

Education System

The development of the education system since the mid-1970s reflects a long-term cyclicity, starting with momentum and growth, through decline and stagnation, and returning to a period of renewed growth in the first half of the 1990s. The second half of the 1990s has been under the sign of a slowdown in terms of budget growth and system expansion. This slowdown should be viewed against the backdrop of the retreat and cutbacks in other social services, on the one hand, and the protracted economic slump, on the other hand.

This year the education chapter focuses on the accelerating expansion of post-secondary and higher education. Our point of departure is post-primary education, especially the transition stage between it and higher education – the matriculation examinations – which must be passed in order to be eligible for the future possibilities available to graduates of the formal education system. The chapter begins with an analysis of the fiscal resources available to the education system and then reviews the system's non-financial development as a preface to discussion of issues in higher education.

1. Government Spending on Education

During the past decade, education has been showered with ample resources and special treatment by policy-makers responsible for resource-allocation. This has continued even in the past few years, when the Government has focused on cutting the deficit: not only has education spending not declined, it has in fact grown at significant annual rates. This increase in

government expenditure has been the decisive factor in the increase in total national spending for education, which now exceeds 10 percent of GDP – higher than the level in most Western countries, even after an adjustment for Israel's younger population.

Education did not always enjoy such budgetary priority. In most of the 1980s, the education budget remained more or less constant, despite the growth of the population and especially its school-age component. As a result, average per-capita government spending on education eroded. Current per-capita outlays for education decreased steadily, reaching their nadir in 1987, and have been rising steadily since then (see Table 1). In 1992, education spending returned to a level comparable to that of 1980 level; since 1994 it has been rising steadily and impressively, as part of the Government's declared re-ordering of priorities.

Table 1. Total Per-Capita Expenditure on Education
(Current Budget, NIS, 1997 prices)

1980	2,941
1987	2,618
1992	2,923
1994	3,364
1996	3,665
1999	3,699

Table 2. Education Expenditure, by Main Components
(Current Budget, NIS millions, 1997 prices)

	Total	Pre-school	Primary	Post-primary	Higher	Vocational	Yeshivot
1980	11,406	442	3,244	2,856	2,557	393	199
1987	11,437	574	3,131	4,097	2,103	260	457
1992	14,973	731	3,859	4,965	2,671	538	970
1994	18,161	876	4,632	6,525	3,163	543	917
1996	20,852	1,157	5,561	7,398	3,737	600	910
1999	22,584	1,236	6,238	7,886	4,022	631	970

In the breakdown by levels, the largest budgets go to the post-primary stage, not necessarily because it is the largest subsystem but because of the higher cost of study at this level, as reflected especially in teachers' wages and working conditions. This year, nearly NIS 8 billion was allocated to this sector, NIS 500 million more than in 1996. The main surge in costs at this level of education occurred between 1992 and 1994, when the post-primary education budget rose from NIS 5 billion to NIS 6 billion – a 30 percent increase within two years.

The second-largest category is primary schooling, which is the largest subsystem in terms of enrollment. Its budget for 1999 comes to NIS 6.2 billion, an increase of more than NIS 750 million since 1996. In this sector, unlike in post-primary education, this reflects a continuation of vigorous but more intermittent growth. One quantum leap occurred between 1992 and 1994, and another between 1994 and 1996, followed by another sharp increase in the past three years.

Higher education is slated to receive NIS 4 billion in 1999. In this sector there was a great lag for many years. Only in 1992-1996 was there a significant increase of NIS 1 billion, which merely compensated for the lag that had accrued before. Nevertheless, if we take into account the growth in enrollment in

budgeted universities, we find that the average per-student expenditure has still not returned to the level of two decades ago.

About NIS 1 billion is allocated for *yeshivot*, 40 percent higher than the allocation for this category in 1989. According to the *yeshiva* enrollment data included in the explanatory notes to the State budget, there seems to be a lag in adjusting the expenditure. A comparison of this figure with enrollment in *haredi* primary schools, however, suggests that something is out of kilter and requires further study (the findings of the inquiry will be reported separately, after it is completed).

Among the levels of the education system, preschools appear to be the most resistant to erosion. Expenditure for preschools did not suffer from the erosion of the early 1980s and has risen steadily, both in absolute terms and as a per-pupil average.

The average per-pupil expenditure at the beginning of the 1980s – i.e., before the great erosion – was not matched again until 1992 in primary education and until 1994 in post-primary education. In higher education, in contrast, the previous level has still not been regained. Per-student expenditure in higher education was still about 20 percent lower in 1998 than it had been 1980. The sections below examine the nonfinancial evolution of the various levels of education.

Table 3. Per-Pupil Education Expenditure, by Level of Education (Current Budget, NIS , 1997 prices*)

	Pre-school	Primary	Post-primary	Higher
1980	1,675	5,810	13,308	45,740
1985	1,974	4,591	10,916	37,625
1990**	2,113	5,567	11,169	32,399
1991	2,133	5,720	11,198	33,157
1992	2,314	5,974	11,293	33,968
1993	2,598	6,157	12,489	31,381
1994	2,814	6,874	14,184	34,577
1995	2,686	7,628	13,580	33,001
1996	3,623	8,039	15,450	36,750
1997	3,840	8,184	15,404	35,281

*Deflated by the Civilian Public Consumption Price Index.

**Recategorized after the Education Ministry budget was restructured in 1987.

2. Evolution of the Education System

a. Preschools

Israel is one of the world leaders when it comes to the proportion of children enrolled in preschools. In the Jewish sector, participation is almost total in the 3-4-year-old, prekindergarten cohort (more than 95 percent in the mid-1980s) and verges on 100 percent at age 5 (kindergarten). Total preschool enrollment (children aged 2-5) in the Jewish sector in the 1997/98 school year was 300,000.¹

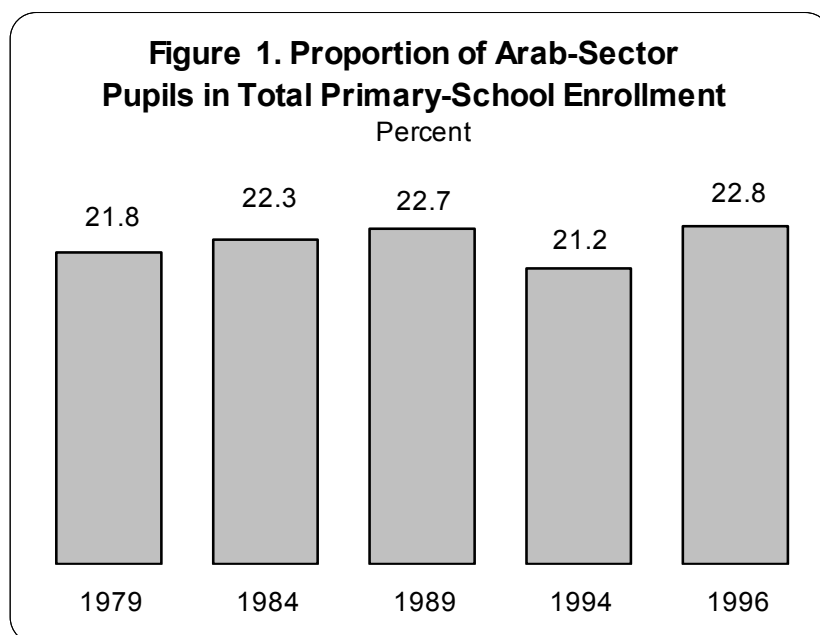
The preschool attendance rate in the Arab sector is much lower than in the Jewish sector – 44 percent among the three-year old, 71 percent of those aged 4, and about 90 percent of those aged 5, for a total of 60,000 children, of which 26,000 of compulsory kindergarten age (since 1994, no other official data have been issued on preschool enrollment rates).

