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HIGHER EDUCATION IN ISRAEL

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Until the late 1980s, the Israeli higher-education system consisted mainly of a small number of universities - three founded before 1948, and the rest in the 1950s and 1960s. Over the past decade, the system has both expanded and diversified, embracing several types of academic institutions differentiated by their formal status, the range of programs they offer, and the extent of state funding they receive.

The Council for Higher Education, the state agency that oversees the Israeli higher-education system, recognizes four types of academic institutions: universities, occupationally specialized colleges, regional colleges, and private colleges.

Universities: Israel has six institutions that award bachelors, masters, and doctoral degrees in a wide variety of disciplines: the Haifa Technion (1924), the Hebrew University of Jerusalem (1925), Bar Ilan University (1955), Tel Aviv University (1956), Ben Gurion University of the Negev (1969), and Haifa University (1974). A seventh institution, the Weizmann Institute of Science (1934), awards only Masters and Ph. D. degrees in the natural and physical sciences.

An eighth institution, the Open University of Israel, awards bachelors degrees and was accredited in 1996 to offer its first masters degree, in computer science. The guiding principles of the Open University are more universalistic and egalitarian than those of the other universities: students are accepted without screening and the teaching system is tailored to the needs of working people. The Open University provides a "second chance" for those who do not meet the other universities' requirements and offers a variety of courses in adult education, reflecting the lifelong learning philosophy. The Open University confers very few degrees relative to the size of its enrollment.

The universities have the broadest variety of study and research programs, offer their researchers the most prestigious paths of advancement, and command primacy at the Planning and Budgets Committee of the Council for Higher Education, the agency that apportions funding for academic institutions and regulates their growth. The universities receive the largest share of the state budget allocation earmarked for higher-education institutions.

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Colleges that specialize in specific occupational disciplines: Israel has thirteen teachers' colleges that confer teaching degrees (B. Ed.) and eleven that specialize in other occupational fields and award degrees in technology (B. Tech.) or disciplines such as music and dance, administration, fashion, and optics. The Council for Higher Education has accredited these colleges to award undergraduate degrees in their respective fields. The colleges do not provide research tracks for their lecturers and students, and their budgets are limited commensurably.

The teachers' colleges have been undergoing a process of academization. The Ministry of Education expects most of them—with the exception of the *haredi* (ultraorthodox) seminars—to offer curricula leading to a degree in education - B. Ed.-by 1999 (Ministry of Finance, 1996 [c]: 84). In 1995/96, about half of the students in colleges for teachers and preschool teachers were working toward academic degrees (Ministry of Education [a]1997: 53).

Regional colleges: Twelve regional colleges operate in peripheral areas of the country. Most began as continuing education programs connected with the universities; in the early 1990s, it was decided to turn them into autonomous academic institutions that would focus on teaching toward bachelors degrees in the social sciences and the humanities. The regional colleges are undergoing accreditation by the Council for Higher Education. As of the writing of this report, two have already been accredited - Tel Hai College and Jezreel Valley College; a third, Sapir College, is well along the way toward accreditation.

Private Colleges: Private colleges offer undergraduate programs in sought-after disciplines such as economics, law, and business administration. The first private college, the College of Management, was accredited in 1986 by the Council for Higher Education to award bachelors degrees in bookkeeping and marketing. In 1992, this institution was authorized to open a law school.

The private institutions charge higher tuition fees than institutions supported by public budgets. In 1996/97, for example, Tisom College charged $20,000 while the universities charged $2,500 (Guri-Rozenblit, 1996: 21).

In contrast to the occupational and technological colleges, which specialize in disciplines traditionally perceived as outside the universities' ambit and which only recently were given academic accreditation, the colleges of law and administration reflect the trend towards privatization in fields traditionally thought of as the exclusive realm of the universities.

Extensions of foreign universities: Additional paths toward academic degrees have opened since the early 1990s—local branches of foreign universities, foremost American and British, that offer bachelors, masters, and doctoral degree programs. The foreign institutions are not subject to the regulation of the Council for Higher Education. Pending legislation would require these institutions to obtain operation permits from the Council for Higher Education. The Ministry of Education, for its part, recognizes degrees awarded by these institutions in determining wage grades in the public services.

GOVERNANCE

The present system of governance of Israel's higher education was established in 1958, under the Higher Education Law. The law created the Council for Higher Education - a statutory corporation whose members are appointed by the President of Israel upon recommendation of the Cabinet, and whose chairperson is, ex-officio, the Minister of Education and Culture. The Council is empowered to grant academic accreditation to institutions and to specific study programs within those institutions. It is through the excercise of this power that the council shapes the structure of Israel's higher education.

Until 1995, the Higher Education Law stipulated that at least two-thirds of the Council's membership be "persons of stature in the field of higher education" - a clear reference to Israel's universities. In 1995 the law was amended so as to enable the emerging types of institutions of higher education to receive representation on the Council (Higher Education Law, Amendment No. 10, 1995). The amendment not withstanding, the Council is still first and foremost, a representative of the universities. On the eighth Council, whose term ended on March 1997, sixteen out of the twenty-five members were representatives of universities, the remainder being representatives of the "general public."

In the ninth Council, the incumbent one, the share of university representatives climbed to seventeen out of twenty-four—70 percent. The other representatives include, for the first time, three representatives of academic colleges—the Rubin Academy of Music and Dance in Jerusalem and the College of Management, and the Levinsky Teachers' College. The regional colleges are not represented. The Council is chaired, by law, by the Minister of Education and Culture.

Judging from its composition, the Council for Higher Education has been slow to adjust to the changing structure of Israel's system of higher education, where a growing proportion of the undergraduate population attends professional colleges, private colleges and regional colleges. According to a Ministry of Education forecast, at the beginning of the twenty-first century 40-50 percent of undergraduate students in Israel will be attending colleges rather than universities (Wilenski, 1996: 81).

BUDGET

In 1974, the Council created the Planning and Budgets Committee charged with planning and allocation of the higher-education budget. This board elaborates a total budget for institutions recognized by the Council for Higher Education and apportions this budget among them. As the Council's executive agency, the Planning and Budgets Committee determines the direction and pace at which the system will develop.

University representatives hold a majority on the Planning and Budgets Committee, as on the Council for Higher Education. Four of six members of the Planning and Budgets Committee are university professors and two are public figures prominent in economic affairs, business, or industry. Two of the professors represent the humanities,

the social sciences, law, or education; the other two speak for the natural sciences, engineering, medicine, or agriculture (Council for Higher Education, 1995: 15).

