

THE CONSEQUENCES OF REFORM IN YUGOSLAV
HIGHER EDUCATION, 1960-1970.

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ABSTRACT

The Yugoslav higher educational reform of the 1960's had the objective to improve the system of higher education, with the assumption that the improved system would produce a sufficient highly skilled manpower in accord with the requirements of the Yugoslav economy, and that it would facilitate democratization of opportunity in higher education.

The analysis of patterns, dimensions of growth and consequences of development of the Yugoslav higher education between 1960 and 1970 indicates that the reformed higher education did not become effective in fulfilling manpower requirements, and that it had evolved into a selective system, whereby the factors of socio-economic, regional and educational background of applicants determine their eligibility for higher educational advancement.

TITRE DE LA THÈSE: LES CONSÉQUENCES DE LA RÉFORME DE L'ENSEIGNEMENT
SUPÉRIEUR EN YUGOSLAVIE - 1960-1970

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RÉSUMÉ

La réforme de l'enseignement supérieur en Yougoslavie, au cours des années 60 avait pour objectif l'amélioration du système de l'enseignement supérieur, avec l'idée qu'un système éducatif amélioré produirait une main-d'oeuvre d'un niveau suffisamment élevé en fonction des exigences de l'économie Yougoslave et qu'il faciliterait la démocratisation des possibilités d'enseignement supérieur.

L'analyse des modèles, des dimensions de croissance et des conséquences du développement de l'enseignement supérieur Yougoslave entre 1960 et 1970 indique que l'enseignement supérieur réformé n'obtint pas les résultats espérés correspondants aux exigences de la main-d'oeuvre et qu'il a évolué en un système sélectif où les facteurs de l'historique socio-économique, régional et éducatif des postulants déterminent leur qualification pour bénéficier de l'enseignement supérieur.

PREFACE

In many ways the problems confronting the Yugoslav higher education are not unique. Throughout the world the university is in a state of crisis, contends James A. Parkins in his presentation in February 1970 at the UNESCO's International Symposium on "Education and Development of Man". The specific crises of the university, which he cites, are those of numbers, finance, relevance, the establishment of new priorities, and the scepticism concerning the possibility of objective, rational thought.

Doctor K. Zurayk, in his inaugural address at the Fifth General Conference of the International Association of Universities in August 1970, stated that universities face definite challenges in regard to their relations to their respective societies. These challenges include the ability to adapt themselves to the requirements of their society, and their capacity to become shapers and renovators of the world around them.

In general, this study is an attempt to analyze the above issues by means of an examination of the development of higher education in Yugoslavia from 1960 to 1970. In order to accomplish this task a study of relevant data in history, geography, economics, politics, sociology, philosophy, and educational theory and practice was undertaken. In addition the author relied on her recollection of past experiences, and on her observations during the visit to Yugoslavia in autumn 1971. The latter resulted in a new awareness of the cultural patterns that have become somewhat obscure over a period of five years of absence from her native land.

It is hoped that the conclusions reached will be of some value, thus justifying the time and effort of all those who have contributed in the process.

I wish to express my deep appreciation to my thesis supervisor, Doctor John P. Lipkin, Associate Professor of Education, Faculty of Education, McGill University, for valuable suggestions and comments, and for investment of his precious time, most of which was engaged in discussion to clarify difficult points.

I am also indebted to the Faculty members of the Department of Education, Faculty of Philosophy, University of Zagreb, for giving me support and for providing valued suggestions during my visit to Yugoslavia. Special gratitude must be expressed to Joseph Kovacich who donated many tedious hours in clarifying the language terminology. Similar thanks and acknowledgement are extended to Ivan Bistrički for his help with designs and drawings of Tables, and mechanics of writing, but most of all for his patience and understanding during my research and writing.

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INTRODUCTION

Statement of Problem

The overall objective of this study is the analysis of the patterns, dimensions of growth, and consequences of development of higher education in Yugoslavia between 1960 and 1970, in an effort to determine whether the goals of the reforms launched in 1960 were in fact achieved.

Since a complete synopsis of higher educational theory and practice cannot be treated in a study of this size, two problems have been selected for particular focus. First, the success of higher educational reform in satisfying the manpower requirements for the needed skilled personnel, and second, the extent of democratization of opportunity in higher education. These problems involve two sets of factors; those which facilitated and those which impeded the realization of the objectives of the reforms of higher education. These problems can be stated in question form as follows:

- (1) Have the manpower requirements for skilled personnel been met?
- (2) Was the democratization of opportunity of higher education fully realized? More specifically, did the pattern of enrollments allow the lower socio-economic strata the opportunity to gain access to higher education?

Survey of Literature

A survey of the Canadian Theses, Doctoral Dissertations Abstract,

American Doctoral Dissertations, and Dissertation Abstracts International indicated an absence of analysis in this particular area of study.

The Yugoslav Laws, Decrees, and Acts, concerning higher education legislated since 1960 are utilized in this study. The prime source is the Službeni list ("The Official Gazette"). Special government publications with commentaries are utilized when appropriate.

Some Yugoslav periodicals in their English editions were used. For example, Review of International Affairs, Yugoslav Survey, and Socialist Thought and Practice. These contained relevant articles pertaining to education, politics, and economics.

Among Yugoslav educational periodicals, it was found that, Universitet danas ("University Today") was very useful, since it contained many articles pertaining to higher education.

The students' weeklies, Student ("Student") and Studentski list ("Students' Gazette"), also published relevant materials. The daily press, Borba, Vjesnik and Politika, and the weeklies Telegram and Vjesnik u srijedu, touched upon the subject, albeit sporadically.

The series Documents and Studies published by the journal Međunarodna politika ("International Affairs") dealt with topics of a relevant nature.

The yearbooks and periodicals in English, such as World Survey of Education, Yearbook of Education, International Yearbook of Education, Comparative Education, Comparative Education Review, International Review of Education, Bulletin of the International Bureau of Education, Foreign Education Digest, Journal of Higher Education, Review of Educational

Research, were carefully surveyed for data on higher education in Yugoslavia. However, only a few articles were relevant to this study.

One of the important sources of data was the publications of the Institut za društvena istraživanja Sveučilišta u Zagrebu (Institute for Social Research of the University of Zagreb). The Institute has published materials from the annual symposia attended by scholars interested in higher education.

There were many books written about social, cultural, political, economic and other aspects of Yugoslav society, in the past few years. A careful selection among these was made in search of materials relevant to the study.

Books by Yugoslav authors on general topics and literary works have not been utilized. However, the fact that the author is familiar with the Yugoslav culture in general and its literature should be mentioned.

Limitations of the Study

One of the research problems was the unavailability of the primary sources concerning this study, in North America. The six weeks visit to Yugoslavia in the autumn of 1971 was very valuable, although the limit of time was a great restraint. Also, the sources utilized incorporate only a portion of existing materials, since the author is fluent in only one of the three major Yugoslav languages, the Serbo-Croatian.

Further problems and limitations of this study concern personal biases. Researching the country of one's origin posed problems of objectivity. On the other hand, the author's constant awareness of these

biases may have created an overly cautious approach. Consequently, some interesting aspects may have been overlooked. It is hoped that this will be corrected in future studies.

CHAPTER I

HIGHER EDUCATION IN THE CONTEXT
OF YUGOSLAV SOCIETY

The Setting

The Federal People's Republic of Yugoslavia came into existence on November 29, 1945. Subsequently, in 1963, the name of the country was changed to the Socialist Federal Republic of Yugoslavia.¹ Yugoslavia consists of six republics and two autonomous provinces. In the former category are Bosnia-Herzegovina, Croatia, Macedonia, Montenegro, Serbia, and Slovenia; and the latter include Vojvodina and Kosovo-Metohija.

Yugoslavia broke away from the Eastern European Communist bloc in 1948. Since then the country has followed what is referred to as "the Yugoslav road to socialism". In international affairs Yugoslavia has followed the politics of peaceful coexistence and non-alignment. In its internal affairs it has developed a unique series of experiments in politics and economics. These include first, industrial democracy, known as workers' self-management, second, grass-roots democracy, expressed in local self-government in the framework of communes, and third a series of economic changes in search of a workable economic alternative, known as a socialist market economy.

¹ In this study the name is being shortened to "Yugoslavia".

Political, Economic, and Social
Development, 1945-1970

During the first few years after the Second World War, Yugoslavia went through a process of rebuilding its basic economy which has been shattered by the war. At the same time emphasis was put on industrialization rather than agricultural activities. In the 1950's the industrial production began growing at an annual rate of 12.0 per cent, and the agricultural output increased at a rate of 3.7 per cent.¹ The process of industrialization altered the basic occupational structure of the population. In 1967, only 49 per cent of the total population earned its living from agriculture, as against 80 per cent in 1939.²

The process of urbanization involved over two million people shifting to towns from 1949 to 1960.³ Still, the Yugoslav urban population is smaller than might be expected. According to the census 1971, towns and cities with over twenty thousand inhabitants account for only 26 per cent of Yugoslavia's total population.⁴ While the significant concentration of industry is in the capital cities of republics, much industry is located

¹ Paul Lendvai, Eagles in Cobwebs: Nationalism and Communism in the Balkans (Garden City, New York: Doubleday and Company, Inc., 1969), p. 102.

² Facts About Yugoslavia (Belgrade: Yugoslav Illustrated Magazine "Review", NIP "Borba", n.d.), p. 66.

³ Joel M. Halpern, "Yugoslavia: Modernization in an Ethnically Diverse State" in Contemporary Yugoslavia: Twenty Years of Socialist Experiment, ed. by Wayne S. Vucinich (Berkeley and Los Angeles: University of California Press, 1969), p. 319.

⁴ Zagorka Aničić, "Population Changes in Yugoslavia", Yugoslav Survey, XII, No. 3 (1971), p. 8.

in small towns. Furthermore, about half of Yugoslav industrial workers continue to live in rural communities and commute to work.

The economic development of the country was uneven for various reasons, one of which was a demographic explosion. From 1948 to 1971 the population of Yugoslavia increased from 15,842,000 to 20,506,000.¹

While the average population increase in Yugoslavia, between 1948 and 1971, was 29.4 per thousand, it was extremely uneven. It stood at a high of 71.0 per thousand in Kosovo, 46.0 per thousand in Bosnia-Herzegovina, 42.9 per thousand in Macedonia, and 40.6 per thousand in Montenegro.² The population increase in the remaining republics of Croatia, Slovenia, and Serbia was below the Yugoslav average at 17.0 per thousand, 19.8 per thousand, and 26.0 per thousand, respectively.³

The uneven increase of population resulted in discrepancies in population distribution, as seen in number of inhabitants per square kilometre in Table 1 as follows.

¹ Ibid., p. 3.

² Ibid., p. 4.

³ Ibid., p. 4.

TABLE 1.
NUMBER OF INHABITANTS PER SQUARE KILOMETRE^a

	1948	1961	1971
Yugoslavia	62	72	80
Bosnia-Herzegovina	50	64	73
Croatia	67	74	78
Macedonia	45	55	64
Montenegro	27	34	38
Slovenia	71	79	85
Serbia	74	87	95
Serbia proper	74	86	94
Vojvodina	76	86	91
Kosovo	67	89	114

^a Aničić, "Population Changes in Yugoslavia", p. 4.

In general terms the uneven distribution of population had a negative effect on economic activities of the regions where the population increase was the highest, as these regions were also the least developed. In fact, Yugoslavia is burdened with underdeveloped regions. The Yugoslav economic growth rate, averaging 7.6 per cent annually between 1952 and 1965, could have been higher and more balanced were it not for this handicap.¹

The uneven economic development of the country is also a result of the geographic variety. Yugoslavia's six republics cover an area of 98,740 square miles of varied terrain. It ranges from the coastal strip with Mediterranean climate and vegetation to the continental Pannonian basin, and from unarable high mountains to flat and fertile planes.

A counterpart to the geographical differences within the country is

¹ Lendvai, Eagles in Cobwebs, p. 101.

found in the diversity of its inhabitants. Five major nationalities are living within Yugoslav borders. In order of numbers, these include, Serbs, Croats, Slovenes, Macedonians and Montenegrins. There are also Muslims, regarded as a separate ethnic group. National minorities comprise around 10 per cent of the total population.¹ These include Shiptars (Albanians), Hungarians, Turks, Slovaks, Bulgarians, Rumanians, Ruthenians, Gypsies (Romi), Czechs, Italians, and others.

Characteristics of these major nationalities and national minorities, expressed in language, religion, customs, and outlook; are very much present in Yugoslav society. Flare-ups of nationalism among local groups, and regional politics based on divisions of nationalities, have had considerable influence on Yugoslav political and economic life. The neo-nationalistic movements have become an expressive political force which influenced changes in economic, political, and social affairs in the last decade of Yugoslavia's existence.

Several important changes occurred in Yugoslavia between 1960 and 1970 in the political, economic, and social spheres. The most important were, the constitutional change in 1963, the socio-economic reform of 1965, and the constitutional amendments in 1967 and 1968.

The new Constitution was especially a significant piece of legislature since it gave special attention to the democratic way of decision making on the local levels. Attention was focused on the self-government of the people in communes (cities, towns, villages -or several villages incorporated).

¹ Facts About Yugoslavia, p. 70.

The new Constitution also firmly established the system of workers' self-management. This self-management system had been implemented gradually since 1950 in industrial enterprises. The new Constitution also made self-management a working principle in the areas of social service organizations and educational and cultural institutions.

The 1963 Constitution furthermore introduced changes in the administrative organs of the Federation. It established the Chamber of Nationalities to enable equal representation of the Yugoslav major nationalities and national minorities in the Federal government.

An important change in socio-economic relationships occurred when the socio-economic reform was launched in 1965. Since the early sixties inflation threatened the Yugoslav economy, and the prime objective of the socio-economic reform was the stabilization of the economy. It was hoped that Yugoslavia's economy would become competitive on the world market and that imports and exports would become more balanced.