The question of the funding of tuition in preschools for children aged 3-4 (prekindergarten) should be examined in view of the intention of enacting a compulsory education law for this age, too. Today, there is a sliding tuition scale in preschools, with ten different payment levels that depend on the parents' income; the maximum discount can reach 90 percent of tuition. In 1997, 8,831 children received this maximum discount as part of Project Renewal; another 41,729 children were fully exempt as residents of localities in Class A national priority areas (source: Draft Budget for 1998). In all, parents paid 67 percent of tuition that year; the total budget was NIS 385 million.

¹ The Ministry of Education and Culture defines school years according to the Jewish calendar. In this study we refer school years to the Gregorian calendar years, as follows: 5757 (Sept.1996 – Aug.1997) is 1997, 5758 (Sept.1997 – Aug. 1998) is 1998, and so on.

b. Primary Schools

Enrollment in the primary education system was about 700,000 in 1998, up from 626,000 in 1990 and 560,000 in 1980. The total increase in the 1990s (1990-1998) was 14 percent, all of it due to natural increase and mass immigration, as the enrollment rate for this age group has long since reached 100 percent.



In the Jewish sector, total primary-school enrollment increased from 480,000 in 1990 to 540,000 1998 – an increase of 12 percent. The Jewish sector has maintained its 78 percent share of all primary-school pupils during the 1990s, largely thanks to the wave of immigration. During the same period, however, the proportion of Arab **first-graders** rose to about one-fourth by the end of the period. The total number of

primary-school pupils in the Arab sector in 1998 was 165,000, up 19 percent from 139,000 in 1990. In this sector, the continual increase throughout the period, all of it stemming from natural increase, is unmistakable.

Within the Jewish sector, the education system is divided into two main streams – State and State-Religious – plus the relatively small *haredi* systems. Any attempt to compare the size of the streams runs into two problems. One is that many of the schools have not yet made the transition to the tripartite arrangement of primary school, junior high, and senior high. Furthermore, this transition is less complete in the State-Religious system. Hence official statistics may produce a misleading picture. To circumvent this limitation, we took the enrollment data of each sector by grade level and summed them into three aggregates that correspond to a structure of 6 + 3 + 3 grades, corresponding to primary, junior high, and senior high school. Our results show that the lowest aggregate, grades 1-6, had a total enrollment of 485,000 pupils in 1996 – 335,000 in the State system and 103,500 in the State-Religious system. At the beginning of the decade, the corresponding figures were 421,000, 299,000, and 89,000, respectively. In other words, the State system has remained dominant, with about 70 percent of total enrollment.

The second problem has to do with measuring the magnitude of the two main *haredi* systems – the “Independent” system and “El Hama’ayan”. The data reported for their institutions are irregular. For example, in 1988, first-grade enrollment in *haredi* schools was reported as 4,646. The next year, however, the figure for second grade was 1.5 times as large – 7,145. A year later, the number of third-graders reported was 15 percent less. In 1991, the reported size of this group (then in fourth grade) had returned to its initial level, only to swell again by 25 percent the next year. Hence the true evolution of this sector of the Jewish school system requires further study.

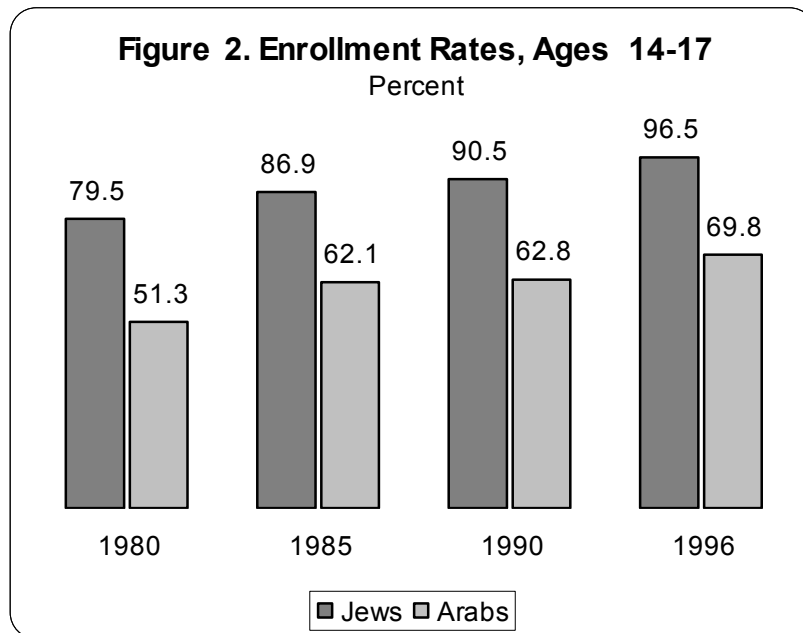
c. Post-Primary Schools

The average growth rate of the post-primary age groups was quite similar for the two education sectors in the period 1984-1996 (about 2.5 percent). In 1998, 517,000 youngsters attended post-primary schools – 220,000 in junior high, the rest in senior high.

In the Jewish sector, which accounts for 80 percent of post-primary enrollment, total enrollment has grown by an average of four percent a year in the 1990s, as against three percent in the second half of the 1980s and more than five percent in the first half of that decade. The growth pattern is similar in junior and senior high, but varies in its relative intensity from period to period: junior-high enrollment grew vigorously, at an average of more than seven percent a year, until the mid-1980s. Afterwards, growth slowed until the end of the decade, only to accelerate again in the early 1990s, due to the arrival of large numbers of immigrants and more vigorous application of the structural reform that created the junior-high level.

In the Arab sector, the growth rates have been higher, with clear differences between the junior and senior levels. In junior high schools, there has been persistent annual growth rate of seven percent since 1980 – in other words, a steady and impressive expansion. At the senior-high level, in contrast, the earlier marked growth tailed off significantly, declining from eight percent a year in the late 1970s to an annual average of about two percent in the 1990s.

As stated, the persistent growth, began in earlier periods, was nurtured by three complementary processes: demographic growth (augmented size of the relevant age groups as a result of natural increase and immigration), socioeducational progress (increase in enrollment rates), and structural change (continued conversion of seventh and eighth grades into junior high).