The academic colleges, although newly represented on the Council for Higher Education, are not represented on the Planning and Budgets Committee.

Traditionally, Israel's universities have been funded primarily by the national budget. The budget, appropriated by the Finance Ministry, is administered by the Planning and Budgets Committee. The Committee operates for this purpose as an independent Ministry; in fact, Higher Education has a budget book of its own, separate from that of the Ministry of Education. The Planning and Budgets Committee drafts the budget in consultation with the various universities, and then negotiates and bargains with the Finance Ministry and with the Knesset Finance Committee. Once the budget is approved, the Planning and Budgets Committee apportions it among the universities and the other academic institutions. Apportionment is done on the basis of defined criteria: The teaching budget is set in consideration of the number of expected graduates at each institution, and a sum is awarded for each graduate commensurate with his or her field of study and the level of degree sought. The research budget is determined in view of each institution's research output (Council for Higher Education, 1996 [a]: 77).

The 1997 Israel state budget for higher education amounted to NIS 4.15 billion (roughly $ 1.2 billion) - a sum that represented 2.2% of the total state budget; an additional NIS 100 million were apportioned for development (Ministry of Finance, 1996 [a]:2, 8).

For comparison, the budget of the Israel Ministry of Education for 1997 was NIS 18.3 billion (roughly, $ 5.2 billion), plus an additional NIS 872 million for development (Ministry of Finance, 1996 [c], 2, 34). The Ministry of Education budget serves preschool, primary, and secondary schooling, teacher's colleges, and the regional colleges that have not yet been accredited by the Council for Higher Education.

During the first half of the 1990s, the budget for higher education grew in real terms - from NIS 1.7 billion in 1990 to NIS 3.4 billion in 1997 (1995 prices, linked to the Consumer Price Index). The share of the higher education budget in the total state budget grew too - from 1.4% in 1990 to 2.1% in 1997. The growth reflects the expansion of the system, due both to the influx of new Jewish immigrants, mainly from the former Soviet Union, and to the increase in local demand for higher education.

The universities receive the bulk of the higher education budget. In 1994/95, for example, universities were given 97.6 percent of the regular budget; the colleges made do with the remaining 2.4 percent. Of the latter sum, 94 percent accrued to four institutions: the Bezalel Academy of Arts and Design, the Rubin Institute of Music and Dance, the Jerusalem College of Technology, and Shenkar College of Textile Technology and Fashion; the remaining 6 percent was allotted to the regional colleges' academic programs (computed from Council for Higher Education, 1996 [a]: 69-70).

State funds cover about two-thirds of the expenses of the higher-education institutions (computed from Council for Higher Education, 1994 [b]: 160). The institutions marshal the rest of their funding from two sources: domestic and foreign fundraising and research grants, and tuition fees charged to students.

The share of tuition fees grew significantly between 1980 and 1993, as a result of tuition raises in the 1980s and of the expansion of the student body. The share of tuition fees in university budgets climbed from only 4 percent in 1980 to 19.7 percent in 1993, and the share of the government allocation contracted correspondingly from 75 percent to 66 percent (Iram, 1990: 12; Council for Higher Education, 1994 [b]: 49-50).

Unaccredited regional colleges are budgeted not through the Council for Higher Education but through the Ministry of Education. In 1997, the ministry allocated NIS 70.6 million for regional colleges—NIS 36.2 million for colleges in the process of accreditation and NIS 34.4 million for colleges still operating under the tutelage of the universities (Ministry of Finance, 1997: 46-47). Another NIS 22.6 million was allocated to colleges for development (ibid.: 55). The budget of the teachers' colleges - in 1997, NIS 533 million [ibid.:9] - comes from the Ministry of Education.

1. State Funding of the Higher-Education System, 1985-1997
(NIS millions, constant 1995 prices, linked to the Consumer Price Index)

	1985	1990	1991	1992	1993	1994	1995	1996	1997
Higher-education budget	1,034	1,662	1,729	2,057	2,150	2,387	3,199	2,858	3,410
% of state budget	1.0	1.4	1.3	1.5	1.7	1.8	1.8	2.0	2.1

Sources: Ministry of Finance, *State Budget: Proposal for Fiscal Year,* various years; Ministry of Education, *The Education System in Numbers, 1997*: Table B6.

THE STUDENT POPULATION

In the 1995/96 school year, 125,500 students were enrolled in academic programs in Israeli institutions of higher education (not including the Open University)—81 percent in universities, 9 percent in teachers' colleges, and the remaining 10 percent in other institutions. The Open University had an enrollment of 27,000 that year (Ministry of Education, 1987 [a]: 39, 40, 78). Aware that few students at the Open University take a full program, the Ministry of Finance computed this figure as being the equivalent of 9,000 full-time students at ordinary universities (Ministry of Finance, 1996 (d): 114).

In the universities, which still enroll a decisive majority of degree candidates countrywide, the student population grew from 1,635 in 1948/49 to 101,700 in 1995/96. The greatest expansion took place in the 1950s and the 1960s, when the onset of rapid economic development created a demand for academically trained personnel (Swirski, 1990: 84). The growth continued after the Six-Day War but halted in the second half of the 1970s. The standstill did not create tensions, because by this time the universities were admitting virtually all recipients of matriculation certificates, who were relatively few in number at the time (Council for Higher Education, 1974:c-10 and c-11).

In the early 1980s, high-school matriculation examinations were restructured, giving students greater choice in their study programs, and leading to higher rates of success - which were soon translated into an increase in the number of applicants for university studies. The universities responded by tightening admission requirements, setting new and higher standards in Math, Hebrew and English (Swirski, 1990:194-195).

The latest wave of expansion in student enrollement came in the early 1990s, in response mostly to an anticipated demand on the part of college-age youth among Jewish immigrants from the former Soviet Union, and to a demand on the part of the slowly increasing number of Israeli high-school graduates with matriculation certificates. The Council for Higher Education was party to the national consensus concerning the high national priority that was to be given to the successful absorption of the new immigrants, among whom higher education was a normative expectation. . The Council felt that "it was necessary to enable them to be absorbed into [the Israeli higher education] system" (Council for Higher Education, 1995:39). Concurrently, Israeli high-school graduates who struggled to meet the rising competition for the limited number of places in the universities stepped up their pressure. The tension was felt mainly in high-demand majors such as law and administration, in which the rising demand was countered by even tougher admission requirements.