The socio-economic reform included the abolition of federal control of prices and of capital investments. The so called "socialist market economy" became the basis of the business transactions among economic enterprises. The main preoccupation of the economic organizations thus became the improvement of their business efficiency. Those that operated with loss sought mergers with the more successful businesses. If that was not possible, they ceased their operations.

The removal of federal control over investments and the withdrawal of investment funds by individual republics resulted in a reduction of investments in the economically underdeveloped areas. Until 1965, a

considerable part of the standard of living in these areas was an economic illusion created by state subsidies. For example, between 1958 and 1965, 70 per cent of all investments in the Republic of Montenegro were financed from federal funds.¹ With the abolition of the funding by the Federation, individual republics began to plan and finance their own economic activities.

As a consequence of the turn towards business efficiency and the curbing of investments, a growth in unemployment occurred. By the end of 1967, approximately three-quarters of a million workers were unable to find work.² They represented almost one-eighth of the total labour force.³ In order to alleviate the unemployment, Yugoslavia allowed its workers to seek employment in the countries of Western Europe.

Tensions, created by unemployment and the lowering of the standard of living, resulted in political protests, labour strikes, and student demonstrations. Students were in particular vocal during the 1968 demonstrations, in which they demanded the removal of unqualified personnel from leading positions in political and economic life. They also requested that these positions be filled on the basis of merit by the newly trained, skilled personnel.

The marked dissatisfaction with economic policies was linked with nationalistic issues. Economic disagreements among republics and autonomous

¹ Lendvai, Eagles in Cobwebs, p. 145.

² Woodford D. McClellan, "Postwar Political Evolution" in Contemporary Yugoslavia, ed. by Wayne S. Vucinich, (Berkeley and Los Angeles: University of California Press, 1969), p. 149.

³ Ibid., p. 149.

provinces were twofold. First, developed regions resented the fact that their standard of living still did not correspond to their industrial productivity. Second, the more backward regions resented being left on their own, without investments from richer parts. Dissatisfactions with regional economic disparities developed into political issues of hegemony, including disputes over language rights and accusations of cultural genocide.

The demand on the part of national minorities in Kosovo and Vojvodina for greater political and economic autonomy precipitated the amending of the Constitution, with the result that autonomous provinces were granted a status almost equivalent to that of a republic.¹ However, this did not lessen the open animosities among Yugoslav nationalities. The existence of Soviet tanks in Czechoslovakia, in 1968, frightened Yugoslavs into temporary unity, but when this foreign threat diminished, the question of nationalism once again became the primer issue. In spite of the attempt to compromise, nationalism, to this date, remains one of the biggest obstacles to Yugoslav unity.

¹ Amendments I-VI, April 17, 1967 and VII-XIX, December 26, 1968, The Constitution with Amendments (Belgrade: Secretariat of the Federal Assembly, 1969), pp. 191-94.

CHAPTER II

GOALS AND DESIGNS OF HIGHER EDUCATIONAL REFORM

Formulation of Goals and Designs

During the 1950's Yugoslavia underwent a period of a rather rapid industrialization. Consequently, a greater number of highly skilled personnel became needed. In this respect the reform of higher education was seen as a measure creating additional manpower for the express purpose of developing the economy. It was expected that, by developing higher education, Yugoslavia would sooner reach a level of production similar to the more developed countries, and consequently, improve its standard of living.

The reform of higher education also represented a natural continuation of the educational reforms at the primary and secondary levels enacted in the General Law on Education, 1958.

The establishment of the Joint Commission of the Federal Assembly and the Federal Executive Council, on July 6, 1957, was the first step towards an investigation of higher education and subsequent recommendations for its reform. The Joint Commission had a task of studying then current problems of institutions of higher education, and of making recommendations for the reorganization of the system. This was to be based on the past experiences and on the future socio-economic needs of the country.

Although the full investigation and consequent recommendations took two years to complete, the Federal Chamber of the Federal Assembly adopted the first recommendations by July 26, 1958. The Recommendation

for the Creation of Better Conditions for Training of Skilled Specialists listed the following major tasks: reduction of the length of studies to a reasonable minimum, normally four years; introduction of active methods in teaching and in learning processes; improvement of personnel and material foundations of institutions and establishment of their long term development plans; and, introduction of the systematically organized post-graduate courses for training of the specialists and researchers.¹

Following the 1958 Recommendation, the regular cycle of studies had been reduced to four years with the exception of the studies in Medicine, which had a five year cycle. Syllabi were shortened and the number of hours of class lectures and seminars was reduced, while the number of hours of practical work was increased. Greater responsibility was placed on the students in regard to the regular taking of prescribed examinations. Post-graduate studies were introduced at a few institutions. Problems of personnel and material conditions of institutions were seriously considered and long term plans were prepared.

The above measures were seen as interim improvements of higher education, while the major reforms were being further studied by the Joint Commission. The final report on higher education with proposals for its reorganization was submitted by the Joint Commission in June 1959. This report was considered by both the Committee for Education and Culture, and the Federal Executive Council. On the basis of this proposal, the Federal Assembly enacted Opći zakon o fakultetima i univerzitetima (The General Law

¹ Krste Crvenkovski, "Reorganizacija univerziteta, visokih i viših škola", Savremena škola, XIV, No. 7-8 (1959), p. 303.

on Faculties and Universities), in June 1960, hereafter referred to as the 1960 Act.

The 1960 Act recognizes the following institutions of higher education: Fakulteti (Faculties), Visoke škole (Higher Schools of Learning), Umjetničke akademije (Art Academies), and Više škole (Two-year Post-secondary Schools). Univerziteti (Universities) are recognized as the associations of the above institutions. Faculties are the highest teaching and scientific establishments. They are the oldest higher educational institutions, dating from the sixteenth century. Traditionally they have been granting degrees in different fields of learning, equivalent to the Bachelor degree. Higher Schools of Learning and Art Academies have the same rank as Faculties in so far as granting degrees in specialized fields of learning. They can be either only teaching institutions or can combine teaching and scientific activities in a definite specialty or profession. Two-year Post-secondary Schools do not engage in research, but offer courses leading to certificates in various fields of learning. Their specialties range from the primary school teaching, to engineering, commerce, medical technology, and others.

In addition to the enactment of the 1960 Act, the Federal Assembly also passed the Resolution on Technical Personnel in June 1960, which defined principles of the long term policy for technical education. These principles, including the improvement of the general and technical knowledge of the population, and the need to relate theoretical knowledge to the practical productive work, were directly related to the aims of the reforms of higher education. The aims of the reforms of higher education were twofold. First, they attempted to improve higher education by building-up

a flexible, inter-related system. Such system would be capable of producing a sufficient number of highly qualified personnel of varied skills. These personnel were to match the needs of the country's rapidly growing economy and its increasingly complex social life. Second, the reforms were aimed at democratization of enrollments at institutions of higher education. This was to enable a greater number of citizens to obtain the highest qualifications regardless of their economic, social and educational background. It would also facilitate further technical and scientific development of population at all times.

In view of these aims, several measures for their realization were legislated. First, the 1960 Act made the provision for the expansion of institutions on a decentralized basis. In addition to the organs of governments of the Republics and the Federation, the Autonomous Provinces, communes, and economic and other organizations could establish institutions of higher education. These institutions could be established in all cities and towns wherever a substantial need for them existed. Second, all higher educational institutions were brought under a unified system. The two-year Post-secondary Schools were thus for the first time included into the university system. Third, the 1960 Act introduced the three-level system of studies in cycles. The first level covered the two-year study courses leading to a certificate, and the second level covered the additional two-year courses leading to a diploma, equivalent to the Bachelor degree. The Two-year Post-secondary Schools were automatically recognized as institutions offering courses on the first level of studies. The provision for the introduction of the first level courses was made an optional possibility at Faculties, Higher Schools of Learning, and

Art Academies. Individual institutions, which did not wish to divide their programmes into two separate levels, could maintain the full four-year programmes leading directly to a diploma. The third level courses covered the post-graduate studies, in which master and specialist programmes were introduced for the first time, while doctoral programmes were reorganized to form systematic study-courses.¹ Fourth, part-time studies were made available at all institutions of higher education to persons who were employed or for other reasons could not attend full-time studies. Fifth, the enrollment into institutions of higher education was made possible to all capable persons who did not have the usually prescribed formal education, with the stipulation that they pass the special entrance examination.

The 1960 Act was revised in the 1964 General Law on Education, bringing ordinances and regulations pertaining to higher education in accord with the 1963 Constitution. Since the 1964 General Law on Education did not provide particular ordinances relating to both the management of institutions and the regulations of teaching staff, these matters were covered under educational acts legislated by the individual republics. The 1964 General Law on Education was amended in 1967; subsequently, the educational acts of individual republics were also amended.

The financing of higher education, was reorganized on a decentralized basis, following the enactment of the 1960 Act. Until 1960 higher education

¹ Master programmes were introduced for the training of researchers in various scientific disciplines. Their attention is focused on theoretical aspects of particular sciences, and problems of scientific research and its methodology. Specialist programmes were introduced for the purpose of equipping the candidates with the knowledge of modern technological achievements and the most recent methods for solutions of problems in operative assignments.

was financed from central funds, collected and distributed by the federal organs of government. From 1960 to 1966 it was financed through Funds for Education collected and distributed by individual republics. Following the 1965 economic reforms, the institutions of higher education were considered working organization with planned activities for which they received necessary funds. Since 1966, institutions of higher education have been receiving the bulk of their income from Committees for Education or from separate Committees for Higher Education organized within each republic. The income is allocated to the institutions on the basis of the need for development of particular professions, and on the basis of determined standards of performance. Each institution is obliged to determine the price of education offered, on the basis of the operational expenses, number of students enrolled, and number of staff members. Since 1969, new regulations for financing of higher education have been under study in each of the republics, on the basis of the 1969 Federal Education Finance Act.

Reorganization of Management of Higher Education

Institutions of higher education are recognized by the law as independent and autonomous working organizations. The relationship between individual institutions and their respective Universities is based on the voluntary participation of institutions in the association. There are some variations in the status of Universities pursuant to the legislative autonomies of the republics. In Serbia, Faculties, and Higher Schools of Learning are obliged to be members of the University, while Art Academies have their own association. In the other republics Universities are

voluntary associations open to all institutions of higher education. The management of institutions of higher education and their associations is based on the principle of self-management in working organization. This means that the government authorities in each of the republics only supervise the legality of work of institutions. The Assemblies of the republics approve and confirm Statutes of individual institutions, and annually examine their reports. All other matters pertaining to the management of institutions are regulated by the by-laws of institutions.¹

All institutions operate through their elected organs of government. At all Universities until 1969, organs of government included the University Council and the office of the Rector. Since 1969, each republic has had a different set-up. For example, in Slovenia, the basic organ of government is the University Council, while the Teaching and Research Council and the office of the Rector serve as organs of management. In Croatia, the basic organ of self-government since 1969, has been the University Assembly, while the University Council, the Teaching and Research Council, and the office of the Rector serve as organs of management. Similarly, at Faculties, Higher Schools of Learning, Art Academies, and Two-year Post-secondary Schools, the governing and managing bodies vary by republics. In Slovenia, the basic organs of governments are Councils of institutions, while the Boards of Management and the Heads of institutions serve as organs of management. In Croatia, the organs of governments include the Faculty Councils and the

¹ This has been legalized in the 1964 General Law on Education, and further revised by the Basic Law on Establishments of 1965, the Constitutional Amendments No. XV., of 1968, and the Federal Assembly's Resolution on the Development of Education on Self-management Basis, of 1970.

Faculty Boards, which serve as the executive organs of management aided by the Teachers' Boards and the offices of the Deans. In Serbia, alone, the only governing bodies beside the Faculty Councils are the Faculty Boards, which serve as the only executive management organs.

Students are included in active management of their institutions through their elected representatives. In Croatia, at the University of Zagreb, the new by-law of 1970, stipulates that all matters falling within the province of the University's work are of concern to students.¹ The student representatives, as members of the University's bodies of management, are on equal terms with the other members of these bodies. They take part in discussions and decision-making on all questions. The student representatives make up one-third of the total number of members of the University's bodies of management. In addition, one of the Vice-Rectors must be a student. In Bosnia-Herzegovina, under the new Higher Education Act, 1970, students are members of the work community of their respective institutions. Most institutions of higher education in Bosnia-Herzegovina have decided to provide in their by-laws that the Council of the institution shall consist of equal number of students and teaching staff. Also, one student was to hold the office of the Vice-Dean. Further provisions included student representation on the Teaching and Research Councils. In Serbia and Macedonia measures have been taken to expand the rights of individual groups concerned with self-management. The new by-laws changed the status of student representatives to that of full-fledged members of bodies of

¹ The 1970 by-law of the University of Zagreb is based on the Higher Education Act of the Republic of Croatia, 1970.

governments.¹

In addition to student representatives in the organs of self-management, at all institutions of higher education, students of each year form Committees of the Year. There are also Student Committees of sections and groups of studies. These Committees are not governing bodies, but have the right to make proposals to the governing organs of institutions. Any proposals made must be studied by the Management Board of the institutions. Any finding in reply to the proposals has to be channeled back to students through the student Committees. The open channels of communication between participants in higher education and the governing organs of institutions have begun to facilitate the evolvement of the participatory democracy, defined in the principle of self-management.

Implementation of Designs for Higher Education

Designs for change in the higher educational system included the following: expansion of the network of institutions and its more balanced distribution; enlargement of enrollments; introduction of the organized system of part-time studies; introduction of the system for enrollment of persons lacking formal education; and organization of the three-level system of studies. Implementations of the above plans are discussed one by one in the subsequent section of the study.

The expansion of the network of institutions of higher education between 1959-60 and 1969-70 is shown in Table 2. Data reveals that the

¹The by-laws of institutions of higher education in Serbia and Macedonia are based on the Higher Education Act of the Republic of Serbia, 1970, and on the Higher Education Act of the Republic of Macedonia, 1968.