Enrollment rates: There has been significant improvement in this domain during the last two decades. Generally, it seems that the major effort invested by the education system in the past decade to stem the post-primary dropout phenomenon has focused mainly on the Jewish sector; progress in the Arab sector has lagged far behind.

In both sectors, there is a conspicuous difference between the sexes. The enrollment rate of girls at the post-primary level is higher than that of boys: 94.3 percent and 88.4 percent, respectively, in the Jewish sector, and 72.2 percent and 68.5 percent, respectively, in the Arab sector.

Dropping out: It is possible to trace dropping out cumulatively through data on a given age group over time. For example, of the age cohort that attended ninth grade in 1985, only 83 percent were enrolled in twelfth grade three years later,

in 1988. In other words, more than 15 percent of members of the cohort had dropped out before the end of high school. In subsequent years, the retention rate rose considerably – to 86 percent in 1990, 91.5 percent in 1992-1994, and 93.5 percent in 1995 and 1996 (bear in mind that the post-primary education system took in large numbers of immigrant pupils during those years).

A similar inquiry reveals that dropout rates are lower for the State system than for the State-Religious system. Of the cohort that attended ninth grade in 1985, three years later, at twelfth grade, we find 83 percent still enrolled in the State system (similar to the average for the entire Jewish education system), but only 71 percent in the State-Religious system. A few years later, for the cohort that attended ninth grade in 1989, in the State system 90 percent completed their studies, but in the State-Religious system only 79 percent. Finally, for the cohort that began in 1993 and completed their studies in 1996, in the State system 95 percent completed twelfth grade, and in the State-Religious system 82 percent.

The disparity between the systems is conspicuous also when they make progress on reducing the dropout rate, as a result of the change in policy and reinforced by the intake of immigrants. It is almost certain that these figures do not express only developments within each system; there must also be some element of movement between the systems.

Structural Changes: After more than 30 years, the structural reform is still not complete throughout the system. Nevertheless, the proportion of pupils attending junior high schools has risen steadily, to 70 percent of all seventh-to-ninth-graders in the Jewish sector and 77.5 percent in the Arab sector. For comparison, in 1985 the proportions were still as low as 54 percent and 43 percent, respectively. Since then, the reform has made more headway in the Arab sector. Within the Jewish sector, there is a notable difference between the State system, in

which 79 percent attend junior high schools, and the State-Religious system, in which only 63 percent do so.

The increase in the number of classes corresponded – albeit not fully – with the large increase in the number of pupils. At the senior high level, the number of classes grew more rapidly than enrollment, so that average class size decreased; at the junior-high level the picture is the opposite.

Table 4. Average Class Size, Post-Primary Level, by Sector

	Total		Arab sector		Jewish sector	
	1990	1997	1990	1997	1990	1997
Junior high	30.6	31.2	30.0	30.4	33.1	34.0
Senior high	28.7	28.1	28.1	27.7	32.4	30.6

3. Matriculation Examinations

a. Matriculation-Certificate Eligibility

The transition to higher education begins with the entry pass to that level – the matriculation examinations. The matriculation certificate is undoubtedly the key to socioeconomic progress of young Israelis in general, and not only to higher education. Major advances have been registered over the years, reflected in part in the introduction of diverse study tracks. This has led to increased enrollment rates at the senior-high level and in the proportion of high-school students who take the matriculation exams.

The past decade has witnessed significant progress in the percentage of twelfth-graders among members of the age cohort, in the percentage of students who take matriculation exams, and in the percentage of those who earn matriculation certificates among those who take the exams (the last has risen more slowly

than the rate of those who take the exams). Twelfth-grade enrollment grew more rapidly at the beginning of the period, while the number of exam-takers increased more rapidly at its end.

Table 5. Twelfth Graders, Taking and Passing Matriculation Examinations, as Percentage of 17-year-old

	Twelfth-grade enrollment rate	Taking matriculation exams	Eligible for matriculation certificate
1965	33.8	—	16.2
1973	41.0	—	16.3
1980	54.2	—	21.3
1985	67.9	—	27.7
1990	71.8	51.8	31.4
1995	76.2	61.1	37.9
1996	79.5	65.6	38.7
1997	79.7	65.2	37.7

The overall increase in the rates of those earning a matriculation certificate is not uniform in all parts of the system. Despite efforts to narrow them, perceptible disparities remain.

If we look at certificate eligibility as a percentage of those who take the tests (rather than of the age group), the data reveal other disparities at the post-primary level: for example, a difference between the academic and vocational-technological tracks.

Table 6. Matriculation-Certificate Eligibles* as Percent of 17-year-old, by Population Group

	1986	1991	1994	1995
All 17-year-old	29	33	39	41
Jews	34	38	44	47
Boys	30	32	38	41
Girls	39	43	51	53
Origin: Israel	45	49	51	52
Asia-Africa	23	28	34	39
Europe-America	42	40	50	51
Arabs	14	16	19	20
Boys	14	15	16	16
Girls	13	16	21	23
Religion: Muslim	11	13	16	17
Christian	—	34	29	30
Druze	—	17	30	30

* There are some differences between these data and those in Table 5; they originate in variant definitions and methods of data collection and processing.

Here the students of the academic track show a clear advantage over their peers in the vocational-technological track among both Jews and Arabs. This is related to the strong emphasis placed on the matriculation exams in the academic track, but it also points to differences in the technological track with regard to the pupil population. There are some technological institutions on a high level, while many others, of a lower caliber, generally attract students who were not accepted by academic programs.

b. Students who are Almost Eligible

In recent years, the Ministry of Education has begun to report not only the number of those earning matriculation certificates among those tested, but also the number of those who almost make it. The Ministry has created four categories:

- * Earned a matriculation certificate
- * Level A eligibility: only one subject short of earning a matriculation certificate
- * Level B eligibility: passed tests representing more than 13 credits.
- * Other: 13 credits or fewer

These figures indicate the potential number of certificate eligibles in the age group. Presumably, most students defined as “level A” and many of those at “level B” are likely to earn a full matriculation certificate in a matter of a few years (after their military service). According to a rough estimate, at least 50 percent of the members of every age cohort become eligible for a full matriculation certificate after making up missing subjects. Hence the potential number of candidates for post-secondary and higher education will exceed 50,000 a year.

Table 7. Percent Taking Matriculation Examinations, by Level of Eligibility, Study Track, Sex, and Ethnic Group, 1997

	Academic	Techno-logical	Boys	Girls	Jews	Arabs
Total	100	100	100	100	100	100
Certificate-eligible	64	43	55	61	60	45
Almost eligible						
Level A	8	9	8	9	9	7
Level B	12	22	17	15	15	18
Other	16	26	20	15	15	30

The share of Level-A “almost-eligible” students is similar in all groups, although slightly lower among Arabs. As for Level-B “almost-eligibles,” the situation is better in the academic than in the technological track, better among girls than among boys, and better among Jews than among Arabs.

c. Diverse paths to the matriculation certificate

Special allowances on tests. The issue of students with learning disabilities exists all over the world, as a result of the ongoing attempts of the institutionalized system to provide appropriate solutions for students with various problems to integrate in society as citizens with equal rights and obligations. One aspect of this attempt is to allow various leniencies in matriculation examinations.