The higher education system responded to the new pressures for expansion in two ways: by expanding enrollment in the existing universities, and by opening up an alternative track for higher education: undergraduate colleges. The college system itself was differentiated: private colleges located in the central area of the country and specializing in high-demand, prestigious professional studies, such as law and business administration, on the one hand, and state-budgeted regional colleges in the peripheral areas of the country, concentrating on first degree studies in the social sciences and the humanities.

Enrollment at the universities was expanded as a result of a decision by the Planning and Budgets Committee to absorb 30,000 new students over a five-year period, between 1991 and 1996 (ibid:40). It steered most of the increase toward institutions in peripheral areas, i.e., Haifa University and Ben-Gurion University of the Negev. Universities that agreed to admit more students were compensated by the Finance Ministry by expansion of their research infrastructure (ibid.).

At the same time that it allowed the existing universities to expand their capacity, the Council decided to inaugurate degree programs in the colleges; some of these were private colleges, which appealed to students from affluent social groups in the center of the country, and others were regional colleges, which targeted high-school graduates in peripheral areas. The colleges were intended to absorb the bulk of future increases in demand for undergraduate studies (ibid: 40), after the universities had absorbed the planned additional of 30,000 students.

Finally, it should be mentioned that the decision to academize the teachers' colleges opened up one more avenue for higher learning that awarded Bachelors degrees.

2. University Enrollment: Numbers and Growth Rates from Year to Year, 1948/49-1995/96

Academic year	Enrollment	Average percent growth
1948/49	1,635	
1959/60	9,275	17.1
1964/65	18,064	14.3
1969/70	35,374	14.4
1974/75	49,849	7.1
1979/80	54,480	1.8
1984/85	61,155	2.3
1985/86	62,360	2.0
1986/87	63,500	1.8
1987/88	64,190	1.1
1988/89	65,080	1.4
1989/90	67,750	4.1
1990/91	71,190	5.1
1991/92	78,640	10.5
1992/93	84,990	8.1
1993/94	91,480	7.6
1994/95	96,600	5.6
1995/96	101,700	5.3

Sources: Ministry of Finance, *Budget Proposal for Fiscal 1996 and Explanatory Notes: Higher Education*, p. 30; Ministry of Finance, *Budget Proposal for Fiscal 1997 and Explanatory Notes: Higher Education*, p. 20

ENROLLMENT RATES

The opening of private and regional colleges and the academization of the teaching profession brought about an increase in enrollment in degree programs. However, as a social category, students are still a minority in Israeli society.

The enrollment rate of young Israelis by age group is hard to determine with precision. International institutions such as UNESCO and the World Bank use the enrollment rate of the 20-24 age cohort as an index, including everyone enrolled in post-secondary institutions, whether they are degree-awarding or not (World Bank, 1996: 241). Alternatively, they use a category of "enrollment in tertiary education system," encompassing all holders of secondary-education diplomas who continue their studies in any setting (World Bank, 1997: 65). Table 3 presents data released by the World Bank in 1997 concerning tertiary-education enrollment in selected countries.

The most interesting finding that the table brings to light is the gap between Israel's international *economic* ranking and its place in the international *scholastic* ranking. On the economic plane, the World Bank ranks Israel among countries with high per-capita income. In terms of schooling, however, Israel's enrollment rate in 1993—35 percent of the age group—approximates the average in countries with medium per-capita income—32 percent of the age group—and falls substantially short of the average in high per-capita income countries—55 percent of age group (expressed in terms of averages in the blocs of countries shown, ibid.).

A straightforward comparison of Israel's enrollment data with those of other countries requires great caution, because Israelis, for various reasons including military service, begin higher studies at different age levels. To compare Israel with other countries, the Council for Higher Education and the Ministry of Education have devised artificial estimates. The Ministry divides the total of first-year students by the total population of the 22 age bracket, as if all first-year students were 22 years old; the Council does much the same but bases itself on the 20-24 age cohort.

Neither of these methods elicits a reliable figure for the enrollment rate by age group. Many Israeli students reach universities at relatively advanced age, be it due to military service or for other reasons. In 1992, for example, only 61.2 percent of first-degree students were in the 20-24 age group. By dividing the number of such students, 35,680, by the total number of Israelis in that age group that year, we find that only 8.4 percent of the age group were students (computed from Central Bureau of Statistics, *Supplement to the Monthly Bulletin of Statistics,* April 1995, Table 4, and *Statistical Abstract of Israel,* 1993: Table 2.20). This figure approximates the data released intermittently by the CBS for university enrollment rates in the 20-24 age cohort (see Table 4 below). Even if we inflate the figures by including masters and doctoral candidates in the 20-24 age group, we find that the proportion of students in the relevant cohort is smaller than that indicated by the data presented by the Ministry of Education and the Council for Higher Education.

Bachelors Degree Students as Percent of Population in Localities with Populations of 10,000+, 1992/93

Locality	Enrollment rate	Locality	Enrollment rate
Rahat	0.1	Afula	0.8
Umm al-Fahm	0.2	Qiryat Ata	0.8
Kafr Qasm	0.2	Qiryat Shemona	0.8
Jedideh-Makr	0.2	Ariel	0.8
Or Yehuda	0.3	Ma'alot-Tarshiha	0.8
Netivot	0.3	Ashkelon	0.9
Kalansawa	0.3	Hadera	0.9
Baqa al-Gharbiyya	0.3	Karmiel	0.9
Beney Brak	0.4	Nes Tsiyyona	0.9
Lod	0.4	Yehud	0.9
Or Aqiva	0.4	Nazareth	0.9
Qiryat Malakhi	0.4	Jerusalem	1.0
Sederot	0.4	Upper Nazareth	1.0
Taibe	0.4	Nahariyya	1.1
Tira	0.4	Rosh ha-'Ayin	1.1
Sakhnin	0.4	Hod Hasharon	1.2
Reina	0.4	Holon	1.2
Tamra	0.4	Safed	1.2
Kafr Kana	0.4	Rishon Letsiyyon	1.2
Beit Shemesh	0.5	Kefar Sava	1.3
Tirat Hakarmel	0.5	Beersheva	1.4
Ramle	0.5	Petah Tiqva	1.4
Ofakim	0.5	Arad	1.4
Shifr-'Amr	0.5	Qiryat Bialik	1.5
Maghar	0.5	Qiryat Motzkin	1.5
Arrabeh	0.5	Mevasseret Tsiyyon	1.5
Arara	0.5	Herzliyya	1.6
Yefiah	0.5	Ra'anana	1.7
Dimona	0.6	Rehovot	1.8
Yavne	0.6	Ramat Gan	1.9
Acre	0.6	Qiryat Tiv'on	1.9
Qiryat Gat	0.6	Tel Aviv-Yafo	2.0
Beit Shean	0.6	Qiryat Ono	2.0
Ashdod	0.7	Givatayim	2.1
Bat Yam	0.7	Haifa	2.2
Migdal ha-'Emeq	0.7	Giv'at Shmuel	2.3
Qiryat Yam	0.7	Ramat Hasharon	2.4
Pardes Hannah-Karkur	0.7	Nesher	2.6
Daliyat al-Karmil	0.7	Lehavim	2.9
Eilat	0.8	Meitar	3.0
Tiberias	0.8	Savyon	3.6
Ma'aleh Adummim	0.8	Elkana	4.3
Netanya	0.8	Omer	5.0