TABLE 2
NUMBER OF INSTITUTIONS OF HIGHER EDUCATION 1959-60 TO 1969-70^a

INSTITUTIONS	1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67	1967-68	1968-69	1969-70
TOTAL INSTITUTIONS	143	204	244	260	260	263	266	267	261	258	247
FACULTIES	59	78	88	94	92	93	96	97	97	100	102
HIGHER SCHOOLS OF LEARNING	7	10	14	16	17	17	16	16	14	10	11
ART ACADEMIES	9	10	10	11	14	14	14	14	13	13	13
TWO-YEAR POST-SEC. SCHOOLS	66	106	131	139	137	139	140	140	137	135	121

^a DATA DERIVED FROM: MARIJAN FILIPOVIĆ, "HIGHER EDUCATION, 1960-1970", YUGOSLAV SURVEY, XII, NO. 3 (1971), p. 73.; ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, REFORMS IN YUGOSLAVIA, CASE STUDIES ON INNOVATION IN HIGHER EDUCATION, REPORT PREPARED BY INSTITUTE FOR SOCIAL RESEARCH, UNIVERSITY OF ZAGREB, (ORGANIZATION FOR ECONOMIC CO-OPERATION AND DEVELOPMENT, 1970), p. 173.

number of institutions was enlarged from 143 in 1959-60 to 247 in 1969-70. The trend of development varied in terms of numbers of institutions operating at various times during the decade, as seen in Table 2. Among the four types of institutions of higher education, Two-year Post-secondary Schools had the most rapid growth; from 66 in 1959-60 to 139 in 1962-63. Their numbers fluctuated slightly between 1963-64 and 1968-69, while in 1969-70 there was a marked reduction of Two-year Post-secondary Schools from 135 to 121. Faculties expanded from 59 in 1959-60 to 94 in 1962-63, stagnated until 1965-66, and then gradually grew to 102 in 1969-70. Higher Schools of Learning expanded from seven institutions in 1959-60 to seventeen in 1963-64, and were gradually reduced between 1965-66 and 1968-69 to ten; in 1969-70 there were eleven Higher Schools of Learning in operation. Art Academies grew from nine in 1959-60 to fourteen in 1963-64. They were reduced in 1967-68 to thirteen at which number they remained also in 1969-70.

Three new Universities were opened between 1960-61 and 1969-70; The University of Novi Sad in 1960-61, The University of Niš in 1965-66, and The University of Priština in 1969-70. These were opened in order to provide the necessary higher education in the autonomous provinces of Vojvodina and Kosovo, and to relieve the University of Belgrade, which was previously the only University for the whole territory of Serbia and autonomous provinces.

The regional distribution of institutions of higher education became more even throughout the country, as seen in Table 3. Faculties, Higher Schools of Learning, and Art Academies were located in twenty-one communities in 1969-70 in comparison to ten in 1959-60. Two-year Post-secondary Schools

TABLE 3

REGIONAL DISTRIBUTION OF INSTITUTIONS OF HIGHER EDUCATION, 1969-1970^a

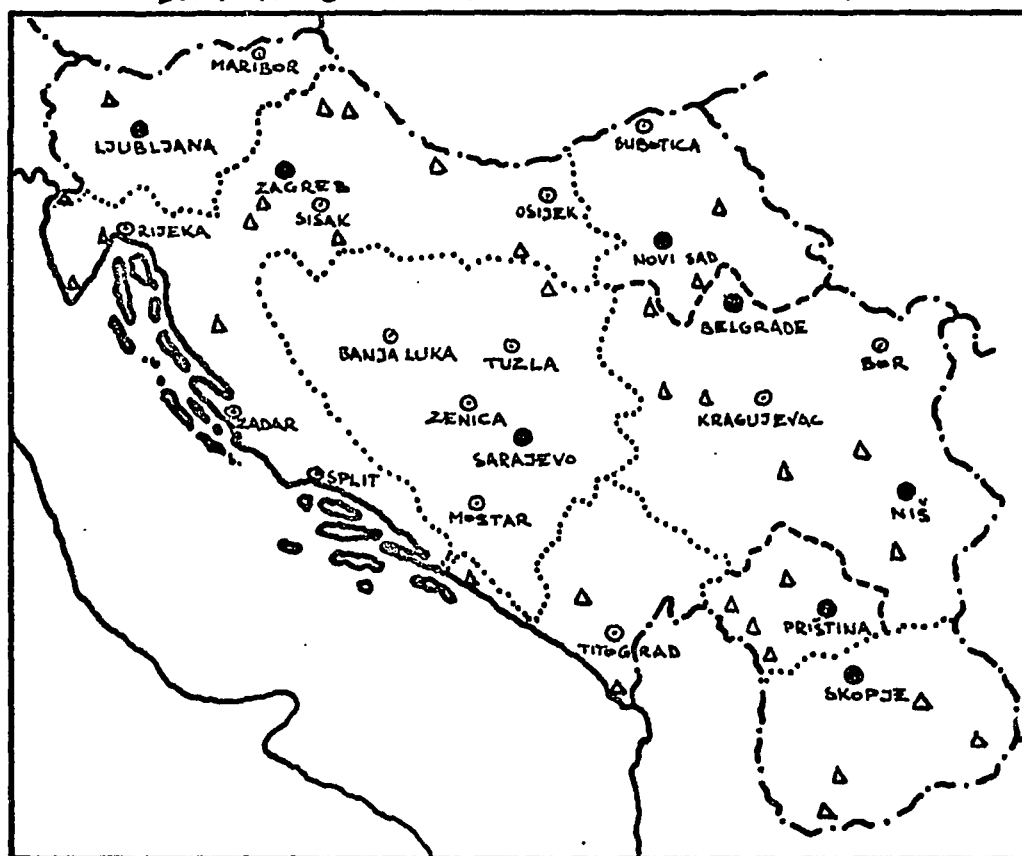
REPUBLIC	SQ. KM. IN %	POPULATION IN %	NO. OF UNIV'S	NO. OF FAC'S	HI. SCH. OF LEARNING	ART ACADEMIES	NO. OF LOCATIONS	TWO-YEAR P. SEC. SCH.	NO. OF LOCATIONS	TOTAL % OF STUDENTS
1	2	3	4	5	6	7	8	9	10	11
YUGOSLAVIA	100.0	100.0	8	102	11	13	22	121	48	100.0
BOSNIA - HERZEGOVINA	20.2	18.7	1	17	2	1	5	15	5	13.0
CROATIA	21.9	21.8	1	27	5	3	6	40	15	22.0
MACEDONIA	10.2	8.4	1	9	1	—	1	9	5	11.0
MONTENEGRO	5.5	0.5	—	2	—	—	1	2	2	2.0
SERBIA	34.3	41.9	4	38	—	6	7	41	18	44.0
SLOVENIA	7.9	8.7	1	9	3	3	2	14	3	8.0
SERBIA PROPER	21.7	29.7	2	27	—	5	4	26	10	
KOSOVO - METOHIA	4.2	2.4	1	4	—	—	1	6	3	
VOJVODINA	8.4	9.8	1	7	—	1	2	9	5	

^a CALCULATED FROM: FEDERAL INSTITUTE FOR STATISTICS, STATISTICAL POCKET - BOOK OF YUGOSLAVIA, 1969 (BELGRADE: FEDERAL INSTITUTE FOR STATISTICS, 1969), p. 7, 20, 95, 99.

were located in forty-eight communities in 1969-70 in comparison to twenty-two in 1959-60. The regional distribution of institutions by republics and autonomous provinces in 1969-70 roughly corresponded to their size and the population distribution. For example Serbia, the largest republic by size and population, had the largest number of institutions of higher education, while Montenegro, the smallest republic by size and population, had the smallest number of institutions, as seen in Table 3. The regional distribution of students also corresponds to the size of republics and their population, as seen in Table 3.

Within the individual republics, the networks of institutions of higher education were extended to include institutions situated in cities and towns other than the ones in which the Universities were located, as seen in Figure 1. In Serbia, as mentioned earlier, three new Universities were established from previous Faculties and Departments belonging to the University of Belgrade. In addition, The Faculty of Mechanical Engineering and The Faculty of Economics of the University of Belgrade opened their Departments in the city of Kragujevac. The newly established University of Novi Sad put in operation six Faculties in Novi Sad, and one in the city of Subotica. The network of the Two-year Post-secondary Schools extended to thirteen new locations within the Republic of Serbia. In Croatia, the network of the University of Zagreb extended to include institutions of higher education in the cities of Rijeka, Split, Sisak, Zadar, and Osijek, and in fifteen other locations where the Two-year Post-secondary Schools were situated, as seen in Figure 1. In Slovenia, the University of Ljubljana extended its network of institutions to include the

FIGURE 1
DISTRIBUTION OF INSTITUTIONS 1969-70^a



- SHORE LINE
- - - STATE BOUNDARY
- REPUBLIC BOUNDARY
- - - BOUNDARY OF AUTONOMOUS REGION (PROVINCE)
- UNIVERSITY CENTRES
- ⊙ LOCATIONS OF FACULTIES, HIGHER SCHOOLS OF LEARNING AND ART ACADEMIES OUTSIDE OF UNIVERSITY CENTRES.
- △ LOCATIONS OF TWO-YEAR POST-SECONDARY SCHOOLS OUTSIDE OF UNIVERSITY CENTRES.

^a DERIVED FROM: MARIJAN FILIPOVIĆ, HIGHER EDUCATION IN YUGOSLAVIA, (BELGRADE: FEDERAL COUNCIL FOR EDUCATION AND CULTURE, FEDERAL COMMISSION FOR CULTURAL RELATIONS WITH FOREIGN COUNTRIES, 1971), p.p. 152-53.

new Higher Schools of Learning and Two-year Post-secondary Schools in the city of Maribor and the towns of Piran and Domžale. In Bosnia-Herzegovina, The University of Sarajevo extended its network to cover Faculties in the cities of Sarajevo, Tuzla, and Zenica, and the newly established Two-year Post-secondary Schools in the cities of Banja Luka, Mostar, and Brčko, as seen in Figure 1. In Macedonia, in addition to the institutions located in the city of Skopje, the University of Skopje extended its network to cover four new localities where Two-year Post-secondary Schools were established. In Montenegro, the new Faculty of Economics was opened in the city of Titograd, and Two-year Post-secondary Schools were established in two other towns.

Total enrollments at institutions of higher education increased by 128 per cent between 1959-60 and 1969-70, as seen in Table 4. Data show that the highest relative gain in total enrollments occurred at Two-year Post-secondary Schools; number of enrolled students grew from 19,286 in 1959-60 to 77,901 in 1969-70, or by 300 per cent. At Faculties, Higher Schools of Learning, and Art Academies, total enrollments enlarged from 86,032 in 1959-60 to 161,800 in 1969-70, or by 87 per cent.

First year enrollments (without repeaters) increased between 1959-60 and 1969-70 by 91.1 per cent at Faculties, Higher Schools of Learning, and Art Academies, while at Two-year Post-secondary Schools they increased by 270 per cent, as shown in Table 5.

Part-time studies were introduced at all institutions (with exception of Faculties of Medicine, some newly established institutions, and those with insufficient number of candidates) in the academic year 1960-61.

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TABLE 4
TOTAL ENROLLMENTS 1959-60 AND 1969-70^a

INSTITUTIONS	NUMBER OF STUDENTS			GAIN IN %
	MODE OF STUDY	1959-60	1969-70	
ALL SCHOOLS OF HIGHER EDUCATION	TOTAL	105,318	239,701	128
	FULL-TIME	84,409	171,117	100
	PART-TIME	20,909	68,584	229
FACULTIES - HIGHER SCHOOLS OF LEARNING- ART ACADEMIES	TOTAL	86,032	161,800	87
	FULL-TIME	72,377	132,372	70
	PART-TIME	13,655	29,428	115
TWO-YEAR POST- SECONDARY SCHOOLS	TOTAL	19,286	77,901	300
	FULL-TIME	12,032	38,745	223
	PART-TIME	7,254	39,156	442

^a DATA DERIVED FROM: FILIPOVIĆ, "HIGHER
EDUCATION, 1960 - 1970", p. 78.

TABLE 5
FIRST YEAR ENROLLMENTS 1959-60 TO 1969-70 (WITHOUT REPEATERS)^a

INSTITUTIONS	NUMBER OF STUDENTS							GAIN IN % 1959-60 1969-70
	MODE OF STUDY	1959-60	1965-66	1966-67	1967-68	1968-69	1969-70	
ALL INSTITUTIONS	TOTAL	43,152	86,029	84,560	89,815	98,925	104,459	142
	FULL-TIME	27,662	52,517	54,599	58,102	68,579	67,914	146
	PART-TIME	15,490	33,512	29,961	31,713	30,346	36,545	136
FACULTIES - HIGHER SCHOOLS OF LEARNING- ART ACADEMIES	TOTAL	30,806	43,724	40,917	42,484	54,974	58,820	91
	FULL-TIME	21,054	33,223	33,304	35,455	46,734	46,625	121
	PART-TIME	9,752	10,501	7,613	7,029	8,240	12,195	25
TWO-YEAR POST- SECONDARY SCHOOLS	TOTAL	12,346	42,305	43,643	47,331	43,951	45,639	270
	FULL-TIME	6,608	19,294	21,295	22,677	21,845	21,289	222
	PART-TIME	5,738	23,011	22,348	24,654	22,106	24,350	324

^a MODIFIED FROM: FILIPOVIĆ, "HIGHER EDUCATION, 1960-1970", p. 76.

Part-time studies are organized in various forms, including "parallel classes", "evening classes", or "weekend sessions". The concentrated instruction is carried out during summer courses, or in the form of short seminars, arranged several times a year. Part-time studies are usually more relaxed with additional terms for examinations. Working organizations interested in further education of their employees provide the time off work, and, in certain cases, some material assistance. This is, however, not considered the obligation of the employers, but their voluntary contribution, and most students carry the full cost of their studies themselves.