The past few years, marked by increased attention to the issue of those suffering from various learning disabilities (passage of the Special Education Law and implementation of the policy of mainstreaming), have seen a rise in the number of special allowances extended to examinees: of the total of 1,075,699 tests administered in 1997, special allowances were made in 131,785 cases, 12.2 percent of all tests. Data in our possession indicate an increase between 1995 and 1998: during those four years, the total number of special allowances made rose by 150 percent, and by 400 percent for some types of allowances.

There are eight types of special allowances: (1) use of an English language tape, (2) overlooking spelling mistakes, (3) oral testing, (4) reproduction, (5) 25 percent extra time, (6) reading the test form aloud, (7) school-level test form, (8) use of electronic dictionary.

Table 8. Types of Special Allowances on Matriculation Examinations

	1995	1996	1997	1998
Total	57,857	82,915	113,229	131,785
1	235	433	564	623
2	10,580	15,215	21,569	26,107
3	5,009	7,886	9,745	11,069
4	6,161	7,653	8,970	8,549
5	31,071	44,160	59,872	69,678
6	3,709	5,368	8,897	10,913
7	742	1,395	2,259	3,125
8	350	805	1,353	1,721

The most common special allowance is an extra 25 percent of time. This item accounts for 53 percent of all special allowances. The number of students receiving it rose by 125 percent over four years. From the educational standpoint, the question of whether there is any point at all to a time limit on matriculation exams remains open.

The second most common special allowance is to disregard spelling mistakes. This accounts for 20 percent of all special allowances; the number of students benefiting from it has risen by 147 percent in four years.

The large increase in the number of students enjoying special allowances may originate in the novelty of the system's willingness to do so. The situation has evidently been exploited by pupils who in the past were in an inferior position relative to other pupils. No study of why certain schools offer special allowances to their students at a different rate than other schools, with similar pupil populations, has been performed. Nor is it clear whether the results of tests in these schools are better.

External examinees. Another development that bears on the question of eligibility for a matriculation certificate has to do

with external examinees. The idea that guides this approach is that providing an opportunity for more young people to obtain a matriculation certificate requires multiple paths leading to this goal, and the external track is one additional possibility. The Center for Social Policy Studies was involved in an examination of policy toward external examinees, as part of the work of a subcommittee of the Knesset Education Committee that dealt with the subject. The goal was to relate to the correlation between the Ministry of Education policy to increase the number of those earning matriculation certificates and activities in the external secondary-education system: whether external secondary education can be improved in a way that would augment its students' prospects of earning a matriculation certificate.

Each year, many people are enrolled in external programs; some of them take matriculation exams. Every year, between 1,500 and 2,000 people earn matriculation certificates after passing all or some of the tests externally. External students face a substantial difficulty, and the time they take to reach their goal – that is, passing the tests required to be eligible for a matriculation certificate – is lengthy.

Table 9. External Matriculation Tests: Persons Tested and Persons Eligible

	Tested	Eligible for Certificate	Percent Eligible
1995	17,706	1,456	8.2
1996	19,671	1,995	10.1
1997	15,802	1,850	11.7

As we see, only a small percentage of external students who take matriculation exams earn a full matriculation certificate. However, most students earn a partial matriculation certificate and pass some of the tests. Obtaining a partial certificate is an

important achievement, too, and the regular system also devotes great efforts to this, as we shall see below.

The number of external testees should be augmented by students of the regular system who take retests (in 1993 there were 30,000 retests). Some of them are twelfth-graders seeking to improve their scores from eleventh grade; others are seeking to improve a passing grade (and were already counted among those eligible for certificates). This large number, and especially its steady growth from year to year, is evidence of the growing demand for a matriculation certificate among those ineligible and of the high motivation among those earning certificates to gain admission to post-secondary studies by improving their test scores.

Special programs to help weak students. As part of the system's efforts to improve the rate of matriculation eligibility, special programs to help pupils attain a matriculation certificate have been introduced or expanded in the past two years. Several programs are conspicuous in this respect: *Mabar* – which helps pupils switch from a partial – to a full-matriculation track (the program, run in the senior-high-school grades of the regular system, involves smaller classes that focus on a different approach and intensive study of one subject at a time); *Tahal* – intended for those who are short one to three subjects; pre-university preparatory programs, which give demobilized soldiers as second chance; and *Michael* – a special programs to exploit outstanding capabilities.

Table 10. Pupils in Special Programs

	1994	1995	1997	1998
<i>Mabar</i>	3,500	6,690	12,790	15,000
<i>Tahal</i>	820	1,200	3,600	4,000
Pre-university	8,150	8,325	10,800	10,800
<i>Michael</i>			6,000	6,000

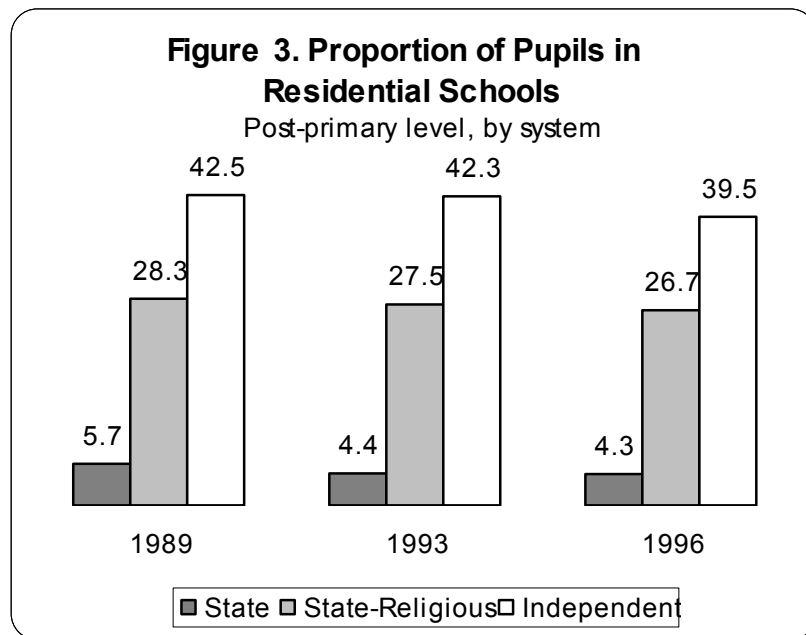
The figures show that in the past few years there have been increased efforts to “lure” weaker population groups to earn matriculation certificates. The efforts seem to be paying off: among the 3,500 pupils who participated in the *Mabar* program and took matriculation examinations in 1997, 1,330 passed the tests and earned their certificates. Another 455 students failed one subject only. These achievements are notable in view of the fact that the pupils admitted to *Mabar* classes are not defined, according to the standard criteria (prior achievements, scholastic ability, teachers’ assessments), as suitable for placement in high-school matriculation tracks.²

It is also noteworthy that 55 percent of students included in the second-chance framework (1,842 out of 3,350) earned matriculation certificates. As stated, this set of programs is accompanied by a willingness to increase the special allowances to students with learning disabilities and difficulties. In addition, there have been changes in the past few years, some of them rather sizable, in the format of the tests and their distribution over the three years of senior high school.