Source: Ministry of Education, *The Education System in Numbers, 1995,* Table G.13.
Note: The five localities at the bottom of the table have fewer than 10,000 inhabitants; they are shown to illustrate the magnitude of inter-locality differences. Similar disparities also exist among neighborhoods within localities, e.g., between north and south Tel Aviv. Since the Ministry of Education does not release data on neighborhoods, we included small localities that are relatively homogeneous in terms of socioeconomic status in order to show the extent of the differences.

It appears that the closest estimate of the extent of transition of young Israelis from high school to university is supplied by the Central Bureau of Statistics's follow-up findings on the university enrollment of holders of matriculation certificates during the six years after they received their certificates. The findings for the group that completed its high school studies in 1986, as shown in Table 7, indicate that only 37.5 percent of young people who received matriculation certificates in 1986 had embarked on university studies by 1992. Additional data from a follow-up study released by the Ministry of Education show that this rate rises as the years pass. Among certificate recipients in 1984, for example, 46.7 percent began to attend university by 1995—eleven years after they obtained their certificates (Ministry of Education, 1997 [a]: 72).

By using the findings of the follow-up study to compute the percent of the age group that reaches universities, we arrive at figures substantially lower than those presented by the Ministry of Education and the Council for Higher Education. In 1986, 25 percent of seventeen-year-olds earned matriculation certificates (Council for Higher Education, 1994 [b]: Table 2.2). Over the next six years, 37.5 percent of these certificate recipients began university studies (CBS, 1996 [b]: Table 2)—meaning 9.5 percent of the age group (see Table 4).

It should be noted that some Israeli high-school graduates do their studies overseas. Figures released by the Council for Higher Education, based on the number of students in overseas institutions, show that 8,690 Israelis were studying overseas in 1991—3,127 in the United States (38 percent for first degrees, the rest for advanced degrees), 3,515 in Western Europe, and 1,716 in Eastern Europe. The data on those in Europe are not itemized by level of degree sought (Council for Higher Education, 1994 [b]: 175).

WHAT SHOULD THE ENROLLMENT RATE BE?

By stating that degree-program students are a minority in the relevant age group in Israel, we are merely begging the question. The real question is: toward what academic enrollment rate should Israel aspire?

One approach, used by the Council for Higher Education, is to treat the Western European rate as a benchmark. The Council regularly points out that Israel's enrollment rate resembles that in Western Europe and surpasses that in most Third World countries—even though it still falls far short of that in the United States and Canada (see, for example, Council for Higher Education, 1994 [b]: 19-39). We have already noted how problematic the Council's comparison is, based on dividing the number of higher-education students by the 20-24 age group. Of interest to us here, however, is not the *problematique* of the comparison but the very use of the Western European rate as a benchmark, by which one may argue that Israel has a relatively respectable enrollment rate. We shall elaborate on this presently.

A second way to determine the desired enrollment rate is to base oneself on the correspondence between higher education and economic

3. Enrollment Rates in Tertiary Education Systems, Selected Countries, 1980 and 1993

	1980	1993
Israel	29	35
Countries with High Per-Capita Income		
Austria	22	43
Australia	25	42
Canada	52	103
Denmark	28	41
Finland	32	63
France	25	50
Ireland	18	34
Italy	27	37
Japan	31	30
Netherlands	29	45
New Zealand	27	58
Norway	26	54
South Korea	15	48
Spain	23	41
Sweden	31	38
Switzerland	18	31
United Kingdom	19	37
United States	56	81
Arab Countries		
Egypt	16	17
Jordan	27	19
Lebanon	30	29
Syria	17	18
Former Communist Bloc		
Belarus	39	44
Estonia	43	38
Kazakhstan	34	42
Latvia	45	39
Lithuania	49	39
Moldova	29	35
Poland	18	26
Russia	46	45
Ukraine	42	46
Uzbekistan	30	33
Latin America		
Argentina	22	41
Brazil	11	12
Chile	12	27
Mexico	14	14
Uruguay	17	30
Venezuela	21	29

Source: The World Bank, *World Development Indicators, 1997*, Washington, D.C., 1997: Table 2.8.

growth. Here, higher education is perceived as a component of capital, or, to be more precise, of "human capital," and for this reason is defined as a crucial component of social and economic development and growth. International economic agencies such as the World Bank often point to the crucial contribution of schooling to economic growth. (See, for example, World Bank, 1996: chapter 8.) Those who argue for the crucial role of "human capital" indicate neither a desired enrollment rate in higher-education institutions nor the desired proportion of schooling in the overall mix of social and economic resources. However, higher education is arguably more important in Israel, a country with sparse economic resources, than in Western European countries that have accumulated capital and other resources over centuries. In this context, it is also worth noting that the United States, Canada, and Japan—"new" developed countries from a historical perspective—have higher enrollment rates in higher education than those in Europe.

A third way to determine a desired enrollment rate is to examine the prevalent cultural norm regarding schooling in relevant reference groups. For Israel, Jews in other countries can serve as a reference point for the Jewish population and Palestinians in their countries of dispersion can serve as a reference group for the Palestinian inhabitants. On the Jewish side, Israel's higher-education enrollment rate appears to be lower than that of any large Diaspora community. In the United States, for example, the enrollment rate of Jews in degree-awarding institutions exceeds 90 percent (Tobin, 1989); high enrollment rates are also known in Canada (Torczyner, Brotman, and Viragh, 1993), the former Soviet Union (Altshuler, 1980), France (Bensimon and DellaPergola, 1984), and South Africa (Dubb, 1994). High enrollment rates are also in evidence among Jewish communities that originated in Arab countries, such as the North African Jewish community in France (Bensimon and DellaPergola, ibid.). As for the Palestinians, their enrollment rate outside Israel also surpasses that of Palestinians who are Israeli citizens (Al-Haj, 1996: 162; Swirski, 1991: 163).