Part-time enrollments have increased between 1959-60, and 1969-70 two and a half times at Faculties, Higher Schools of Learning, and Art Academies, and about four times at Two-year Post-secondary Schools. Part-time enrollments have, however, shown a steady decrease since 1965-66 at Faculties, Higher Schools of Learning, and Art Academies, as shown in Table 6. The percentage of part-time enrollments to total enrollments at these institutions was in 1959-60 15.8 per cent, it grew to 22.3 per cent in 1965-66, dropped to a low of 16.6 per cent in 1968-69, and slightly increased in 1969-70 to 18.1 per cent. There was a slight decrease of the percentage of part-time enrollments at Two-year Post-secondary Schools between 1965-66 and 1969-70 from 54.0 per cent to 50.2 per cent, as shown in Table 6. The number of part-time students enrolling in the first year of studies also decreased at Faculties, Higher Schools of Learning, and Art Academies from 1962-63 to 1968-69; it slightly increased in 1969-70.¹ The

¹ Marijan Filipović, "Higher Education, 1960-1970", Yugoslav Survey, XII, No. 3 (1971), p. 81.

TABLE 6
PERCENTAGE OF PART-TIME STUDENTS IN TOTAL ENROLLMENTS^a

INSTITUTIONS	1959-60	1965-66	1966-67	1967-68	1968-69	1969-70
ALL INSTITUTIONS	19.8	33.8	32.1	31.9	29.2	28.6
FACULTIES-HIGHER SCH OF LEARN.-ART ACAD.	15.8	22.3	19.6	18.9	16.6	18.1
TWO-YEAR POST- SEC. SCHOOLS	37.6	54.0	52.0	52.2	51.3	50.2

^a MODIFIED FROM: FILIPOVIĆ, "HIGHER EDUCATION, 1960-1970", p. 81.

number of part-time students enrolling in the first year of studies at Two-year Post-secondary Schools remained nearly constant (between twenty-two and twenty-four thousand) within the period from 1965-66 to 1969-70.¹

The 1960 Act introduced the possibility of enrollment of candidates who had not completed secondary education, providing that they had practical experience and passed the special entrance examinations. The entrance examinations were made rigorous, and the percentage of passes was low. For example, at the University of Ljubljana in 1968-69, only 0.4 per cent of candidates applying for admission at Faculties, Higher Schools of Learning, and Art Academies, and 20 to 25 per cent applying at Two-year Post-secondary Schools, were permitted to enroll.²

The percentage of the full-time first year students with inadequate school background, enrolled in all institutions of higher education, grew from 6 per cent in 1960-61 to 7 per cent in 1961-62; it remained at 7 per cent until 1964-65 when it fell to 5 per cent, and to a low of 2.7 per cent in 1965-66.³ The admission of students with inadequate school background varied by years and by institutions. At Faculties, the percentage of

¹ Ibid., p. 81.

² Marijan Filipović, Higher Education in Yugoslavia (Belgrade: The Federal Council for Education and Culture and Federal Commission for Cultural Relations with Foreign Countries, 1971), p. 63.

³ Organization for Economic Co-operation and Development, Reforms in Yugoslavia, Case Studies on Innovation in Higher Education, Report Prepared by the Institute for Social Research, University of Zagreb, (Paris: Organization for Economic Co-operation and Development, 1970), p. 70.

students with inadequate school background varied between 0.7 per cent in 1960-61, 1.4 per cent in 1961-62, 1.0 per cent in 1962-63, 1.2 per cent in 1963-64, 0.6 per cent in 1964-65 and a low of 0.4 per cent in 1965-66.¹ The percentage of students with inadequate school background also showed downward trend at Higher Schools of Learning, and Art Academies; it decreased from 39 per cent in 1961-62 to 18 per cent in 1965-66.² At Two-year Post-secondary Schools the percentage of students with inadequate school background grew from 18 per cent in 1960-61 to 24 per cent in 1961-62 and then gradually decreased to 5 per cent in 1965-66.³ Even though there are no data available for the later years, it is obvious that the percentage of persons without adequate secondary education, enrolling at institutions of higher education, had a downward trend.

The design for the reorganization of the higher educational system included organization of studies on three different levels. Shortly after the introduction of this new system in 1960-61, more than half of the Faculties, Higher Schools of Learning, and Art Academies offered separate first level courses; in 1963-64, there were ninety-three Faculties of which fifty-five offered first level courses, as did seven Higher Schools of Learning from the total of fourteen, and ten Art Academies from the total of fourteen.⁴ The trend towards the return to the traditional unified system of full four-year courses began in 1965-66. It was felt that there were enough Two-year Post-secondary Schools offering first level courses,

¹ Ibid., p. 70.

² OECD, Reforms in Yugoslavia, p. 71.

³ Ibid., p. 71.

⁴ Filipović, Higher Education in Yugoslavia, p. 36

and that the majority of the first level students at Faculties, Higher Schools of Learning, and Art Academies were continuing to the second level at the same institutions. Also, the 1965 socio-economic reform changed the demand for manpower in general, and diminished opportunities for employment of the first level graduates. It seems that, in many cases, the decision to continue on the second level of studies was reached in order to avoid unemployment. The return to the traditional system of unified studies was gradual but effective; in 1968-69 only twenty-five Faculties, four Higher Schools of Learning and six Art Academies maintained first level studies.¹

The third level programmes (post-graduate studies) proved to be of great value and continued to increase in number of students and variety of course offerings. While in 1960-61 seventeen Faculties offered third level courses in fifty-seven subjects (forty-seven master programmes and ten specialist programmes), in 1968-69 sixty-eight institutions offered third level courses in 507 subjects.² From 1961-62 to 1968-69, 2,658 candidates completed their programmes.³ The highest number obtained degrees in Social Sciences and Liberal Arts, 42.1 per cent, while the Engineering was low at 21.4 per cent.⁴ The prevalence was in master programmes over specialist programmes. From 1960-61 to 1964-65, 450 Master degrees were awarded and 106 Specialist degrees.⁵ In 1967-68, from 2,991 candidates only

¹ Filipović, Higher Education in Yugoslavia, p. 36-37

² Ibid., p. 41.

³ Filipović, "Higher Education, 1960-1970", p. 89.

⁴ Ibid., p. 89.

⁵ OECD, Reforms in Yugoslavia, p. 91.

320 were taking specialist programmes.¹

In doctoral programmes, between 1960 and 1969, 3,471 persons were awarded degrees.² The largest number of degrees was awarded in Social Sciences and Liberal Arts (1,156), and the smallest in Engineering (284).³ In 1969-70, 33.3 per cent of the candidates were awarded degrees in Social Sciences and Liberal arts and half of these were in Politics and Law, and Economics.⁴

From 1960 to 1965, 1,288 Doctoral degrees were awarded.⁵ The year 1965 was the last in which Doctoral degrees could be obtained without candidates' participation in doctoral courses. Candidates, who started working on their theses prior to the introduction of organized doctoral courses, were permitted to give an oral examination and defend an approved doctoral dissertation, but did not have to attend any formal courses of instruction. However, a little less than two-thirds (2,183) of the candidates, who obtained Doctoral degrees between 1960 and 1970, attended the systematic doctoral courses.⁶ Furthermore, approximately three-quarters of all Doctoral degrees awarded between 1945 and 1969, were awarded within the period from 1960 to 1969; 3,471 from the total of 4,813.⁷

¹ Filipović, "Higher Education, 1960 - 1970", p. 89.

² Ibid., p. 91.

³ Ibid., p. 91.

⁴ Ibid., p. 91-92

⁵ Ibid., p. 91.

⁶ Calculated from: Filipović, "Higher Education, 1960-1970", p. 91.

⁷ Ibid., p. 91.

Evolution of New Concerns

The priorities of higher education seem to have been the quantitative expansion of the network and instructional programmes of institutions of higher education. Data show that the network of institutions rapidly expanded between 1959-60 and 1962-63, during which period 117 new institutions were established.¹ From 1963-64 to 1966-67 the expansion was much slower, since only seven new institutions of higher education were established during that period.² In the last three years of the decade, between 1967-68 and 1969-70, the network of institutions decreased by 20 institutions, as seen in Table 2. The Social Development Plan, 1966-70, passed by the Federal Assembly on July 5, 1966, emphasized the consolidation and stabilization of higher education, thus promoting the efficiency of higher education instead of its quantity.³ Subsequently, institutions of higher education began adjusting their instructional and research programmes in order to improve the quality of education. The integration of teaching programmes and examination of their rationale resulted in closing a number of Two-year Post-secondary Schools, between 1967-68 and 1969-70.⁴ Some Departments were also closed, or merged with the similar ones. Various inter-faculty studies were organized, and the staff was integrated within several institutions, concentrated around core subject areas. The process

¹Calculated from: OECD, Reforms in Yugoslavia, p. 173.

²Ibid., p. 173.

³Social Development Plan, 1966-70, offprint from the Yugoslav Survey, No. 27 (1966), p. 3887.

⁴Filipović, Higher Education in Yugoslavia, p. 117.

of integration was also extended outside of institutions of higher education to include projects designed in co-operation with economic enterprises. Co-operation was also established between individual institutions of different Universities in order to eliminate differences in courses offered at the same kinds of institutions within the country.

Summary

Throughout the decade 1960-70, the higher educational reform continued as a developing process responding to the changes in economic, political, and social structures. Following the enactment of the 1963 Constitution the management of institutions of higher education was democratized. The principle of active participation of all concerned, students as much as staff, in all processes of decision-making, evolved into a particular type of participatory democracy within the institutions of higher education. The major change of emphasis from the quantitative to the qualitative growth of higher education followed the 1965 socio-economic reform. The Social Development Plan, 1966-70, underlined the importance of intensification of the efficiency of higher education, in accord with policies of the qualitative economic growth. Courses, subjects, and programmes were rationalized and integrated in order to form a more cohesive system, without unnecessary repetitions. Thus, the trend towards a more realistically planned expansion is evident.

During the decade under study, most of the designs for change of the system of higher education have been implemented. The network of higher educational institutions was enlarged, and the regional distribution of institutions became more balanced throughout the country. The enrollments

in the first year and the total enrollments grew rapidly, even after the expansion of the institutions ceased. The part-time studies proved to be of value as they provided additional opportunities for continuation to higher education for those already employed.

Significantly, part-time studies are much more popular at Two-year Post-secondary Schools, where more than a half of the total number of students enroll part-time. This is most likely because the courses offered last only two years and are geared to the more practical types of professions. Those at Faculties tend to be more academically oriented, involve longer period of time, and are usually more rigorous.

The extension of the opportunity for higher education to persons without normally prescribed educational background (secondary school) has been followed within reasonable limits. Only the most talented and serious persons who can prove that they have adequate working experience, and the necessary background knowledge, are being awarded admissions.

The institution of the first level studies, although implemented overwhelmingly during the first three academic years following the 1960 reform, has been revised as of 1965-66. It was found that the dividing of the four-year courses into two cycles was not economical. Most students continued from the first to the second level at Faculties, Higher Schools of Learning, and Art Academies. There were enough Two-year Post-secondary Schools to fill the need for the more practical type of courses, training the middle technicians on the first level of studies. It seemed that the repetition of the first level courses at Faculties, Higher Schools of Learning, and Art Academies was not only unnecessary, but also damaging to

the academic standards usually maintained at these institutions. Furthermore, graduates from Two-year Post-secondary Schools had the opportunity to continue onto higher levels. They could enter into second level courses after having passed the differential examinations in corresponding subjects taken at Two-year Post-secondary Schools. The differential examinations were necessary since subjects taken at Two-year Post-secondary Schools were not as extensive as the ones offered by the academically oriented institutions. Since there was no need to maintain the artificial division on the first and second levels of studies at Faculties, Higher Schools of Learning, and Art Academies, they were largely abandoned.

The third level courses (post graduate) proved to be of value and continued to expand by fields of specialization as well as in number of candidates.

Two important aspects of reforms remain to be examined. First, we shall determine whether higher education has been effective in providing the necessary manpower, and if not, what were the factors that impeded the realization of this task. Second, there remains the question whether expansion of enrollment in higher education resulted in a proportionate representation from the lower socio-economic strata. These aspects shall be discussed in chapters three and four.

CHAPTER III

EFFECTIVENESS OF YUGOSLAV HIGHER EDUCATION

Higher Educational Performance

The expansion of higher education and reorganization of its system were designed with the aim to improve the performance of higher education, that is to produce a sufficient number of highly qualified personnel. Within the ten year period, 1960-70, a total of 256,045 students graduated from Yugoslav institutions of higher education; 117,615 students graduated from Faculties, 3,857 from Higher Schools of Learning, 2,732 from Art Academies, 97,508 from Two-year Post-secondary Schools, and additional 34,333 students graduated from the first level of studies at Faculties, Higher Schools of Learning and Art Academies.¹

Although, these figures seem impressive, their effect decreases when the efficiency of the studies are examined. The percentage of students who graduated, to those who were enrolled at institutions of higher education, was very low. It ranged between 14.6 per cent in 1960-61, 12.3 per cent in 1961-62, 14.4 per cent in 1962-63, and 13.0 per cent in 1969-70.² The percentage of students who graduated to those who were enrolled reached its peak at 17.0 per cent in 1964-65.³ Prior to the higher educational reform,

¹ Filipović, "Higher Education, 1960-70", p. 83.

² OECD, Reforms in Yugoslavia, p. 176. For 1969-70 percentage calculated from: Filipović, "Higher Education, 1960-1970", p. 78., p. 83.

³ OECD, Reforms in Yugoslavia, p. 176.

in 1959-60, the percentage of graduations to enrollments was 12.6 per cent.¹ Since it remained low at the end of the 1960-70 period, it is evident that the problem of discrepancy between graduations and enrollments persisted after the reforms of higher education have been introduced. This discrepancy between the high enrollments and low graduation can be traced to the problems involving students' approach to studies, namely, the prolonging of studies beyond the prescribed time, the high drop-out rate, and the high rate of abstentions from and failures of examinations.