Residential schools. In the past, the education system assumed that referral to residential schooling would help some pupils focus their scholastic efforts, in part, on earning a matriculation certificate. A large proportion of the residential facilities focused on taking in young people referred to them in a last attempt to keep them from dropping out of the education system totally; some of the young people were referred by welfare officers because of home and family problems. Over time, this idea was eroded; today, many of the residential schools established to help weaker population groups have become channels for the advancement of the well-off. This is reflected especially in the concentration of residential facilities

² Nora Rash, “Evaluation of an Experiment: Winter Matriculation Tests for Students in *Mabar* Classes,” Institute for Innovation in Education, School of Education, The Hebrew University of Jerusalem.

in the religious sectors. A perceptible difference is found between the various systems in the rates of referral to residential study: a higher proportion of the pupils in the State-Religious system attend residential schools, with the referral being voluntary (see Figure 3).



The increase in the number of students attending residential schools has far-reaching implications. It is almost certain that the socioeconomic and ideological profile of those enrolled in the religious residential schools, where leaving home for *yeshiva* is a social norm, is very different from that of pupils in residential schools of the State system, as well as from that of State-Religious pupils who attend regular (nonresidential) schools. In the State system, the overwhelming majority of residential students are still those referred to the schools because

of scholastic, behavioral, and social problems. By contrast, a majority of students in the religious residential schools applied to *yeshivot* of their own volition and many of them belong to the scholastic and intellectual elite of the religious community. Concentration of this group in such an educational facility has, of course, far-reaching educational, political, social, and economic implications, but it is not our intention to discuss these in the present study. Suffice it to say that the educational and financial investment in each pupil in a residential school is much larger than that in pupils in a regular community school.

4. Higher Education: Its Expansion as a Key Path to Social Mobility

The higher education system includes students in universities, colleges (public and private, regional, technological, and teacher training colleges), and extensions of foreign universities. Undoubtedly, the most interesting – and perhaps most important – developments in the education system are taking place today in post-secondary and higher education. These developments are reflected in several salient processes: first, the growing enrollment in all post-secondary, college-, and university-level institutions, with the concomitant increase in the number of degree recipients; second, the growing diversification of post-secondary institutions, as reflected in their types, locations, and study programs; third, the growing privatization of higher education.

These three processes are totally transforming the face of post-secondary and higher education in Israel. This development is associated with population growth and especially the increase in the number of those earning matriculation certificates and the advent of new groups interested in acquiring a college or university education. Of course, it reflects the social demand for

greater equality of access to higher education. Another impetus for the process comes from the professionalization of various occupations, manifested in the growing demand for an undergraduate degree in some fields (teaching, nursing, insurance, optometry, and others), on the one hand, and the desire to enjoy the significant financial return that accrues to degree holders, on the other hand.

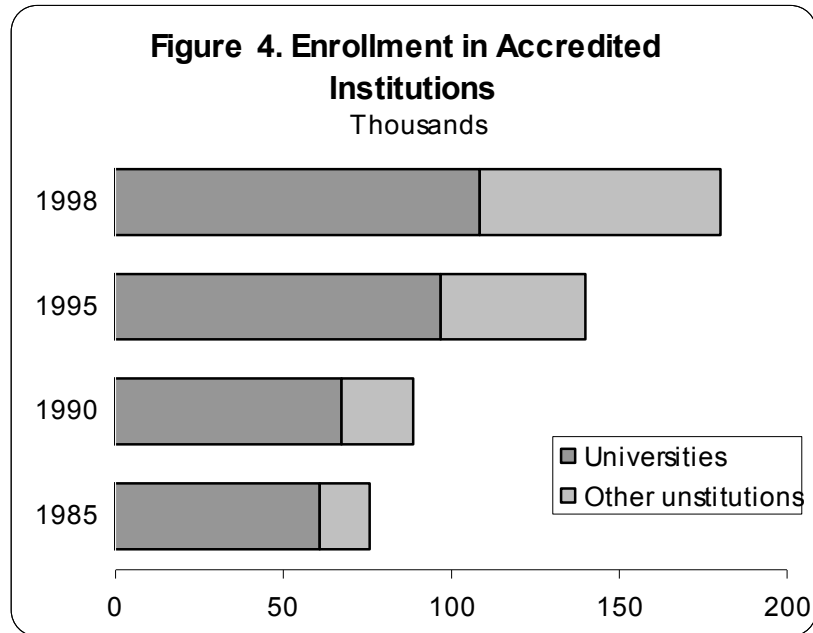
a. Growth of enrollment

The most conspicuous indicator of progress in higher education is the rise in enrollment and the great differentiation in the growth rate from one type of institution to another.

Table 11. Students in Accredited Institutions

	1985	1990	1995	1997	1998	Average annual percent change
Total	76,120	89,063	140,288	164,994	180,561	7
Universities	61,205	67,770	97,250	104,900	108,880	5
Colleges: total	2,881	8,286	19,402	31,616	41,108	23
Teacher training	1,033	4,618	10,127	14,257	17,735	24
Other colleges	1,848	3,668	9,275	17,359	23,463	22
Open University	12,034	13,007	23,363	28,478	30,473	7

Since 1985, university enrollment has increased by 77 percent, with main growth occurring in 1990-1995, when the average annual growth rate was 7.5 percent. Since then, the growth rate has dropped to only 3.8 percent. In contrast, enrollment in other accredited institutions has increased by 380 percent, with an average annual growth rate of 15.1 percent between 1990 and 1995 and 18.5 percent in 1995-1998. The statistics on enrollment in non-university institutions are actually



biased downward, because they do not take account of the thousands of students enrolled in the degree-awarding extensions of foreign universities. The number of such extensions is growing steadily, as is their enrollment.

It is interesting to compare the growth in enrollment for the various degree-awarding institutions:

The vast difference in the growth rates of the seven universities stands out, and especially the vigorous growth of three universities: Ben-Gurion, Bar-Ilan, and Haifa. None of them, however, has even come close the growth rates of the non-university institutions.