A fourth way to determine a desired enrollment rate is based on principles of social justice and equality. The essence here is a comparison of the enrollment rates of the various social groups or categories within the society. As we shall see, Israel's diverse social groups are unequally represented in the student body.

In each of the last three tests, the present higher-education enrollment rate of young Israelis is found wanting.

4. Estimates of Higher-Education Enrollment Rates in Israel

Year	Council for Higher Education data: first-year students as % of 20-24 age cohort	Education Ministry data: students as % of 22 age cohort	Central Bureau of Statistics data: students as % of 20-24 age cohort	Adva Center computation: matriculation-eligibles who began university within 6 years as % of 17 age group at end of high school
1984/85		20.9	8.9	10.1
1985/86		19.8		9.6
1986/87		19.1		9.5
1987/88		19.4		9.6
1988/89		18.7	9.4	9.8
1989/90		19.4	9.0	
1990/91	23.2	20.4		
1991/92		20.0		
1992/93	26.4	22.5	10.3	
1993/94		22.0		
1994/95		22.0		
1995/96		23.1		

Sources:
Column 1: Council of Higher Education, *The Higher Education System in Israel, Statistical Report*, 1992, p. 15; Council for Higher Education, *The Higher Education System in Israel, Trends and Developments, Statistical Report*, 1994, p. 18.
Column 2: Ministry of Education, *The Education System in Numbers, 1997*, Table 6.1.
Column 3: *Statistical Abstract of Israel*, various years.
Column 4: Computed by dividing the number of those beginning university study within six years of having received a matriculation certificate by the number of 17-year-olds in the specified years. Data on the beginning university students was taken from the Central Bureau of Statistics, Admission of Matriculation Certificate Holders to First Degree Studies in Universities, Cohorts of 1983/84-1988/89, Follow-Up Until 1994/95, 1996: Table 2; the number of 17-year-olds was taken from Statistical Abstract of Israel (when the number was not noted, we divided the 15-19 age cohort by 5). The number of eligibles for internal matriculation certificates was taken from Council for Higher Education, *The Higher Education System in Israel, Trends and Developments, Statistical Report, 1994*, 1994, Table 2.2.

HIGHER EDUCATION AND JEWISH IMMIGRANTS

Israel has taken in large numbers of Jewish immigrants over the years and makes consistent efforts to bring over more. To this day, the waves of immigration have supplied the country with academically trained individuals who obtained their training overseas; thus, immigration has provided the Israeli economy with personnel who, under ordinary conditions, the Israeli higher-education system would have to train by itself. This being the case, discussion of Israel's ideal enrollment rate cannot be divorced from reference to the higher education enrollment rates of Jews in Diaspora countries.

Table 5 juxtaposes data on the number of degree-holding immigrants in selected years with information on recipients of degrees from Israeli universities during the same years. The data on immigrant degree-holders are based on reports of the Central Bureau of Statistics on "professional, scientific and academic workers." In the country's early years, immigrant degree holders far outnumbered degree recipients from the two universities in existence at that time, the Hebrew University of Jerusalem and the Technion, which together awarded only several hundred degrees each year. The immigration wave following the Six-Day War (1969-1971) brought with it 16,100 degree-holding newcomers—approximately as many as Israeli universities turned out during the same period (16,400). Were the Israeli higher education system to train as many degree holders as reached the country during that time, it would have had to double its capacity.

The trend lasted into the 1990s. In 1991, for example, the number of degrees held by immigrants exceeded the number awarded in Israel that year (14,840 vs. 14,658).

We did not find evidence that the Council for Higher Education has referred to the number of degree-holders among potential immigrants as a consideration in determining the desired size of the Israeli higher-education system.

One public expression of the importance of immigrant degree holders was voiced by Moshe Arens, a former Minister of Defense long associated with the Israel defense industries, which employ many engineers and scientists (*Ha'aretz*, July 16, 1995). Arens claimed that mass immigration from the former Soviet countries helped position Israel at the threshold of the club of the most highly developed countries, because of the large number of "ready-made" degree holders that Israel had absorbed: "The Israeli economy is now profiting from investments made by the Soviet education system." Arens then maintained that Israel needs to take but one more step to join that club of advanced countries: it must bring over "the million Jews who still live in Russia and Ukraine" (ibid.).

As we have seen, the Jewish university enrollment rate is higher in most large Diaspora communities than in Israel. Thus, to this day, Israel has been enhancing its human capital by taking in Jews who acquired their schooling elsewhere. It is for this reason, perhaps, that not much pressure has been brought to bear to expland higher education.

The demand of sizable Israeli social groups—foremost Mizrahi Jews (whose origins are in Middle Eastern and North African countries) and Arabs—for a more equitable and universalistic education system rests chiefly on principles of justice and social equality, and have thus far largely failed to elicit effective policy changes. The human capital argument has been proposed with lesser frequency or conviction, probably because of the reinforcements of academic degree holders coming from abroad, which at times created an oversupply of trained personnel in various professions and disciplines.

In the past, certain immigrant groups failed to pass on their academic standing to the second generation: thus, while the educational level of the first generation of immigrants from Iraq resembled that of immigrants from Eastern Europe, that of the second generation, educated in Israel, retreated to the lower level of second-generation immigrants from African and other Asian countries (Nahon, 1997:31-32). The phenomenon may recur amongst the immigrants who arrived in the 1990s, if the higher education system retains its restrictive and selective approach.

THE PATH TO UNIVERSITY

The hurdles that bar most Israeli youth from the portals of academia are stationed mainly not at the university gates but at earlier stages of education.

5. Immigrants in Liberal and Academic Professions, Selected Mass-Immigration Periods and Recipients of Degrees from Israeli Universities

	Immigrants in liberal and academic professions	Recipients of degrees from Israeli universities
1948-1954	13,079*	3,199
1969-1971	16,081**	16,435
1990-1995	109,941***	92,257

* The figure pertains to persons who "completed higher education." Calculated from Moshe Sicron, "Mass Immigration—Its Magnitude, Indicators, and Effects," in Mordechai Naor, *Immigrants and Transit Camps, 1948-1952,* Jerusalem, Yad Izhak Ben-Zvi, 1987 (Hebrew).
** The figure pertains to "persons in liberal, technical, and similar professions."
*** The figure pertains to "persons in scientific and academic occupations" and excludes "persons in other liberal, technical, and similar professions."
Sources: Central Bureau of Statistics, *Immigration to Israel, 1948-1972,* Part A: Annual Data, Table 9; *Students in Academic Institutions, 1964/65, 1965/66,* Table 2; *Immigration to Israel,* various years; and *Statistical Abstract of Israel,* various years.