The courses at Faculties, Higher Schools of Learning, and Art Academies, should be completed in four years (except for specific institutions which have five year courses). Prior to 1960, the average length of stay at institutions in four year courses was 6.2 years, in 1964-65 it was the shortest at 5.7 years, and in 1969-70 it was again prolonged to 6.0 years.² At Two-year Post-secondary Schools, the average length of stay at institutions was 2.7 years prior to 1960, and in 1969-70 it was prolonged to 3.5 years.³ The percentage of students who postponed their final completion of studies at Faculties, by eight or more years, reached the figure of 25.0 per cent in 1969-70, while in 1960-61 this percentage was 22.1 per cent.⁴ In 1969-70, only 17.2 per cent of the total number of full-time students graduated on time at Faculties, 22.6 per cent at Higher Schools of Learning, 55.8 per cent at Art Academies, and 31.6 per cent at

¹ Ibid., p. 176.

² Filipović, "Higher Education, 1960-1970", p. 84.

³ Ibid., p. 84.

⁴ Ibid., p. 85.

Two-year Post-secondary Schools.¹

Within the ten year period, 1960-70, the drop-out rate at all institutions of higher education was, on an average, 40 per cent after the first year of studies, and 60 per cent during the entire duration of studies.² The survey at the University of Zagreb in 1964-65 found that from 3,758 students who enrolled in the first year of studies at Faculties only 1,687 passed into the second year, or 50.6 per cent.³ The similar survey at the University of Belgrade found that from the total of 5,809 students, who enrolled in the first year of studies during the academic year 1960-61, only 2,403 passed into the second year, or 41.3 per cent.⁴ During the consecutive years further drop-out occurred, leaving only 440 students in the final fourth year of studies, or barely 7.5 per cent of the original number enrolled.⁵ When the additional two years of study time were taken into account, even then only 23.1 per cent of the original number of students reached the fourth year.⁶

¹ Ibid., p. 86.

² Ibid., p. 85.

³ Calculated from: Zora Steineman, "Razvoj redovitog školovanja u SR Hrvatskoj", quoted in Rudi Supek, "Sveučilišna politika obrazovanja, socijalno porijeklo studenata i uspjeh u studiranju", in Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1967, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1967), II, 420.

⁴ Bogdan Pilić, "Uslovi racionalizacije univerzitetskih studija", in Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1967, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1967), II, 318.

⁵ Ibid., p. 318.

⁶ Ibid., p. 318.

According to the available data, a large proportion of students do not take the prescribed examinations. Furthermore, a large proportion of those who attempt them fail. For example, the survey at the University of Belgrade, in 1964-65, found that from the total of 3,604 first year students 1,395 abstained from examinations, or 38.7 per cent, while 2,209 sat for examinations, or 61.3 per cent.¹ From those who attempted examinations 1,410 passed, or 39.1 per cent of the total number of the first year students, and 799 failed, or 22.2 per cent.² The phenomena of abstentions from and failures of examinations are found to exist in all years of studies, not only the first. For example, at the University of Skopje in 1965-66, from the total of 82,505 students from all years of studies 29.2 per cent abstained from examinations, 29.7 per cent failed them, and 41.1 per cent passed.³ Since 1965-66 the percentage of failures at the University of Skopje has slightly decreased, but the percentage of abstaining grew larger. For example, in 1967-68, 26.0 per cent of students failed, 35.0 per cent abstained from examinations, and 39.0 per cent passed.⁴

The problems of the prolonged stay at institutions, the high drop-out rates, and the low percentage of success at examinations, have contributed to the lowering of the graduation data. These problems become even more

¹ Ibid., p. 319.

² Ibid., p. 319.

³ Jakim Sinadinovski, "Neke osobenosti i tendencije nastavno-obrazovnog procesa Skopskog Univerziteta u svetlu nekih pokazatelja", in Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1970, Vol. I: Obrazovni procesi u reformiranoj nastavi, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1970), p. 19.

⁴ Ibid., pp. 19-21.

salient bearing in mind that one of the aims of the higher educational reforms was the alleviation of the shortage of skilled personnel. In addition to the problems of students' approach to studies, the deficiencies of the system of higher education have also contributed to the low graduation of students from the Yugoslav institutions of higher education. These deficiencies are discussed in the subsequent part of the study.

Deficiencies of the System of Higher Education

The deficiencies of the higher educational system include the irrational organization of courses and ancillary services, the insufficient supply of staff, and the inadequate financing of students and institutions of higher education.

Courses at institutions of higher education in Yugoslavia are, most often, organized in two semesters of lectures and seminars, after which the examinations are taken. During the academic year students are obliged to attend courses and seminars regularly. Since ex-cathedra teaching methods have prevailed during the 1960-70 decade, students were, most often, only listeners and "note-takers". They were not trained to undertake independent intellectual operations and to seek independent solutions to problems. As the lectures progress students loose contact with the subject matter, and tend to either "skip" lectures or they stay in lecture rooms in their physical presence only. When the time for the examinations approaches, students utilize their own or their colleagues' notes, the prescribed textbooks, and professors' mimeographed notes. Very few attempt to utilize any other materials. The survey at the University of Niš in 1968-69 found that 87.3 per cent of students study at home, and

only 6.4 per cent utilize libraries.¹ The same survey found that 8.6 per cent never use any materials other than notes and textbooks, while 45.2 per cent do so seldom, 33.8 per cent often, and only 8.2 per cent always.² Only 12.1 per cent of students utilize foreign materials, and only 21.4 per cent had acquired their own professional literature.³

A large part of the working time during the academic year is taken up by lectures and seminars. A survey at the University of Belgrade in 1968 found that the average daily time spent at lectures and seminars amounts to five hours and forty-five minutes.⁴ While this is an average, the actual amount of time within one week varied from twenty-five hours in Social Sciences, to twenty-three in Medicine, and to thirty-four in Technical Sciences.⁵ At the University of Skopje, in 1969-70, weekly amount of lectures and seminars ranged from twenty-two hours in Social Sciences, to thirty-seven in Technical Sciences, to forty in Agricultural Sciences, and to forty-six hours in some subjects in Natural Sciences and Mathematics.⁶

The large amount of time spent in lectures and seminars is not entirely productive. The survey at the University of Niš in 1968-69 established that, during the course of one day, 40.7 per cent of students could

¹ Petar Kozić, "Sociografija nekih studentskih zapažanja o učenju, ispitima i dokolici", Univerzitet danas, XI, No. 2-3 (1970), p. 37.

² Ibid., p. 37.

³ Ibid., p. 37.

⁴ Vera Pilić, "Radni dan studenata i efikasnost univerzitetskih studija", Univerzitet danas, X, No. 6 (1969), p. 71.

⁵ Ibid., p. 71.

⁶ Jakim Sinadinovski, "Neke osobenosti i tendencije nastavno-obrazovnog procesa", p. 18.

attend lectures and seminars being fully alert up to four hours, 27.1 per cent up to three hours, 10.2 per cent for more than four hours, while 14.9 per cent were able to do so only up to two hours.¹ This suggests that little less than a half of students were not able to remain fully alert and attentive due to fatigue.

Lectures and seminars at institutions of higher education are not necessarily continuous. This would allow students to undertake individual studies during the time between lectures. However, since the ancillary services are not organized in such a way as to facilitate easy access to them, a further dissipation of time occurs. For example, institutions of higher education are usually scattered around the city. Only a few provide food services, while the central Refectory is usually located in only one place in the city. This alone causes commuting between various parts of the city at least twice a day. Furthermore, Students' Hostels are often found in the opposite end of the city from the location of the institutions. The Central University Library is also not within an easy geographical reach of students. Within the Central Library, there are no open stacks, and all reading material has to be ordered in advance. Two or three trips are necessary to obtain desired reading material. Departmental Libraries, although more easily accessible to students, also have no open stacks, and maintain a policy of ordering in advance. In addition, reading rooms at Departmental Libraries are an exception rather than a rule.²

¹ Petar Kozić, "Sociografija nekih studentskih zapažanja", p. 37.

² The above insufficiencies were observed in the autumn of 1971, when the author visited Yugoslav institutions of higher education.

Under these circumstances, mainly the irrational organization of courses which involve the overburdening with lectures and seminars, and irrational organization of ancillary services which do not provide an easy access to students, it is not surprising to find that a large proportion of students do not succeed in their studies. The discrepancy between high enrollments and low graduations is, at least partially, the end result of these circumstances.

The problems with the supply and recruitment of teaching and auxiliary staff also have had significant influence on the efficiency of higher education. The number of teaching and auxiliary staff at Yugoslav higher educational institutions doubled between 1959-60 and 1969-70; from about 8,500 to 16,000.¹ According to the figures for 1967-68, the largest number of staff is found at Faculties (10,833), followed by Two-year Post-secondary Schools (3,986).² Higher Schools of Learning accounted for 648 staff members and Art Academies for 483 staff members.³ Since the total number of students at all institutions of higher education slightly more than doubled within the decade, there does not seem to be any shortage of staff. However, the fact that almost a half of the staff members were employed on a part-time basis, and that a large number were hired on a contractual basis for a definite period of time, calls for some concern. For example, at Two-year Post-secondary Schools, in 1967-68,

¹ OECD, Reforms in Yugoslavia, p. 70., and Federal Institute for Statistics, Statistical Pocket-book of Yugoslavia, 1969, p. 99.

² Federal Institute for Statistics, Statistical Pocket-book, 1969, p. 99.

³ Ibid., p. 99.

out of 3,986 staff members, 1,781 were under contract.¹ At the same time, at Faculties, Higher Schools and Art Academies out of 11,964 staff members 8,811 were permanent full-time and part-time personnel, while 3,153 were hired on a contractual basis.² It should be noted that a trend towards the full-time employment of teaching and auxiliary staff is becoming more prevalent since 1966-67, although this is mostly only at Faculties, as seen in Table 7.

The data on student-teacher and student-auxiliary staff ratios between 1959-60 and 1966-67 indicate a tendency of diminishing student-teacher ratios, while the student-auxiliary staff ratios were on the increase. There was a particular shortage of the auxiliary staff at Two-year Post-secondary Schools, where in 1966-67 one auxiliary staff member was available for 106 students, as seen in Table 8.

The pool of the available staff was rather small at the beginning of 1960's, at the time when the network of the higher educational institutions was beginning to expand. Between 1945 and 1960 only 1,342 persons obtained Doctoral degrees.³ Even if all holders of Doctoral degrees had taken teaching positions at the beginning of the decade, there would not have been enough qualified staff to satisfy the needs of the teaching institutions. Between 1960 and 1970, however, a total of 2,991 persons

¹ Federal Institute for Statistics, Statistical Pocket-book, 1969, p. 99., and Filipović, "Higher Education, 1960-1970", p.93.

² Calculated from: Federal Institute for Statistics, Statistical Pocket-book, 1969, p. 99., and Filipović, "Higher Education, 1960-1970", p. 92.

³ Calculated from: Filipović, "Higher Education, 1960-1970", p.91.

TABLE 7
PERCENTAGE OF FULL-TIME EMPLOYMENT OF TEACHING
AND AUXILIARY STAFF 1963-64 AND 1966-67^a

	TEACHERS		AUXILIARY STAFF	
	1963-64	1966-67	1963-64	1966-67
TOTAL INSTITUTIONS	58.1	60.1	65.1	70.2
FACULTIES	67.6	72.2	71.1	74.1
HIGHER SCHOOLS OF LEARNING AND ART ACADEMIES	46.9	54.6	45.7	50.5
TWO-YEAR POST-SECONDARY SCHOOLS	42.9	44.9	31.9	42.6

^a DATA DERIVED FROM: OECD, REFORMS IN YUGOSLAVIA, p. 106.

TABLE 8
NUMBER OF STUDENTS PER TEACHING/AUXILIARY STAFF
MEMBER (FULL AND PART-TIME) FROM 1959-60 TO 1966-67^a

		1959-60	1960-61	1961-62	1962-63	1963-64	1964-65	1965-66	1966-67
TOTAL INSTITUTIONS	STUDENT-TEACHER	25	27	24	21	19	19	20	21
	STUDENT-AUXILIARY	24	27	27	26	24	25	27	30
FACULTIES	STUDENT-TEACHER	33	36	30	25	21	20	21	22
	STUDENT-AUXILIARY	21	22	22	21	18	18	19	21
HIGHER SCHOOLS OF LEARNING AND ART ACADEMIES	STUDENT-TEACHER	14	13	13	13	14	14	13	14
	STUDENT-AUXILIARY	16	18	22	16	22	20	21	23
TWO-YEAR POST-SECONDARY SCHOOLS	STUDENT-TEACHER	15	18	17	17	19	21	22	23
	STUDENT-AUXILIARY	65	88	83	90	66	83	91	106

^a DATA DERIVED FROM: OECD, REFORMS IN YUGOSLAVIA, p. 55.

obtained Master and Specialist degrees, and 3,471 additional persons obtained Doctoral degrees.¹ This would have remedied, to a certain extent, the shortage of the qualified staff, were it not for the fact that not all of those people were willing to take teaching positions. There was also a tendency to prolong the studies in master programmes beyond the prescribed time. For example, in 1968, out of 402 Master candidates, only 67 completed studies within two years, 79 after three years, 99 after four years, and 157 after five or more years.² If the completion of the master programmes takes such a long time, doctoral programmes most probably take even longer. This would naturally decrease the pool of the available qualified personnel.

Another salient factor preventing the available qualified staff from entering teaching positions is that of a very little incentive. For example, in Slovenia, which in 1967 had provided the highest salaries in Yugoslavia for personnel in pedagogical activities, teachers' salaries at institutions of higher education were still 25 per cent lower than those of persons with the same qualifications employed elsewhere.³ This would justify the tendency of the qualified staff to take a part-time teaching position at institutions of higher education, while holding another, better paid, full-time job elsewhere.

¹ Filipović, "Higher Education, 1960-1970", p. 89., p. 91.

² Ibid., p. 90.