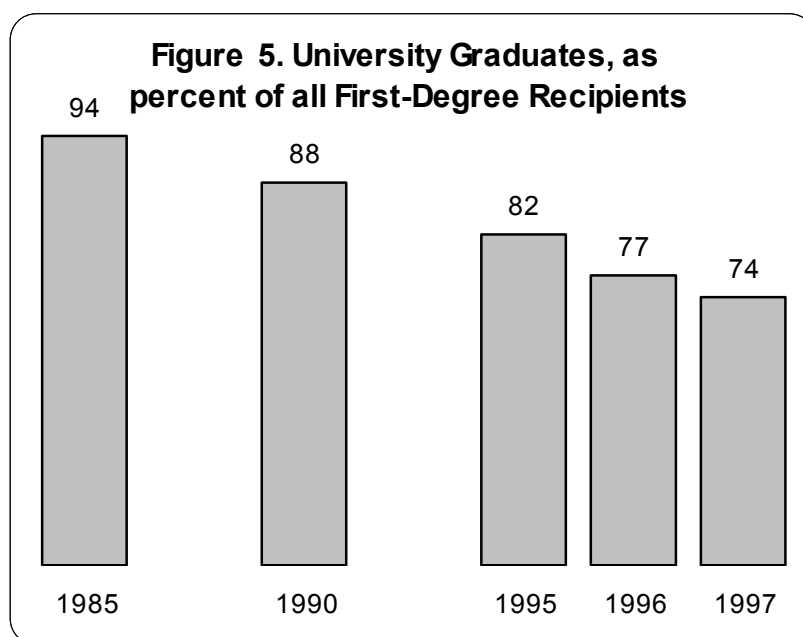


Table 12. Students and Degree Recipients in Universities and Other Institutions, 1990–1997

	Students		Percent increase	Undergraduate degree recipients		Percent increase
	1990	1997		1990	1997	
Universities – total	67,770	108,880	61	10,192	16,478	62
Hebrew University	16,780	21,730	29	2,412	31,000	29
Technion	9,080	11,840	30	1,313	1,655	26
Tel-Aviv	19,270	25,610	33	2,940	4,154	41
Bar-Ilan	9,330	20,700	122	1,266	3,120	146
Haifa	6,780	13,390	97	1,160	2,401	107
Ben-Gurion	5,890	14,870	152	1,101	2,048	86
Weizmann Inst.	640	740	16			
Colleges	8,286	41,108	396	1,055	4,760	351
Open University	13,007	30,473	134	281	1,048	273

Table 13. Undergraduate Degree Recipients from Universities and Other Institutions

	1985	1990	1995	1996	1997
Total	8,601	11,528	22,397	19,738	22,286
Universities	8,113	10,192	18,339	15,138	16,478
Colleges: total	457	1,055	3,443	3,950	4,760
Teacher training	139	655	2,144	2,456	2,884
Other	318	400	1,299	1,494	1,876
Open University	31	281	615	650	1,048

Generally, one may say that the same trends are also reflected in data on recipients of undergraduate degrees. Whereas only 5.6 percent of 1985 bachelor's degrees were awarded by colleges, in 1998 about a quarter of them were. Here too we should emphasize that the figures are biased downward, because they do not include students in extensions of foreign universities, which have recently been publishing lists with the names of hundreds of graduates.

b. Enrollment Rates

Thus far the figures have pointed to the growth of higher education, and an expansion beyond the confines of the long-accredited universities and colleges to new institutions and to extensions of foreign universities. We do not have figures and parameters on the composition, age, ethnic origin, and sex of students in these institutions. Hence we should be aware of major biases in any analysis of the trends indicated by the following data, which pertain to universities only.

Table 14. University Enrollment Rate among Jews
(Percent of 20–29 age group)

	1975	1985	1990	1993	1996
Total	7.2	7.6	8.0	8.9	9.8
Men	8.0	7.5	7.3	7.8	8.1
Women	6.3	7.6	8.7	10.1	11.5
Israel-born, by father's origin					
Israel	10.0	13.4	14.0	15.3	14.8
Asia-Africa	3.0	3.7	3.9	4.7	5.8
Europe-America	14.0	14.9	14.2	14.8	15.1
Asia-Africa born	2.1	2.8	3.1	3.3	5.8
Europe-America born	8.4	8.3	9.5	8.4	8.8

The university enrollment rate for the 20-29 age cohort rose from 7.6 percent in 1985 to 9.8 percent in 1996. There are significant differences in the rate by sex and by ethnic origin:

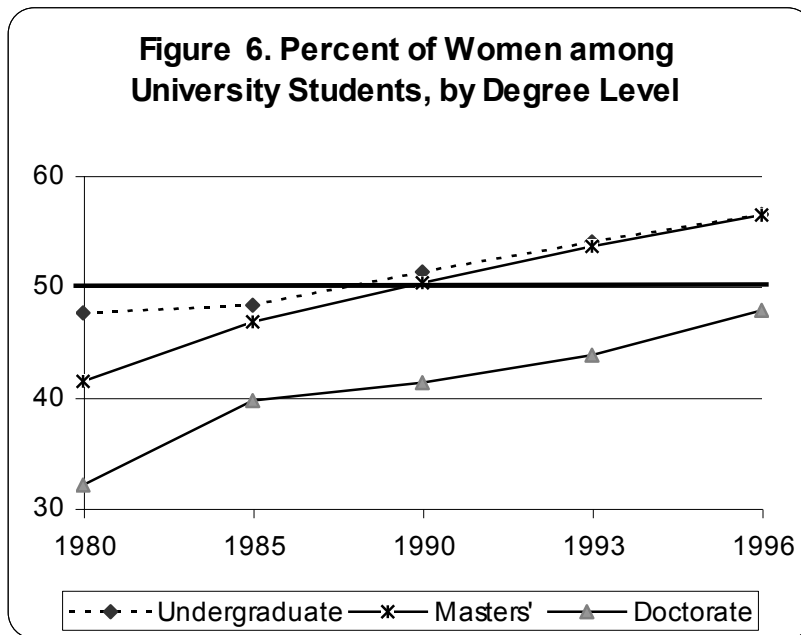
The data reveal a narrowing of gaps among population groups. In fact, the disparity between the sexes has actually reversed its sign; women's enrollment rates now far exceed those of men. This phenomenon is reinforced by the colleges, many of which are still teacher training colleges, with their predominantly female enrollment. The situation is different with regard to ethnic gaps: Israel-born children of fathers who came from Asia or Africa remain far behind, and the rate at which they have been catching up during the last 15 years does not bode well for the future. Admittedly, there may be some compensation for this in the proportion of students of African or Asian extraction in institutions that supplement the universities – the colleges and other institutions – but we have no data to prove this.

The growth in enrollment does not stem only from new undergraduates. There has also been a rather strong uptrend in the number of masters' and doctoral students. In other words, there is a growing tendency to proceed to graduate studies beyond the first degree. The increase in the number of graduate students is manifested in their rising proportion of total enrollment: in 1985, there were 15,000 graduate students at all the universities, or about one-quarter of their student bodies. The 34,790 graduate students of 1998 accounted for about one-third of total enrollment.

The rising proportion of women is conspicuous at all levels of study and degrees. Women have become a majority even in masters' studies. To judge by the trend of the past decade, the disparity between men and women at the doctoral level, too, is fated to vanish (in 1996, 47.8 percent of doctoral students were women).