Only a minority of Israeli youth receive matriculation certificates: 38.8 percent in 1996 (Ministry of Education, 1997 [b]). Nearly one-fifth of teenagers drop out before twelfth grade. The highest dropout rate is among the Arab youth, of whom 45.6 percent did not reach twelfth grade in 1995, as against 12.5 percent of Jewish youth (see Table 6). Non-enforcement of the Compulsory Education Law harms young Arabs even earlier in their scholastic careers: 24.5 percent drop out before they reach ninth grade. Among the Jews, the dropout rate is especially high in development towns: Ministry of Education data on dropouts at the junior-high level by locality show rates of 8-10 percent in most of these localities (Ministry of Education, 1995, Table G.11).

Among those who stay the course, a large proportion are channeled to tracks that do not prepare them for matriculation examinations or to programs that do not correspond to the latest matriculation requirements. These tracks, vocational or technological, are especially prevalent in Jewish development towns and working-class neighborhoods in the large cities (Shavit, 1984; Swirski, 1991: 97-102). Almost half of Jewish high-school students in Israel (45 percent in 1995) attend vocational or agricultural tracks (cf. Ministry of Education, 1997 [a]: 32). Of them, 38.2 percent were in programs that did not prepare them for matriculation examinations; the rest were divided between two levels, A and B, which are differentiated in the makeup of the syllabus in matriculation-exam subjects (CBS, *Statistical Abstract of Israel*, 1995: Table 22.20).

Graduates of technological tracks are a minority among those who sit for the matriculation examinations (28 percent in 1994)—even though, as stated, almost half of all high-school students attended such tracks. In 1994, only 43 percent of candidates who graduated from technological programs passed the tests, as against 65 percent of those who completed academic tracks (CBS, *Statistical Abstract of Israel*, 1995: Table 22.22).

Finally, many graduates of technological tracks who pass the matriculation examinations earn certificates at a level and/or of a subject composition that denies them a practical chance of admission to university. The Central Bureau of Statistics follow-up study on holders of matriculation certificates shows that only 21 percent of those eligible for certificates among graduates of technological programs in 1986 began to attend university by 1992—as against 42 percent of eligibles who graduated academic programs (see Table 7).

Even among graduates of academic tracks, only slightly more than 50 percent go on to university. Presumably, most of the others completed academic tracks in schools in development towns and Arab localities—where matriculation subjects are taught at levels of competence below university entrance requirements. Under such circumstances, it is difficult to attain a score sufficiently high for university admission. Table 7 shows that among those eligible for academic matriculation certificates in 1986, only 26.5 percent of Arabs and 35.8 percent of Mizrahim enrolled in universities within six years—as against 51.0 percent of Ashkenazim (Jews whose origins are in Europe, the Americas, or other English-speaking countries).

At the other end of the scale, many academic high schools in affluent neighborhoods and localities tend today to teach all twelfth-graders the basic subjects—Hebrew, Mathematics, English—at a level that entitles them to "bonuses" (score supplements that universities award to those who meet the highest requirements) when their university applications are reviewed. Those who study mathematics at the level of five units, for example, are given a bonus of 2.5 grade points on their weighted matriculation score.

Those who study the basics at a level that qualifies them for the highest bonus—and, accordingly, to a stronger likelihood of university admission, especially in high-demand majors—are a minority among Israeli high-school students. In 1994, for example, 18.7 percent of Jewish matriculation candidates and 9.2 percent of Arab candidates were tested in mathematics at the level of five units. The proportions in English were 49.2 percent and 4.4 percent, respectively (CBS, *Statistical Abstract of Israel*, 1995, Table 22.24).

Thus, university enrollment is a norm mainly for the graduates of a rather small number of high schools, mostly academic, which offer a syllabus that leads not to a mere matriculation certificate but to a certificate showing a combination of courses and a level of competence that enhance their likelihood of meeting the universities' entrance requirements.

COLLEGES AND UNIVERSITIES

The upturn in first-degree enrollment in the 1990s originates, as we have already pointed out, in a new policy at the Council for Higher Education. This policy, endorsed by the government in 1994, allows enrollment to grow by absorbing much of the expected increase in colleges. This two-tiered admission pattern allows the universities to continue screening their first-degree candidates stringently, to focus more intensively on graduate studies, and thereby to maintain their traditional posture as the institutions that train Israel's scientific, technological, and managerial elite.

Table 8 shows that the new policy has already had the effect of dispersing the country's first-degree students. In the 1990s, the universities' share of first-degree students decreased because the colleges' share rose. In 1983, almost all first-degree students—95 percent—attended a university. In 1994, nearly one-fourth—23 percent—attended non-university academic institutions. A senior official at the Ministry of Education expects this proportion to climb to 40-50 percent by the early 21st century (Wilenski, 1996: 81).

Concurrently, the proportion of Masters and Ph.D. students in university enrollment has been rising: from 23.8 percent of this population group in 1979/80 to 29.8 percent in 1994/95 (CBS, *Statistical Abstract of Israel*, 1996: Table 22.27). Some university leaders are adopting the model of prestige American universities, in which more than half the student body pursues master's and doctoral degrees, for the future development of universities in Israel (Sherman, 1995: 39; *Ha'aretz*, May 5, 1995).

The inauguration of colleges has given Israel a larger and more diverse higher-education system and created scholastic opportunities for new sectors of high-school graduates. However, the expansion seems to be coupled with an intergenerational reproduction of the class, ethnic,

and national inequality patterns that had already formed in the Israeli education system, and has actually introduced them in a new arena. Until the 1990s, tracking and segregation leading to different scholastic destinations was present in primary schools in the form of ability grouping and in high schools in the form of differentiation between academic and vocational programs. From now on, higher-education institutions will also evince this kind of tracking through differentiation between universities and expensive private colleges at one pole, and regional and, perhaps, some vocational and technological colleges, at the other.

The collective term "colleges" includes, on the one hand, for-profit private colleges that specialize in high-demand and high-prestige majors and charge much higher tuition than the universities charge, and, on the other hand, regional colleges that offer first-degree studies in social sciences and the humanities, principally for high-school graduates in peripheral localities.