³ Šefkija Žuljević, "Materijalni položaj univerzitetskih nastavnika i mogućnost vrednovanja naučnog i nastavno-pedagoškog rada na univerzitetu", Univerzitet danas, XI, No. 9-10 (1970), pp. 94-95.

The actual amount of staff employed at institutions of higher education on a permanent basis varies by different regions of the country. The largest number of permanent staff was found in 1967-68 to be in Serbia (3,719), followed by Croatia (2,569), while the Autonomous Province of Kosovo had only 141 permanent staff members at institutions of higher education, and the Republic of Montenegro 47.¹ The newly established institutions, particularly those in the underdeveloped regions, had considerable difficulties in attracting staff. Since they could not provide the same standard of living, nor did they have a cultural stimulus to which the qualified staff was accustomed in the older University centres, they had to resort to hiring of the staff on a contractual basis.²

Difficulties in recruitment and distribution of the qualified staff among the institutions of higher education can be also attributed to the fact that there are three different major languages employed in the country. This prevents a mobility of staff between the equivalent institutions across the borders of the republics.³ There are also minority languages to be considered, of which the Albanian language is spoken by the largest Yugo-

¹ Filipović, "Higher Education, 1969-1970", p. 92.

² Miloš Bogdanović, "Problemi izvođenja nastave iz društvenih nauka na univerzitetima u nedovoljno razvijenim regionima i mogućnosti za njenu modernizaciju", Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1970, Vol. 1: Obrazovni procesi u reformiranoj nastavi, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1970), p. 4.

³ These difficulties, along with those of differences in teaching standards, were experienced to a considerable extent by students and teaching staff after the earthquake in Skopje in 1964, when students and staff were accommodated at other higher educational institutions in the country.

slav minority in the Autonomous Province of Kosovo. Since at the institution of higher education in Kosovo both Serbo-Croatian and Albanian languages are spoken, there has been a constant shortage of qualified staff who are proficient in the Albanian language.¹

Besides hiring staff on a contractual basis, the institutions which failed to attract permanent qualified staff, also had to hire unqualified personnel, largely from industry and other economic activities. These staff members are given the opportunity to gain their degrees while employed at institutions of higher education. Besides being periodically absent to fulfill their own course requirements, which interferes with their teaching activities, these staff members have had no previous teaching experiences, and have had no pedagogical training. This prevents them from carrying out their duties on the same level as the fully qualified staff would normally do.

The rapid expansion of higher education, both in number of institutions and enrollments, combined with the relatively small pool of the qualified staff at the beginning of the decade, resulted in the unsatisfactory distribution of qualified personnel. It seems that the accelerated numbers of Doctoral and Master degree holders, within the last ten years, were not able to alleviate this shortage. The steady employment outside of the educational field, and the non-competitive salaries at institutions of higher education to those in industry and other activities, have prevented the newly qualified staff from entering teaching positions at institutions of higher

¹ Bogdanović, "Problemi izvođenja nastave u nedovoljno razvijenim regionima", p. 4.

education on a permanent basis. The less qualified and the less experienced have found their way into the institutions of higher education, particularly at the newly established institutions in economically and culturally underdeveloped regions. This staffing pattern has contributed to the lowering of the teaching quality in general, and is partly responsible for the relatively low graduation figures.

Additional deficiencies of the higher educational system include the financing of students, which has a definite bearing on their standard of living. The standard of living of students in higher educational institutions is not high enough. This partly contributes to the high drop-out rate, or a prolonged stay at institutions due to the repeating of courses and years of studies. Consequently, the low standard of living contributes to the lowering of the graduation percentages.

In the area of student accommodations, the number of places in Student Hostels grew by 77 per cent from 1959-60 to 1965-66, but at the same time, the number of the full-time students, eligible to enter Hostels, grew by 55 per cent.¹ In 1965-66, 37.4 per cent of the full-time students lived in places where the institutions they attended were located, while 62.6 per cent came from other places, and needed accommodation.² The disproportion between the number of full-time students and the number of available places in Student Hostels puts a large number of students in a disadvantaged position. Students who do not gain entrance to the Hostels

¹ Toša Tišma, "Naše visoko školstvo u svetlu nakih statističkih podataka", Univerzitet danas, VIII, No. 5, (1967), p. 45.

² Ibid., p. 45.

have to spend larger amounts on accommodations, and also have no proper facilities for studying.

The availability of funds for students has been on a decrease. Even in the most economically developed Republic of Slovenia, the funds diminished considerably within the last five years of the decade. While the number of students at the University of Ljubljana in Slovenia grew by 14 per cent, between 1965-66 and 1969-70, the number of those receiving stipends was lowered by 12 per cent.¹ The amount of the stipend received was not enough to cover the expenses, since the average stipend amounted to 330.00 new dinars, while the real needs were around 615.00 new dinars.² The situation was worse in other, less developed republics.

The Student Loan System (bank credit) was introduced in 1963-64, and the percentage of students benefitting from it has been growing. In Croatia alone, the percentage of students taking out Student Loans grew from 7.6 per cent in 1963-64 to 28 per cent in 1968-69.³ The Student Loan recipients have proven to be better students in terms of more regular enrollments into the next year of studies. It was established that about 15 per cent of students receiving Loans do not enter into the next year of studies, in comparison to 40-45 per cent of the rest of the full-time

¹ Jože Konc, "Osipanje studenata", Universitet danas, XI, No. 9-10 (1970), p. 84.

² Ibid., p. 84.

³ Ivo Cević, "Kreditiranje studenata sa aspekta reforme visokog školstva", Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1969, Vol. I: Integracioni procesi na univerzitetu, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1969), p. 9.

students.¹ Unfortunately, the amount of the Loan is insufficient as it does not cover the cost of studies; 320.00 new dinars, which students received as a Loan in 1968-69, covered only about half of the cost, and in previous years it used to be even smaller.² Since the Student Loan system is set up by the individual republics, the stage of development of each republic is necessarily reflected in the amount of the funds allocated for this purpose. In this way the regional developmental differences are transferred to the area of higher education. The Republics of Croatia and Slovenia, for example, had in 1961-62 the proportion of students below the national average, and yet had the largest national revenues.³ Macedonia and Montenegro, at the same time, had the higher proportion of students, and much smaller revenues.⁴ Education is considered one of the channels of social mobility, especially in the poorer parts of the country. Students and their families in those parts had to carry a larger financial burden themselves, because the revenues of the republics could not cover the cost of living of students. In many cases, this meant that students had to take up employment, even though that might have interfered with their studies.

The insufficient standard of living, including the unavailability of accommodations, stipends, loans and funding by republics, has

¹ Ibid., p. 10.

² Ibid., p. 9.

³ Rudi Supek, "Sveučilišna politika obrazovanja, socijalno porijeklo studenata i uspjeh u studiranju", Univerzitet danas, VIII, No. 6 (1967), p. 56.

⁴ Ibid., p. 56.

contributed to the lowering of the percentage of graduates. It caused dropping out and repeating of courses, and prolonging of studies, which in turn lowered the graduation figures.

The serious lack of funds interfered with the improvement of the quality of teaching at the institutions of higher education. In the academic year 1969-70 the average cost per one student at the institutions of higher education reached the figure of 5,244 new dinars.¹ At the same time the share of higher education in the total educational expenditures was only 15.1 per cent.² While the institutions of higher education expanded greatly and the enrollments more than doubled within the decade, the percentage of shares in the total educational expenditures remained almost the same and even dropped; in 1959-60 this percentage was 16.5 per cent and in 1967-68 it was only 13.2 per cent.³

The bulk of expenditures in higher education goes for the personnel's income and very little is being invested into buildings and teaching materials. Between 1961 and 1964, 69.3 per cent of expenditures went for the personnel, 27.5 per cent for the material needs, and 3.2 per cent on amortization.⁴ Compared to some other countries the material expenditures were very low even in the period of lesser restrictions in capital investments. (In the same period Belgium invested 41.5 per cent in material growth, Finland 37.6 per cent, and USSR 45.7 per cent).⁵ After the socio-

¹Filipović, "Higher Education, 1960-70", p. 99.

²Ibid., p. 99.

³Ibid., p. 99.

⁴Supek, "Sveučilišna politika obrazovanja", p. 50.

⁵Ibid., p. 50.

economic reform of 1965, the new capital projects came to a virtual stop in all areas of education. Investments in education were resumed in 1967. The share of the higher education in the funds allocated for financing of school facilities improved during the 1967-69 period, reaching 10.9 per cent in 1967, 19.6 per cent in 1968, and 16.1 per cent in 1969.¹

In view of the deficient funding of higher education, especially the low investment in buildings and equipment, it is not surprising to find that institutions of higher education had no proper space, equipment, technical aids, technological and other educational materials, even books, as the analysis of teaching deficiencies at Yugoslav Universities has revealed.² For example, Medical Pharmaceutical and Stomatological Faculties reported inadequate space, lack of laboratories, inadequate supply of teaching material, and outdated teaching equipment.³ Faculties of Technical Sciences reported inadequate space, inadequate technical equipment and laboratory materials, and the lack of the foreign currency for modernization of the teaching equipment.⁴ Faculties of Agriculture, Forestry, and Veterinary Science reported similar deficiencies, plus the inadequate supply of agricultural and other lands for the practical work of students.⁵ Faculties of Social Sciences, and Faculties of Natural

¹ Filipović, "Higher Education, 1960-1970", p. 100.

² Ladislav Končar, ed., "Stanje i problemi nastave na univerzitetima u SFRJ", Univerzitet danas, VII, No. 4-5 (1966), pp. 3-122.

³ Ibid., pp. 7-8., p. 22.

⁴ Ibid., p. 28., pp. 47-48., p. 51., pp. 57-58.

⁵ Ibid., p. 68., p. 72., p. 78.

Sciences reported insufficient space, inadequate supply of audio-visual materials and foreign literature, and the lack of laboratories and laboratory materials.¹

The above findings indicate that the teaching processes at institutions of higher education became outdated through the lack of investments. The low percentage of graduates can thus be attributed to the improper teaching, caused by the insufficient funding of higher education. Furthermore, these deficiencies, combined with the deficiencies in funding of students, show the unrealistic planning of the expansion of higher education without the provision for the sufficient financial back-up.

Fulfillment of Manpower Requirements

The aims of the reforms of higher education included the build-up of the system which would be able to produce the highly qualified personnel matching the needs of the economy. Data on the educational structure of the manpower in Yugoslavia indicate that the shortage of personnel with the appropriate educational qualifications had not been alleviated. For example, in 1966, of 1,377,000 people employed in industry only 22,343 had higher educational qualifications.² At the same time, about 800 industrial enterprises had no engineer or other professional with higher educational qualifications.³ In Serbia, in 1966, of 15,943

¹Ibid., p. 90.

²Miloš Bogdanović, "Problem zapošljavanja diplomiranih studenata (Sa specijalnim osvrtom na kodrove u poljoprivredi)", Univerzitet danas, IX, No. 1 (1967), p. 38.

³Ibid., p. 38.

directors of working organizations, and directors of sectors of economy, 33.2 per cent had elementary school qualifications, 48.6 per cent had secondary school qualifications, 3.9 per cent were graduates from Two-year Post-secondary Schools, and 14.3 per cent were graduates from Faculties.¹ Even in Slovenia, the most developed region of the country, about 40 per cent of directors of working organizations had only elementary school qualifications.² The educational structure of persons employed in industry in 1969 was still unsatisfactory, as every third employee had less than eight years of elementary education, every sixth had more than elementary but less than secondary education, every eighth employee had the full secondary education, and only every thirty-fifth employee had the higher educational qualifications.³

The unsatisfactory manpower structure, however, did not persist because of the lack of graduates. Already at the end of 1965, 2,000 graduates from institutions of higher education were registered at the labour exchange offices seeking employment.⁴ At the end of 1967, it was estimated that close to 60,000 graduates were seeking employment.⁵

¹ Ibid., p. 38.

² Lendvai, Eagles in Cobwebs, p. 135.

³ Milan Benc, "Neke tendencije u promjenama kadrovske strukture u privredi i kontinuirano obrazovanje", in Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1970, Vol. I: Obrazovni procesi u reformiranoj nastavi, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1970), p. 3.

⁴ Bogdanović, "Problemi zapošljavanja diplomiranih studenata", p. 40.

⁵ Lendvai, Eagles in Cobwebs, p. 106.

In addition, the proportion of the technically trained manpower seeking employment abroad rose from 16 per cent in 1965 to 37 per cent in 1967.¹ This indicates a discrepancy between the planned results of the higher educational reforms, and the actual demand of the economy for manpower with higher educational qualifications. It was expected by the designers of the reforms that the improved higher education would produce a larger number of graduates and that those graduates would be quickly absorbed by the economy, thus improving the efficiency of economic activities. The economic enterprises had, however, continued to hire personnel with lower educational qualifications for the positions which would normally have to be filled by graduates from higher educational institutions. For example, it was estimated that in 1967, out of each hundred jobs requiring professional skills, only fifty-four were filled by men with appropriate training.² At the same time, from 264,000 skilled and highly skilled new graduates, who completed their education at higher educational institutions and secondary schools during the 1965-67 period, 150,000 could not find employment.³

The employment opportunities of new graduates have decreased after the introduction of the 1965 economic reforms. The economic reforms of 1965 placed the emphasis on the qualitative improvement of economy, which resulted in reduction of investments for quantitative expansion of economic activities. The individual enterprises had to pursue policies of tighter control over expenditures, and to increase their efficiency

¹ Ibid., p. 135.

² Ibid., p. 135.

³ Ibid., p. 135.

without expanding their personnel. Furthermore, the skills of the available graduates from higher educational institutions did not match the needs of the industry. There has been a relative shortage of graduates in the professions most suited for employment in industry, most particularly those from the fields of Engineering and Technology. At the same time there has been a higher concentration of graduates from Social Sciences and Liberal Arts from Faculties, Higher Schools of Learning and Art Academies throughout the decade, as seen in Table 9.

