF SCIENCE
 (At the End of 1969)

	Number of Graduate Students	Including Graduate Students Studying in:	
		Scientific Institutions (Excluding Higher Educational Institutions)	Higher Educational Institutions
Total	99,532	42,522	57,010
Of this number by branches in science:			
Physico-mathematical.	11,548	3,969	7,579
Chemical.	5,486	2,489	2,997
Biological.	5,647	3,348	2,301
Geological and mineralogical.	2,658	1,517	1,141
Technical.	39,942	18,611	21,331
Agricultural and veterinary	6,752	3,927	2,825
Historical and philosophical.	5,033	1,099	3,934
Economic.	9,473	3,610	5,863
Philological.	2,464	461	2,003
Geographical.	823	343	480
Legal.	881	241	640
Pedagogical.	1,870	684	1,186
Medical and pharmaceutical.	5,200	1,579	3,621
Artistic.	934	214	720

1-20

APPENDIX X--Continued

	Number of Graduate Students	Including Graduate Students Studying in:	
		Scientific Institutions (Excluding Higher Educational Institutions)	Higher Educational Institutions
Architectural	513	308	205
Psychological	254	80	174
Miscellaneous	54	44	10

Source: "Narodnoe Obrazovanie Nauka i Kul'tura v SSSR" (Public Education, Science and Culture in the U.S.S.R.), Vestnik Statistiki (Herald of Statistics), No. 9 (September, 1970), 89. . .

APPENDIX XI

TOTAL NUMBER OF ASPIRANTS (GRADUATE STUDENTS)
ATTENDING AND GRADUATING HIGHER EDUCATIONAL
AND SCIENTIFIC INSTITUTIONS, BY SELECTED
YEARS: 1960-1969

	1960	1965	1968	1969
Total number of graduate students (at year's end)	36,754	90,294	98,139	99,532
Including:				
full-time	22,978	51,109	55,018	55,603
part-time	13,776	39,185	43,121	43,929
In scientific institutions (excluding higher educational institutions)	16,348	36,882	41,594	42,522
Including:				
full-time	9,515	17,765	19,126	19,131
part-time	6,833	19,117	22,468	23,391
In higher educational institutions	20,406	53,412	56,545	57,010
Including:				
full-time	13,463	33,344	35,892	36,472
part-time	6,943	20,068	20,653	20,538
Total graduated for year	5,517	19,240	25,488	25,810
By scientific institutions (excluding higher educational institutions)	2,497	7,395	10,226	10,627
Including:				
full-time	1,718	4,701	5,793	5,864
part-time	779	2,694	4,433	4,763



APPENDIX XI--Continued

	1960	1965	1968	1969
By higher educational in-stitutions	3,020	11,845	15,262	15,183
Including:				
full-time	2,407	3,764	10,655	10,540
part-time	613	3,081	4,607	4,643

Source: "Narodnoe Obrazovanie, Nauka i Kul'tura v SSSR" (Public Education, Science and Culture in the U.S.S.R.), Vestnik Statistiki (Herald of Statistics), (September 1970), 90.



APPENDIX XII

DISTRIBUTION OF ASPIRANTS (GRADUATE STUDENTS)
 ACCORDING TO VARIOUS SPECIALTIES
 (At the End of 1970)

	Number of Aspirants	Of These Studying	
		In Scien- tific In- stitutions	In Higher Educational Institu- tions
Total	99,427	42,518	56,909
Of this number ac- cording to special- ties:			
Physics-mathematics	11,729	4,150	7,579
Chemistry	5,313	2,369	2,944
Biology	5,457	3,261	2,196
Geology-minerology.	2,551	1,460	1,091
Engineering	39,979	18,615	21,364
Agriculture	5,634	3,527	2,107
History	2,945	765	2,180
Economics	9,964	3,763	6,201
Philosophy.	2,344	423	1,921
Philology	2,597	489	2,108
Geography	814	327	487
Law	900	345	655
Pedagogy.	2,007	760	1,337
Medicine.	4,842	1,401	3,441
Pharmacy.	160	32	128
Veterinary.	678	288	390
Art	578	201	377
Architecture.	496	300	196
Psychology.	316	109	207
Others.	33	33	--

Source: "Statisticheskie Materialy" (Statistical Materials),
 Vestnik Statistiki (Herald of Statistics), No. 9
 (September 1971), 83.

APPENDIX XIII

NUMBER OF SCIENTIFIC INSTITUTIONS,
 BY SELECTED YEARS: 1940-1971
 (At End of Year)

	1940	1950	1960	1965	1970	1971
Total scientific institutions (including higher educational institutions)	2,359	3,447	4,196	4,867	5,182	5,307
Of this total, the number of scientific research institutes, their branches and departments	786	1,157	1,728	2,146	2,525	2,648

Note:

In 1913, there were 298 scientific institutions.

Source: "Statistical Materials," Vestnik Statistiki (Journal of Statistics), No. 12 (December, 1972), 82.

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