The first type of institution includes principally colleges of business administration and law. The law schools were opened by entrepreneurial lecturers at the university law schools, in the wake of public pressure instigated, *inter alia*, by well-known lawyers whose children had been turned down by the university law schools and had to enroll in expensive programs overseas (Guri-Rosenblit, 1993: 464). In response to the pressure, the Knesset amended the Bar Association Law to permit the following arrangement: graduates of the new institutions do not receive academic degrees, but the Bar Association allows them to take its tests and certifies those who pass them as lawyers (ibid., 463, 464). Immediately after this arrangement was sanctioned, three private law schools opened their gates and hired lecturers from the universities at high salaries. Within one year, Israel's population of law students doubled. Additional law faculties outside the universities have opened since then.

In contrast to the private colleges, which offer an elitist program, the regional colleges represent "grass-roots" academia. While the elitist colleges admit several hundred students, the regional colleges are designed to take in more than 12,000 by the year 2000—much of the expected increase in Israel's student population.

The regional colleges are the products of a public debate that dates from the 1970s. Amid mounting pressure to open the gates of higher education, representatives of the universities, in tandem with the heads of the education system, took a uniform and consistent stand against expanding the existing universities or establishing new ones (See remarks by Yadlin, Rabin, and Rotenstreich, in deliberations of the Council for Higher Education, 1974). Instead, it was proposed to introduce a non-university academic path that would focus on teaching—not research—and would confine itself to undergraduate studies only.

6. Enrollment Rates of the 14-17 Age Cohort, 1995, by Nationality
(N per thousand)

Age	14	15	16	17
Jewish school system	995	978*	943	885
Arab school system	755	724	590	544
Total	948	950	871	816

Source: Ministry of Education, *The Education System in Numbers, 1997*, Table C.9.
* The figure pertains to 1994.

In this vein, the Ministry of Education and the Council for Higher Education recommended, in the early 1990s, the conversion of existing university-sponsored colleges in peripheral areas into autonomous academic institutions. The 1992 report of the Planning and Budgeting Committee noted that the colleges were meant for "people who are not admitted to higher-education institutions today because, in terms of their achievements on the matriculation certificate and the psychometric tests, they do not meet the current admission terms of the institutions and the various faculties. . .and for people who have. . .dropped out without completing their degree requirements" (Council for Higher Education, 1992: 59). A preliminary survey among students in regional colleges found that these institutions indeed admit mainly "students not admitted to the universities, students of Mizrahi origin, and students from peripheral areas. . . ." (Sherman, 1995: 12).

The amendment to the Council for Higher Education Law that facilitated the establishment of regional colleges (Amendment 10, enacted in 1995) promises the colleges a status equal to that of the universities in terms of both budgets and accreditation. However, several weaknesses already visible today raise doubts about the colleges' ability to attain such a status.

The legislative amendment stipulates, as stated, that the colleges shall be budgeted "in accordance with equal criteria." Immediately afterward, however, it adds that these criteria shall be determined, among other things, "in consideration of the types of institutions and the development, teaching, and research programs that the Council has approved" (ibid.). Since the colleges are defined as institutions for teaching and not for research, the practical meaning of the amendment is that "components not directly related to teaching will be deducted from [their budgets]" (Wilenski, 1996: 77). Research funding accounts for a large share of universities' budgets, the equivalent of 40-60 percent of their teaching budgets (Council for Higher Education, 1995, 69). Thus, the colleges will be seriously underbudgeted relative to the universities. Moreover, although the colleges are to offer their students a scholastic environment similar to that of the universities, it is difficult to see how they can provide university-level scholastic services unless given especially large initial development budgets. One example is library services: in view of the definitions in the law, it stands to reason that the college libraries' acquisitions budgets will be based on introductory texts in basic subjects, to the exclusion of a full range of scientific textbooks and journals in the various disciplines, which would almost certainly be defined as crucial for research but not for teaching.

The colleges' budget for the next few years is small relative to that of the universities. The Ministry of Education budget for 1997 earmarks NIS 75.7 million for operating expenses for colleges plus NIS 22.6 million for their development (Ministry of Finance, 1996 [c]: 26, 40). According to the national master plan for the development of the colleges,

the operating budget should climb to NIS 90 million by the year 2000. The development expenditures for 1994-2000 were calculated at NIS 199 million, plus an estimated NIS 49 million in special earmarked expenditures for that time (Sherman, 1995: 50). Let us recall that the budget of the Council for Higher Education, nearly all of which is earmarked for universities, was NIS 4.25 billion in 1997, including development (Ministry of Finance, 1996 [a]).

There is reason to fear that the regional colleges will find it hard to hire lecturers on the basis of criteria similar to those of universities. Since college lecturers have a heavier teaching load than university teachers, lecturers who are interested in research–the accepted basis for advancement in the academic world—will be difficult to recruit (Sherman, 1995: 38).

These constraints may affect the practical status of the degrees that graduates of regional colleges receive. The researcher Neil Sherman expects the graduates to have a difficult time: "Students who obtain bachelor's degrees from a college may find their path to advanced university study blocked, practically if not formally . . . " (Sherman, 1995: 49). Formally, Sherman says, a degree from a college should be equivalent to a university degree. "However, it is clear that in the eyes of society, employers, and the universities, when it comes to admission to advanced studies, the value of the degree will be determined in accordance with the appraisal given to the level of the colleges' studies and the quality of their graduates. . . ." (ibid., 53). "After they attain an autonomous academic status . . . the colleges will remain junior players in the higher-education system, their resources limited and their status lower than those of the universities. . . ." (ibid., 11).