TABLE 9

GRADUATES FROM FACULTIES, HIGHER SCHOOLS OF LEARNING
AND ART ACADEMIES 1960-1970, BY FIELDS
OF STUDIES^a

Fields of studies	No. of graduates	Percentage
Social Sciences and Liberal Arts	55,114	44.4
Natural Sciences	8,023	6.4
Medicine, Dentistry, Pharmacology	18,318	14.7
Agriculture, Forestry, Veterinary Science	13,282	10.7
Engineering and Technology	29,467	23.7

^a Filipović, "Higher Education, 1960-70", p. 84.

At Two-year Post secondary Schools there was also a prevalence of graduates from Social Sciences and Liberal Arts, even though there were twenty-four new schools established in the fields of Engineering and Technology between 1960-61 and 1968-69. At Two-year Post-secondary Schools and the first level of studies at Faculties, there was an increase of graduates from Engineering and Technology from the total of 54 graduates in 1960 to

3,023 in 1965, but the number of graduates again decreased in 1968 to 2,416.¹ In proportion to the total number of graduates from Two-year Post-secondary Schools, graduates from Engineering and Technology were represented by 1.2 per cent in 1960, 18.6 per cent in 1965, and by 13.3 per cent in 1968.² In 1969-70, of the total number of graduates from Two-year Post-secondary Schools, 77.9 per cent obtained certificates in Social Sciences and Liberal Arts, and only 10.6 per cent in Engineering and Technology.³

Distribution of the available graduates in 1961 indicates that almost three-quarters were employed in the non-productive activities, while only 26 per cent were employed in industry.⁴ At the same time, the highest concentration of persons with higher education was found in the big cities of Belgrade, Zagreb, Ljubljana, and Sarajevo, where 50 per cent of the total number of persons with higher education were located.⁵ This indicates that the rest of the country had not had its share of the personnel with the higher educational qualifications, neither in industry nor in non-productive activities. The larger number of graduates began to be produced by institutions of higher education in 1966-67, (the annual graduation figures almost doubled between 1959-60 and 1966-67, from 14,928

¹ Filipović, Higher Education in Yugoslavia, p. 29.

² Calculated from: Filipović, Higher Education in Yugoslavia, p. 29.

³ Filipović, "Higher Education, 1960-70", p. 84.

⁴ Toša Tišma, "Naše visoko školstvo u svetlu nekih statističkih podataka", Univerzitet danas, VIII, No. 5 (1967), p. 44.

⁵ Ibid., p. 44.

to 28,678), and a surplus of graduates was noticeable in the big cities.¹ Although the employment was not easily available in the big cities, the unemployed graduates were reluctant to enter employment in the smaller places within the country. Graduates who could not find employment in the bigger industrial and cultural centers, in accord with their education and skills, resorted to accepting employment in the less skillful positions in the big cities, or they took employment abroad regardless of their attained education.

The unsatisfactory educational structure of the personnel and the rise of unemployment of graduates were both, at least partly, results of discrepancies between educational and economic policies. The rapid expansion of higher education within the period from 1959-60 to 1962-63, did not begin showing results until 1966-67, when these results were no longer appreciated. Restrictions placed on expansion of economic activities, introduced by the 1965 economic reforms, have decreased opportunities for improvement of the educational structure of manpower. Should the higher education been more efficient in the earlier period, this situation could have probably been corrected.

Summary

The percentage of students who graduated from Yugoslav institutions of higher education, to those who were enrolled during 1960-70 decade, was very low. This phenomenon can be traced to problems involving students' approach to studies, in particular the prolonged stay at institutions, the

¹ OECD, Reforms in Yugoslavia, p. 176.

high drop-out rate, and the high rate of abstentions from and failures of examinations.

In addition to the above problems deficiencies of the higher educational system have contributed to the lowering of the graduations from institutions of higher education. These deficiencies were the irrational organization of courses and ancillary services, the insufficient supply of teaching and auxiliary personnel, the low standard of living of students caused by the insufficient financing, and the insufficient investments in higher education.

In spite of the relatively low graduations a surplus of graduates occurred in the middle of the decade 1960-70. This surplus can be attributed to the effects of the economic reforms of 1965, particularly to restrictions of economic expansion which had resulted in reduction of employment in general. This surplus of graduates can also be attributed to the fact that the skills of the available graduates did not match the actual requirements of the economy, as the larger number of graduates completed courses in Social Sciences and Liberal Arts than those in the fields of Engineering and Technology.

Distribution of graduates did not correspond to the economic development of the country, since the majority of graduates were employed in non-productive activities. The poor balance of graduates was also found between the big cities and the smaller places in the country, because graduates preferred to stay in the big cities even though they had difficulties finding appropriate jobs.

The unfulfilled manpower requirements were not consequences of

the relatively low graduations. The persistence of the low educational structure of the employed population can, more properly, be attributed to the lack of the realistic manpower planning.

CHAPTER IV

THE PROBLEM OF DEMOCRATIZATION IN HIGHER EDUCATION

Feasibilities of Access to Higher Education

The principle of equal opportunity in higher education was incorporated in higher educational reforms with the purpose to decrease influence of social differences on the accessibility to higher education. The higher educational acts made provisions for the enlargement of the network of higher educational institutions and its more balanced distribution throughout the country. They also made provisions for the introduction of the systematic part-time studies at all institutions of higher education, and for the enrollment of persons lacking secondary school qualifications. These designs for the improvement of higher education have largely been implemented within the decade 1960-70. It remains to be seen if these improvements of the higher educational system have resulted in a more proportionate enrollments of candidates from the lower socio-economic strata. The subsequent discussion shall examine the patterns of enrollment at institutions of higher education focusing attention on the background of candidates. In particular, the attention shall be centered on the social, regional, and educational background of the candidates in order to determine the extent of their influence on accessibility to higher education.

Studies of the social origin of students enrolling at institutions

of higher education within the decade 1960-70 have found that, on an average, about one-fifth of students came from the working class families.¹ Data for 1968-69 show that only 13 per cent of students came from families of the "blue collar" workers.² This seems rather low in comparison to 32 per cent in USSR, 30 per cent in USA, and 25 per cent in Great Britain.³ Furthermore, the analysis of enrollments at the University of Skopje between 1964-65 and 1968-69 found that, although there was a significant increase of enrollments into the first year of studies, the percentage of students from the families of the "blue collar" workers increased only from 19.95 per cent to 20.17 per cent.⁴ The percentage of candidates from the families of agricultural workers decreased within that period from 21.38 per cent to 14.09 per cent.⁵

Interestingly, the regional origin of students at Yugoslav institutions of higher education reflects an anomaly. The proportion of students in the total population by republics is negatively correlated to

¹ Rudi Supek, "Sveučilišna politika obrazovanja", p. 446.

² Miroslav Vujević, "Prijemni ispiti - socijalna selekcija", Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1968, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1968), p. 1.

³ Ibid., p. 1.

⁴ Miloš Miloševski, "Slobodni upis na Skopski univerzitet kao fenomen u Jugoslavenskom visokom školstvu i njegove aplikacije na obrazovni proces u reformiranoj univerzitetskoj nastavi", Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1970, Vol. I: Obrazovni procesi u reformiranoj nastavi, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1970), p. 3.

⁵ Ibid., p. 3.

per capita income, as seen in Table 10. However, it should be noted that: "the greatest proportion of young people enrolling in institutions of higher education come from the parts of the country with larger urban units, from the economically developed regions, and from the coastal region of Yugoslavia; the smallest proportion comes from the under-developed continental regions".¹

The distribution of students among the institutions of higher education, by their educational background, indicates a prevalence of students who had completed secondary general schools. In 1966-67, 95 per cent of the secondary general school graduates continued in higher education; 89.5 per cent as full-time, and 5.5 as part-time students.² At the same time, 52.4 per cent of the secondary vocational school graduates continued in higher education; 32.2 per cent as full-time and 20.2 as part-time students.³ The growth of secondary education showed, since 1961-62, a steady increase of graduates from the secondary vocational schools over those from the secondary general schools. In 1959-60, 14,665 graduated from secondary vocational schools and 17,330 from secondary general schools.⁴ In 1961-62, 4,915 more students graduated from vocational secondary schools than from

¹ M. Rašović, "Regionalno porijeklo studenata Jugoslavije", (Belgrade, I.D.N., 1965), p.28; quoted in: Rudi Supek, "Sveučilišna politika obrazovanja", p. 425; and quoted in translation in: OECD, Reforms in Yugoslavia, p. 62.

² Toša Tišma, "Naše visoko školstvo u svetlu nekih statističkih podataka", p. 38.

³ Ibid., p. 38.

⁴ Ferdo Demori, "Uloga viših škola u visokoškolskom obrazovanju", Institut za društvena istraživanja Sveučilišta u Zagrebu, Simpozij: Društveni i ekonomski aspekti obrazovanja, 1971, Vol. I: Više škole u visokoškolskom obrazovanju, (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1971), p. 5.

TABLE 10
REGIONAL REPRESENTATION OF STUDENTS IN RELATION
TO NATIONAL PER CAPITA INCOME FOR 1961-62^a

REPUBLIC	NUMBER OF STUDENTS	NUMBER OF STUDENTS PER 10000 INHABITANTS	NATIONAL PER CAPITA INCOME IN OLD DINARS
YUGOSLAVIA	157,539	85.1	164,650
BOSNIA-HERZEGOVINA	20,042	61.2	115,851
CROATIA	35,154	84.7	205,844
MACEDONIA	12,904	91.8	105,303
MONTENEGRO	5,863	124.1	112,733
SERBIA	71,731	94.0	144,576
SLOVENIA	11,838	74.7	323,808

^a SOURCE: M. RAŠOVIĆ, REGIONALNO PORJEKLO STUDENATA JUGOSLAVIJE, (BELGRADE: IDN, 1965), QUOTED IN RUDI SUPEK, "SVEUČILIŠNA POLITIKA OBRAZOVANJA, SOCIJALNO PORJEKLO STUDENATA I USPJEH U STUDIRANJU", UNIVERZITET DANAS, VIII, NO. 6 (1967), p. 56.

secondary general schools.¹ Since 1961-62, between five and eight thousand more students have been annually graduating from secondary vocational schools than from secondary general schools.²

In spite of the increasing numbers of graduates from secondary vocational schools proportionally fewer entered institutions of higher education than those from secondary general schools. Furthermore, those who entered were more easily accepted at all other institutions but the Faculties, as seen from the following data. In 1966-67 the percentage of the vocational school graduates in the total enrollments was at Faculties 31.8 per cent, at Higher Schools of Learning 35.0 per cent, at Art Academies 71.5 per cent, and at Two-year Post-secondary Schools 51.8 per cent.³ Data for the academic year 1969-70 show that a larger proportion of the secondary general school graduates were admitted at Faculties (62.4 per cent), while only about one-third (37.6 per cent) were graduates of secondary vocational schools.⁴ At Two-year Post-secondary Schools the trend was reverse; 65.4 per cent of all new entrants were secondary vocational school graduates, and 34.6 per cent were secondary general school graduates.⁵

This disproportion in enrollment between the secondary general and

¹ Ibid., p. 5.

² Ibid., p. 5.

³ Toša Tišma, "Naše visoko školstvo u svetlu nekih statističkih podataka", p. 38.

⁴ Filipović, "Higher Education, 1960-1970", p. 77.

⁵ Ibid., p. 77.

secondary vocational school graduates is further evident when the full-time and the part-time enrollments are compared. For example, in 1969-70, 69.9 per cent of the total first year full-time students at Faculties had completed secondary general school, while 30.1 per cent had completed secondary vocational school.¹ In the part-time enrollments this trend was reversed, as 33.7 per cent of the first year part-time students at Faculties had completed secondary general schools, and 66.3 per cent secondary vocational schools.² At Two-year Post-secondary Schools, the first year full-time students, in 1969-70, were equally represented by graduates from secondary general and secondary vocational schools. However, in the part-time enrollments, only 21.0 per cent had completed secondary general school, while 79.0 per cent had completed secondary vocational school.³ It is evident that, by the end of the decade, the primary route to higher education for the secondary vocational school graduates was becoming that of the part-time enrollment.

The fact that Faculties enrolled full-time only 30.1 per cent of the graduates from secondary vocational schools, while Two-year Post-secondary Schools enrolled 50 per cent of these graduates, clearly indicates that graduates from secondary vocational schools have been enrolling in significantly larger numbers at Two-year Post-secondary Schools.⁴ This indicates

¹ Ibid., p. 77.

² Ibid., p. 77.

³ Ibid., p. 77.

⁴ Filipović, "Higher Education, 1960-1970", p. 77.

that institutions of higher education have become divided in terms of their orientation on academic and non-academic courses, and the graduates from secondary vocational schools more easily enrolled at institutions offering non-academic courses. Furthermore, in spite of the fact that there was a high percentage of part-time enrollments of secondary vocational school graduates at Faculties, Higher Schools of Learning, and Art Academies, the proportion of these graduates was on a decrease after 1965-66, since the total part-time enrollments at these institutions were decreasing. Between 1965-66 and 1969-70, part-time enrollments at Faculties, Higher Schools of Learning, and Art Academies decreased from 22.3 per cent to 18.1 per cent.¹ During the same period part-time enrollments at Two-year Post-secondary Schools remained above the 50 per cent mark.²

The educational background of the students at the institutions of higher education is connected to their social and regional origin. It was found that:

Children from working-class families also reach higher education largely through secondary technical schools, while those from families with a higher social status or educational background usually reach higher education via grammar schools....Almost 40% of students from unskilled workers' families, and almost 50% of those from rural homes, reach higher education via secondary technical schools. On the other hand, almost 90% of students from the families of people with university qualifications come to institutions of higher education as grammar school leavers.³

¹ Ibid., P. 81

² Ibid., p. 81

³ OECD, Reforms in Yugoslavia, p. 63.

Since the secondary vocational school graduates enter institutions of higher education in lesser numbers than those from secondary general schools, it is obvious that there is a definite stratification within the educational system based on the social, regional, and educational background of students and their families.