Table 15. Women in University Enrollment, by Degree Level
(Percent)

	Total	Undergraduate	Master's	Doctorate
1980	46.2	47.6	41.4	32.1
1985	47.9	48.3	46.8	39.7
1990	50.8	51.3	50.3	41.3
1993	53.6	54.0	53.6	43.8
1996	56.3	56.5	56.4	47.8



Applicants. A particularly interesting figure involves applicants: a larger percentage of applicants are being accepted today. On the other hand, the yield – the percentage of those admitted who elect not to enroll – has remained stable. There are two possible explanations for the first finding. Universities may have decided to lower the admission threshold and are today accepting students whom they would have rejected in the past. Second, because those interested in college – or university-level studies have more options available today, they may apply to the universities only when they believe they stand a good chance of being admitted.

Table 16. Persons Accepted and Rejected by Universities

	1980	1990	1995	1996	1997	1998
Accepted and enroll	48.2	55.9	60.0	62.9	63.5	63.5
Accepted but do not enroll	17.4	17.0	18.9	17.6	17.8	17.2
Rejected	31.1	22.9	21.1	19.4	18.7	19.3

c. Greater Diversity among Accredited Institutions

One of the most conspicuous trends in the development of higher education is the increasing number and diversity of the institutions that award degrees. In the main, this has stemmed not from long-term social planning but rather from the growing demand by large segments of the population for post-secondary studies, especially on the undergraduate level. The rapid change was manifested not only in the number of students and institutions but also in the diversity, level, geographic distribution, ownership, course offerings, and teaching methods of the latter.

In addition to these institutions, there are other important frameworks of post-secondary education, some of which do not award academic degrees or diplomas, which fill the needs of many people who are eager to broaden their education or prepare for degree studies. The most notable of these are the pre-academic preparatory programs of the universities, similar programs in colleges, vocational training programs run by the Ministry of Labor and Social Affairs and by private entities, on-the-job vocational training, post-secondary diploma programs, and post-secondary programs that do not lead to a diploma.

As stated above, only some of this development was planned and came about as the implementation of the master plan for the development of colleges, elaborated by the Council for Higher Education and Ministry of Education, Culture, and Sports in 1993. This plan, approved by a Government resolution on

September 28, 1994, envisioned three categories of colleges: regional, technological, and teacher training. The plan did not deal with private (“non-budgeted”) colleges and with the extensions of foreign universities. In February 1995, the Council for Higher Education Law was amended to provide a firm basis for the status of the colleges. The three main provisions of the law define an academic college, set equal criteria for budgeting, and stipulate equal status for the degrees granted by different institutions. Another amendment, enacted in 1998, regulates the activity of the extensions of foreign universities in Israel and places them under various restrictions, whose crux is to assure that the caliber of the extensions in Israel and of the parent institution overseas – in curriculum, level of teaching, and status of degree awarded – is equal.

Discussion of the issue of the compass of higher education and of its anticipated impact on the quality and level of studies is neither new nor unique to Israel. This debate has traditionally accompanied every expansion of educational facilities, not necessarily at the college and university level, pitting the “defenders of ramparts,” representing the existing establishment, against those who are pounding at the gates of education.

The Center for Social Policy Studies drafted a document, followed by a discussions of the issues raised in it, as long ago as 1994. According to the preface to that document, “strengthening higher education, on the one hand, and opening its gates to the population at-large, on the other hand, are not necessarily mutually exclusive. The crux of the dilemma that we wish to discuss today is in what manner to continue developing higher education, inter alia by means of colleges, and in so doing to increase the percent of those studying in the higher-education framework. Special thought should be given to population groups that have not had adequate access to higher education thus far.”

The discussants correctly foresaw the growth in demand for higher education and the need to find new organizational and institutional solutions – chiefly in the form of colleges. However, they failed to express the intensity and extent of the growth in demand and the massive penetration of the higher-education market by private institutions.

In 1998, more than 80 degree-awarding institutions were active in Israel, as follows:

Type of institution	Number
Total	82
Universities	7
Open University	1
Teacher training colleges	18
Other higher-education institutions, including regional colleges	22
Extensions of overseas universities	23
Authorized distance-learning institutions	11

This section deals mainly with teacher training colleges and other institutions of higher education. As stated above, we do not have adequate data on the extensions of overseas universities in Israel and on authorized distance-learning institutions. A comprehensive and full discussion of higher education issues in Israel in 1998 would require a credible and precise picture of these institutions too, at least in terms of the variables noted above.

While the enrollment in non-degree-awarding post-secondary institutions increased by 15 percent, and actually declined in some fields, enrollment in non-university institutions increased by 111 percent within four years, and in certain disciplines doubled, tripled, or more.

Table 17. Students in Post-Secondary Institutions that do not Award Degrees

	Total	Teaching	Practical engineering, technician-ship, etc.	Secretarial, law, administration, economics, etc.	Arts, design, architecture	Other
1995	42,548	9,446	18,245	6,905	4,541	3,411
1996	46,514	10,819	19,310	7,720	5,197	3,468
1997	48,377	9,733	20,671	8,132	5,781	4,060
1998	48,850	7,591	22,788	7,988	5,837	4,646

Table 18. Undergraduate Students in Non-University Institutes of Higher Education

	Total	Teaching	Practical engineering, technician-ship, etc.	Secretarial, law, administration, economics, etc.	Arts, design, architecture	Other
1995	19,402	10,127	1,750	4,693	1,912	920
1996	23,747	10,781	2,497	5,896	2,201	2,372
1997	31,616	14,257	3,624	7,972	2,495	3,268
1998	41,108	17,735	6,231	9,942	2,501	4,699

The most conspicuous increase was in teacher training colleges. This increase is the result of the accelerated academization policy of the Ministry of Education and Culture, as a result of which many of these institutions were authorized to award undergraduate degrees (B.Ed.). This policy began, practically speaking, after submission of the Etzioni Report in 1979. The goal of the Ministry of Education is a situation in which teacher training at the various levels will involve a four-year curriculum. To encourage teachers to complete their schooling and earn academic degrees, the ministry participates

in the attendant expenses, including tuition, partial remuneration for travel expenses, a reduction of several hours in their weekly teaching load, and the advanced-training fund. (It is important to note that the Education Ministry is not exceptional in this respect; other government ministries and public employers also extend assistance to employees who return to school while continuing to work.)

d. Privatization of Higher Education

The most revolutionary change in the higher-education system would seem to lie not in the expansion of the colleges but in the growing intrusion by private, for-profit systems into a field that was until recently the absolute monopoly, both practically and ideologically, of the public service.

Any discussion of the issue of private institutions – especially the extensions of foreign universities – in the social reality of Israel is complex and difficult. These institutions tend not to publicize their enrollments, the number of those who fulfill degree requirements, or data on their faculties, and do not provide information about the academic services and facilities available to their students.

Since we have only fragmentary data,³ we shall focus on several issues that may have a general impact on the higher-education system, as a result of the invasion of higher education by private institutions. We should emphasize that this discussion is preliminary; a more comprehensive treatment would require more detailed data.