The patterns of enrollment at institutions of higher education during the period 1960-70 indicate that the social, regional, and educational background of candidates applying for admission have continued to influence the accessibility to higher education. The improvements of the higher educational system have therefore not resulted in a more proportionate enrollment of candidates from the lower socio-economic strata to the extent which was expected by the legislators of the higher educational reforms.

Evolution of the Restrictive Higher Education

The concept of the open higher education, accessible to all, had gradually given way to the idea of restrictive higher education. Several factors made this shift of policies in higher education necessary. The general demographic trends during the last ten years indicate the high percentage of the youth of school age among the Yugoslav population. Approximately 10 per cent of the total population was in the age group between fifteen and nineteen, and another seven per cent between the age of twenty

and twenty-four.¹ There was an increase in the secondary school attendance among the youth of the school age. While in 1961 the attendance of the secondary schools by the youth between the age of fifteen and nineteen was 27.7 per cent, by 1965 it increased to 32.3 per cent.² There was an increase of graduates from secondary schools between 1959-60 and 1968-69. In 1959-60, 31,995 students graduated from secondary schools, in 1965-66, 64,418 students graduated, and in 1968-69, 80,727 students graduated from secondary schools.³ The increase of graduates from the secondary schools resulted in a great pressure on institutions of higher education in terms of the number of candidates applying for admission. This pressure became stronger when the rise of unemployment occurred in the mid sixties. Institutions of higher education had to seek some measures by which to curb the influx of candidates. Since the 1964 General Law on Education left it up to the individual institutions to determine conditions and stipulations for admission of candidates, pressured institutions opted for selective enrollments. It was also felt that by the proper selection of candidates the drop-out rate after the first year, which reached as high as 50 per cent of students, would be eliminated.

Institutions, which were highly pressured by the candidates, were given the right to request that the number of candidates, to whom admission should be granted, be fixed by the Executive Committees of the republics. In this way, certain institutions obtained the status of the institution with

¹ Calculated from: Statistical Pocket-book of Yugoslavia, 1967, p. 22., and Statistical Pocket-book of Yugoslavia, 1969, p. 22.

² Rudi Supek, "Sveučilišna politika obrazovanja", p. 412.

³ Ferdo Demori, "Uloga viših škola u visokoškolskom obrazovanju", pp. 4-5.

the approved numerus clausus. The criteria for the selection of candidates was, however, left to be regulated by the individual institutions. Until 1964-65 the most frequently employed criteria for the selection of candidates were candidates' marks from the secondary school. Since then the qualifying examinations have been gradually introduced because the marking system of the secondary schools was not considered valid, as there were discrepancies in marking among individual schools. Since qualifying examinations were designed by individual institutions, the criteria for admission varied greatly. Some institutions stipulated that all candidates must take qualifying examinations, others exempted candidates with the best marks from the secondary schools, and yet others combined the criteria, as the study "Sistem upisa na prvu godinu studija na univerzitetu u Jugoslaviji, 1967-68" reveals.¹

Institutions which obtained the status with the approved numerus clausus, regardless of the criteria for the selection of candidates they employed, had the right to refuse entrance to all candidates once their approved number of students was filled. Candidates, no longer assured of their admission to institutions of higher education of their primary choice, began applying to several institutions at the same time. Since institutions of higher education became divided along the lines of the ease of entry, the less successful candidates began to flood institutions which employed less restrictive measures for enrollment. Consequently, the influx of candidates to institutions which had no approved numerus clausus, had to be curbed and

¹ Vladimir Serdar, "Sistem upisa studenata u prvu godinu studija na univerzitetu u Jugoslaviji, 1967-68", (Zagreb: Institut za društvena istraživanja Sveučilišta u Zagrebu, 1968), p. 5.

regulated by more rigorous selectionary measures. By the end of the decade, almost all institutions of higher education were applying restrictive measures in order to curb enrollments, which meant that the open entrance was definitely replaced by highly selective position. Data for 1967-68 show that from the total of 107 Faculties only seventeen maintained a system of open enrollments.¹ Only 20 per cent of the total number of first year full-time students and 10 per cent of the first year part-time students were enrolled in this manner.² From the total of 107 Faculties, forty-seven fell into the category of institutions with the approved numerus clausus.³ This indicates that forty-three institutions which had no approved numerus clausus also employed effective selectionary measures. These usually took the form of qualifying examinations. In 1967-68 over 32,000 students sat for qualifying examinations of which little over 19,000 passed and little over 15,000 were enrolled.⁴ This presents a marked reduction of over 50 per cent of candidates, and consequent diminution of their opportunities in higher education.

The shift towards the selective enrollments is justifiable as a prevention from the overcrowding of institutions of higher education. This especially in view of the lack of space, lack of teaching and auxiliary staff, and the insufficient material basis which institutions experienced during the decade 1960-70. However, some negative by-products emerged as a result of

¹ Serdar, "Sistem upisa studenata u prvu godinu studija", p. 6.

² Ibid., p. 6.

³ Ibid., p. 8.

⁴ Ibid., p. 10.

this policy, such as the stratification of institutions of higher education in terms of their prestige. Furthermore, the introduction of qualifying examinations, for which criteria were not made uniform, resulted in a negative selection of students, that is, institutions with less restrictive stipulations ended up enrolling the least promising candidates.

Qualifying examinations were, to a large extent, based on testing of the knowledge of subjects taught at secondary general schools.¹ This resulted in a disadvantaged position of graduates from secondary vocational schools who had not been exposed to the subject matter in the same depth as their counterparts from secondary general schools. Candidates from the peripheral regions of the country were also no match for candidates from the big urban centers, regardless of whether they completed secondary vocational or general school. Even though they might have been the best students in their schools, they have been exposed to a much lesser degree to the modern technology, and cultural stimuli. They often had only mediocre teachers. Through no fault of their own, these candidates were more likely to be rejected by those institutions of higher education which employed severe measures for reduction of entrants. In this way, the opportunities in higher education have automatically decreased since the choice of courses and institutions became limited.

Summary

The analysis of the enrollment at Yugoslav institutions of higher education within the period 1960-70, shows that only about one-fifth of the

¹ Vujević, "Prijemni ispiti - socijalna selekcija", p. 3.

students come from the working class. The analysis also shows that a greater proportion of students come from larger urban units, and from more developed regions of the country. Furthermore, it was found that a larger proportion of entrants into institutions of higher education have the secondary general school background. The part-time studies provide the alternate route to higher education for candidates with the secondary vocational background. There is a prevalence of students with the secondary vocational school background at Two-year Post-secondary Schools, while considerably higher proportion of students with the secondary general school background enroll into Faculties. These patterns indicate that the social, regional, and educational background of candidates applying for admission have continued to influence the accessibility to higher education. In spite of the improvements of the higher educational system, the aim of the reforms of higher education to make higher education easily accessible has not been fully realized.

Contrary to the notion of democratization of opportunities in higher education, the enrollments became restricted, as higher education became increasingly selective. Criteria for the selection of candidates varied considerably, because the higher educational legislations left these matters for the individual consideration by institutions of higher education. The only stipulation given in the legislations of higher education, in regard to the selection criteria, was the approval of the fixed number of candidates at the most pressured institutions. Even though qualifying examinations were designed by the individual institutions, they were mostly based on the knowledge of subject matter from secondary general schools.

This put candidates from secondary vocational schools and those from the peripheral regions of the country in a disadvantaged position.

The restrictive enrollments evolved as a result of the necessity to prevent overcrowding of students at institutions of higher education. Measures devised in that regard have, however, produced also some negative results. These are, the stratification of institutions by their prestige, and a negative selection of students based on the prestige of institutions and students' success at qualifying examinations.

The shift towards the restrictive enrollments, particularly the application of the selectionary measures, further aggravated social selection among the population aspiring to higher education. Contrary to the principle of democratization of opportunities for educational advancement, the shift towards the selective higher education decreased these opportunities.

CONCLUSION

The objective of this study was to analyze patterns, dimensions of growth, and consequences of development of higher education in Yugoslavia between 1960 and 1970, with the aim to determine whether the goals of the higher educational reforms were achieved.

Two particular problems were selected for this analysis: the success of the higher educational reform in fulfilling the manpower requirements for the skilled personnel; and the effects of reform on democratization of opportunity in higher education.

The relevant findings of this study are discussed in the subsequent section.

Summary of the Findings

Higher educational reform aimed at the improvement of the system of higher education. Planners of the higher educational reform specified that the improved system should be capable of producing highly qualified personnel in accord with the requirements of the economy. In addition, planners expected that the improved system of higher education would provide easier access to higher education to all capable candidates, regardless of their socio-economic, regional, and educational background.

Designs for the improvement of the system included the following: expansion of the network of higher educational institutions, introduction of part-time studies at all institutions of higher education, augmentation of enrollments, extension of admission to persons with inadequate formal education,

and reorganization of the study-courses. In addition to the quantitative expansion of higher education which the above designs facilitated, in the second half of the decade the improvement of the quality of instructional and research programmes was emphasized.

Development of higher education was a dynamic process which responded to changes in economy and politics. The earlier period of the reform from 1960 to 1963 is characterized by the numerical expansion of higher education in accord with the policies of expansion applied in economy. The change of emphasis to that of the better quality of higher education evolved within the context of economic reforms of 1965. The 1966-70 Social Development Plan underlined the importance of intensification of economic activities, and improvement of the quality of production. Higher education responded to this change by establishing priorities of modernization, rationalization, and integration of institutions and their instructional programmes. The implementation of these priorities was evident mostly during the last three years of the 1960-70 decade. During that period teaching and research programmes were scrutinized in view of their rationale, and were integrated to form a more cohesive system.

Parallel to the response to changes in economic priorities, higher education responded to decentralization and democratization of political and governmental affairs. Following the enactment of the 1963 Constitution the principle of self-management was applied to higher education. This principle was incorporated in educational legislation, financing, and management. As a result of the implementation of the self-management principle, a particular kind of democracy evolved, equalizing the status of students and teachers

in direct governing and management of institutions of higher education.

Most of the designs for improvement of higher educational system were implemented between 1960 and 1970. The network of institutions was enlarged, distribution of institutions became more balanced throughout the country, enrollments increased, part-time studies were introduced at almost all institutions, the possibility of enrollment of persons with inadequate formal education was established within the reasonable limits, and the study-courses were reorganized to form three different levels. A division of the studies on the levels was, however, recognized as a mistake, and was subsequently corrected by the gradual reversal to the earlier system of full four-year courses, between 1966-67 and 1969-70.

In spite of the implementation of designs for improvement of the system of higher education, the expected improvement of the efficiency of higher education remained low, particularly in terms of the disproportion of enrollments and graduations. The unsolved problem of low graduations was traced to the students' approach of studies, in particular the prolonged duration of studies, the high drop-out rate, and the high rate of abstentions from and failures of examinations. It was found that deficiencies of higher educational system were also responsible for the low performance of higher education. These deficiencies include the irrational organization of courses, inaccessibility of ancillary services, insufficient supply of teaching and auxiliary staff, and the insufficient financing of students and higher educational institutions.

The effectiveness of higher education in fulfillment of the manpower requirements for the skilled personnel was found to have been very low. The educational structure of the personnel employed in industry remained

unsatisfactory. On the other hand, the available graduates, particularly in the second half of the decade, had difficulties finding employment. This situation was caused by discrepancy in planning of the economic activities and the output of higher education. More specifically, the economic expansion ceased in the middle of the decade, resulting in unemployment, which coincided with the augmented output of the higher education. Moreover, the skills of graduates from higher educational institutions did not match the actual requirements for the manpower. A proportionately larger number of graduates obtained certificates and diplomas in Social Sciences and Liberal Arts than in Engineering and Technology, and was therefore not suitable for the employment in industry. In addition, the attitudes of graduates, in particular their unwillingness to take employment in smaller places in the country, both in industry and non-productive activities, resulted in the poor balance of the skilled personnel between the big cities and the small industrial and rural communities.

The analysis of the enrollment patterns at institutions of higher education indicates that the reforms did not succeed in democratizing the opportunity in higher education. On an average, only about one-fifth of the admitted candidates were from the working class. The regional background of admitted candidates indicates that larger number of students came from the big urban centers, from economically developed regions, and from the coastal part of the country, even though the proportion of students in the total population of republics is negatively correlated to the per capita income. Educational background of students at Yugoslav higher educational institutions indicates that the larger proportion of secondary general school

graduates entered higher education as full-time students, while the part-time enrollments became the alternate route to higher education of the secondary vocational school graduates. Furthermore, the vocational school graduates were more readily accepted by the non-academically oriented Two-year Post-secondary Schools than by the academically oriented Faculties.

The analysis of the accessibility of higher education shows that higher educational institutions became increasingly rigorous in selection of candidates. This increase of selectivity was a measure for the prevention of the influx of candidates at institutions of higher education. It was found that between 1964-65 and 1969-70 qualifying examinations prevailed as a method of selection of applicants. Qualifying examinations, based on the knowledge of the subject matter taught in secondary general schools, discriminated against applicants who completed secondary vocational school, and decreased their opportunity in higher education. Furthermore, qualifying examinations emphasized differences between applicants from bigger cities and those from the peripheral regions of the country, since applicants from the peripheral regions had not been exposed to the same educational and cultural stimuli as their counterparts in the big cities. Concluding from the above findings, the restriction of enrollments at higher educational institutions decreased opportunities in higher education. The measures of selection employed fostered influences of socio-economic, regional, and educational background on applicants' eligibility for educational advancement.

The final conclusions, based on the findings of the study, are the following: first, higher educational reform had no apparent effect on the

fulfillment of the manpower requirements for skilled personnel; and second, higher educational reform did not succeed in democratization of opportunity in higher education.

This implies that the use of the human and material resources in reforming higher education have been almost unnecessary, since no particular results followed. The reformers of the higher education in Yugoslavia have realized that the exerted efforts did not bring desired results. It remains to be seen what measures have been developed for corrections of omissions and errors in reformed higher education, after the 1960-70 decade.

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