Supply. In Israel today there are eight private colleges, 23 extensions of foreign universities, and 11 distance-learning institutions. The number of extensions is growing rapidly; the

³ The official data in our possession concern the number of private institutions that have been authorized to operate and the fields in which the Council for Higher Education allowed them to award degrees.

most recent amendment to the Council for Higher Education Law is intended to scale down the phenomenon or at least to guarantee, as far as possible, the academic level. The range of subjects offered by these institutions is vast, with a tendency to focus on areas that do not require expensive laboratories, workshops, and facilities. Particularly prominent is the number of extensions that offer programs in education, public administration, law, and economics. There are also colleges that specialize in highly specific field such as insurance, tourism, and design.

Operating method. The private colleges and extensions of foreign universities are run by Israeli operators – some of them private, some institutional, and some public – for profit. Some of these entrepreneurs run extensions for several foreign universities. The foreign universities receive a fixed percentage of the tuition; the local operators receive their share after deducting expenses for faculty salaries, rental of facilities, advertising, and administration.

Tuition. Tuition runs between \$6,000 and \$8,000 per year. However, the “year” is usually a full calendar year (two semesters, or three trimesters plus a summer session). Some of the institutions, especially those affiliated with American universities, require a period of residence at the parent university to complete the degree requirements. Many institutions promise a one-year masters’ degree. Institutes that offer degrees in education speak of completing the bachelor’s degree on the basis of credit given for practical experience and courses taken at the college. Public agencies that have concluded various agreements with some of the institutions offer scholarships to students who come from their own ranks. Students employed in public institutions are also eligible for a full or partial refund of tuition.

The level of tuition fees is not uniform and varies among the institutions, among disciplines, and between undergraduate and advanced degrees. Installment plans are available.

Structure of study. Most of the extensions and colleges make an effort to concentrate courses on one or two days a week, across a full year, and promise to make it possible to obtain a master's degree in one calendar year. In many of the universities, the requirements for a master's degree omit all knowledge of statistics and quantitative research methods, based on the contention that the thesis is based on qualitative research methods. At the Ph.D. level, duration of studies and residency requirements are usually stricter. Some of the extensions give a small fraction of their courses in the language of the parent university – mainly English – and require that some of the papers – or at least an abstract – be submitted in English.

Degrees. The extensions award degrees ranging from B.A. to Ph.D. Many of them concentrate on courses to complete the requirements for an undergraduate degree, and offer credit for studies in post-secondary institutions (teacher training colleges and schools for practical engineers and technicians) and for practical experience in these occupations. All of the institutions state that the degrees they award are recognized by government ministries for wage and promotion purposes. The degrees given by the extensions allow their recipients to continue advanced studies at the parent university. However, these degrees usually do not entitle their recipients to continue graduate work in Israeli institutions of higher education, because the quantity of prerequisites that would have to be made up is tantamount to redoing the undergraduate degree.

Libraries and other academic services. Most of the extensions operate out of rented quarters in public buildings such as community centers, high schools, and teacher training colleges. This fact alone indicates that they do not have academic libraries worthy of the name. Some of the extensions

have reached agreements with local universities to allow their students to use their libraries.

In view of the foregoing, the question is what attracts Israeli students to these institutions, which charge such high tuition, which offer an education (some of them, at least) of dubious quality, and whose promises as to the various entitlements conferred by their degrees do not always pass the test of reality?

There seem to be several reasons, which have different weights for different students:

1. Convenience – in terms of schedule and geography. Many of these institutions are near the students' places of residence. The possibility of completing degree studies within a year, with the courses clustered on one or at most two days a week, is enticing.
2. Access to fields in demand. Many of the private institutions and the extensions have gone into the fields most in demand in academic studies, those in which the universities are severely selective. These include law, business administration, communications, and computers, which until recently were an unrealizable dream and have now become a realistic possibility.
3. Academic requirements. The academic requirements at most private institutions are less rigorous than those of the universities. More credit is given for courses taken in non-academic post-secondary settings and for students' cumulative experience.
4. Personal attention. Most of the private institutions are still small and go out of their way to create closer personal relations between students and teachers.
5. Economics. Although the tuition at private institutions seems much higher than that at universities, there is in fact no substantial difference if one considers that degrees can be completed in one year at the former, as against three or four in the universities. Furthermore, all the ancillary expenses are

concentrated in a single year. If we add the fact that the wage increment for the sought – after degree (for teachers this is five percent for an undergraduate degree and 7.5 percent for a masters) is received starting after only one year, rather than three or four, we see that for individuals, the investment in studies at an institution that promises a degree within one year is well worth it. Another consideration, of course, is comparison of cost of studies in a sought – after discipline in Israel – denied to a student in the existing higher-education institutions and now possible with the establishment of the private institutions – against the cost of studying abroad, with everything this entails. Such a comparison immediately illuminates the preference for study in Israel over going abroad.

In the last-mentioned context, the issue of **university tuition** refuses to vacate the public agenda. Recently, demands for free tuition have gathered strength. The rising willingness of Israeli students to pay large sums to private institutions of higher education seems to contradict this demand. However, as we have already shown, this is not the case. In our estimation, a majority of students at private institutions belong to the well-to-do strata, which prefer to study in Israel even when these studies are more expensive in Israel than abroad, or are workers in the public or private services who can rapidly recoup the cost of their studies. If this assumption is correct, then expansion of the spectrum of higher education to public colleges and private institutions has not solved the problem of the high cost of academic studies for disadvantaged groups and actually hinders their full socioeconomic integration.

The demand for free tuition, although justified on many grounds, is problematic, because of its regressive effect on the distribution of national income. For example, the Central Bureau of Statistics has found that the value of “transfers in-kind of

services of universities and other institutions of higher education increases inequality in income distribution; a rather large share of these transfers are given to households in the upper deciles. This is because a higher proportion of students come from high-income households than from low-income households... The inequality may be greater than that reflected in the findings, since the Family Expenditure Survey considers students who live apart from their parents to be members of separate low-income households and accordingly ranks in the lower deciles.”⁴

Nevertheless, it should be borne in mind that university studies are free in many Western countries. In any case, it is worth to renew the discussion of the proposal advanced in a publication of the Center for Social Policy Studies in Israel by Prof. A. Razin, namely, that *all* students should be allowed to finance their *full* tuition, plus an allowance for basic needs, by means of a loan granted them irrespective of their current economic situation. The loan would be repaid over a lengthy term, and students with low repayment ability would be given a grant.⁵

This proposal would allow anyone capable of and interested in acquiring higher education to do so and would eliminate the budgetary constraint that limits the economically disadvantaged, without aggravating social disparities. Similar proposals have been put forward recently. Unlike the CSPPS proposal, however, they speak of tuition loans only, make no provision for basic needs, and envision a much shorter repayment term than the original proposal did.

⁴ Central Bureau of Statistics, *The Impact of Social Transfers In-Kind on Income Distribution*, Special Publication No. 1049.

⁵ A. Razin, “Integration of Assistance Programs for the Young”, in *Israel’s Outlays for Human Services 1984*”, Center for Social Policy Studies in Israel (Jerusalem, 1985).