Thus, there seems to be a real danger of the formation of a two-tier higher education system, its tiers differentiated at the levels of performance, outputs, and prestige. Worse still, this system may

7. Recipients of Matriculation Certificates in 1986 Who Enrolled in University within Six Years of Graduation

Groups		Matriculation-certificate holders (N)	Enrolled in university (%)	Did not enroll in university (%)
	Total	26,849	37.5	62.5
Total	Men	11,212	32.9	67.1
	Women	13,668	42.3	57.7
Religion	Jewish	22,208	39.5	60.5
	Non-Jewish	2,672	24.7	75.3
Ethnic origin (Jews)	Israel	6,943	44.7	55.3
	Europe/America	7,091	45.5	54.5
	Asia/Africa	8,174	30.0	70.0
		Academic track		
	Total	20,943	42.2	57.8
Total	Men	7,746	37.2	62.8
	Women	11,707	46.3	53.7
Religion	Jewish	16,928	45.1	54.9
	Non-Jewish	2,525	26.5	73.5
Ethnic origin (Jews)	Israel	5,688	48.9	51.1
	Europe/America	5,468	51.0	49.0
	Asia/Africa	5,772	35.8	64.1
		Technological track		
	Total	5,906	21.0	79.0
Total	Men	3,466	23.1	76.9
	Women	1,961	18.5	81.5
Religion	Jewish	5,280	21.6	78.4
	Non-Jewish	147	17.7	82.3
Ethnic origin (Jews)	Israel	1,255	25.7	74.3
	Europe/America	1,623	26.9	73.1
	Asia/Africa	2,402	15.8	84.2

Source: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1995, No. 5, Table 6.

complement a high-school education system already typified by separate and unequal tracks of study. The purpose of the colleges from the outset, as noted above, was to meet the needs of candidates who, "in terms of their achievements on the matriculation certificate and the psychometric tests. . . do not meet the current admission terms of the institutions and the various faculties" (Council for Higher Education, 1992: 59). Unless both levels of education are reformed concurrently, the two-tier structure of high-school education may provide long-term justification for the existence of the same kind of structure in higher education—and vice versa.

8. Bachelors-Degree Students in Universities and Colleges

Academic year	Total enrollment	Bachelors-degree students	Thereof: enrolled in universities	
1983/84	60,865	45,600	43,380	95%
1990/91	80,749	58,309	48,750	84%
1991/92	90,951	66,261	53,950	81%
1992/93	99,790	73,430	57,197	78%
1993/94	108,328	80,028	63,180	79%
1994/95	116,236	85,904	66,502	77%

Note: The data do not include enrollment at the Open University.
Sources: Council for Higher Education, *The Higher Education System in Israel,* Trends and Developments, Statistical Report, 1994, Table 3.1; and CBS, *Supplement to the Monthly Bulletin of Statistics, 1995, No. 3,* Table A [Introduction] and Table 10. Data for the 1994/95 academic year were computed on the basis of CBS, *Students in Universities and Other Institutions of Higher Education, 1994/95*, Tables 1 and 9.

9. Master Plan for the Higher-Education System, Presented by the Minister of Education to the Government of Israel in 1994

	1990/91	1993/94	1994/95	2000
Total enrollment	76,000	104,500	115,500	135,000
In universities	67,700	90,000	96,500	98,500
In colleges	8,300	14,500	19,000	36,500
Thereof, in regional colleges		3,000		12,000

* The data do not include enrollment at the Open University and in non-budgeted law schools.
Source: Ministry of Education, *Master Plan for The Expansion of Higher Education and Development of Colleges,* 1994.

THE STUDENT POPULATION

Israel's diverse social groups and sectors are unequally represented in the student population. The following data focus on the representation of four groups: women, Mizrahim, Arabs, and new immigrants.

The fact that the various groups within Israeli society are not equally represented in the student body is evidenced by the data on bachelors degree students as a proportion of the total population, by locality, on p. 5.

"Periphery" is a concept that embodies not only geographic location but socio-economic status. Although Arad is situated in the geographic periphery, many of its inhabitants belong to the Israeli middle class. This town has twice the proportion of students as Dimona, a town geographically nearby but socioeconomically far away. Bat Yam, although located in the center of the country, is populated predominantly by the lower-middle class and has a proportion of students reminiscent of most development towns.

WOMEN

Women's university enrollment rates have been rising steadily in the past 30 years—from a rate lower than their representation in the age group up until the 1980s to more than half of enrollment today. Moreover, women currently account for a majority of candidates for first and second degrees; only at the doctoral level are men in the majority.

The proportion of women in the student population rose from 36.1 percent in 1964/65 to 51.4 percent in 1990/91 and more than 55 percent in 1995/96. The increase was greatest in advanced degree programs: from 19.4 percent of masters' candidates 1964/65 to 56.4 percent in 1995/96; and from 20.6 percent of doctoral candidates to 47.8 percent, respectively.

The increase in women's representation is also evident among degree recipients: Table 12 shows that women earned a majority of the bachelors degrees awarded in 1994/95, about half of the masters degrees, and nearly 40 percent of the doctorates.

Women are overrepresented in programs that lead to professional certification (as distinct from academic degrees). Teaching is the main program of this type. The proportion of women recipients of teaching certificates climbed from 58.9 percent in 1969/70 to almost 80 percent

10. Proportion of Women among Candidates for Bachelors, Masters, and Ph.D. Degrees in Universities, 1964/65 - 1995/96

	1964/65	1971/72	1974/75	1980/81	1984/85	1990/91	1995/96
Total	36.1	42.1	42.8	46.9	47.9	51.4	56.3
Bachelors degree	39.1	45.2	44.8	47.9	48.3	51.9	56.5
Masters degree	19.4	31.9	35.2	42.9	46.8	50.6	56.4
Doctorate	20.6	21.8	25.9	33.8	39.7	42.4	47.8

Sources: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1986, No. 4, Table 2; *Supplement to the Monthly Bulletin of Statistics, 1995,* No. 5, Table 1; *Students in Academic Institutions, 1971/72-1978/79*, Special Publications Series 618, Table 9; *Students in Academic Institutions, 1964/65*, 1965/66, Tables 3 and 6; *Students in Universities and Other Institutions of Higher Education, 1995/96*, Current Briefings in Statistics, No. 11, 1997, Tables 1 and 3.

11. Proportion of Women among University-Degree Recipients, 1969/70 - 1994/95

	1969/70	1974/75	1979/80	1984/85	1990/91	1994/95
Bachelors degree	39.7	42.5	45.0	49.0	52.1	55.3
Masters degree	24.8	33.5	37.8	40.8	46.4	49.7
Doctorate	15.5	17.2	27.2	32.8	37.6	39.0
Certification	58.9	75.8	84.2	78.2	78.3	79.6

Sources: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1976, No. 8, Table 3; *Supplement to the Monthly Bulletin of Statistics,* 1995, No. 4, Table 1; *Supplement to the Monthly Bulletin of Statistics,* 1993, No. 10, Table 2; *Recipients of Degrees from Universities and Other Institutions of Higher Education,* 1994/95, Table 2.

twenty-five years later. In fact, the entire teaching profession has been feminized: in 1995, 74 percent of persons employed in education were women (CBS, press release, February 4, 1997).

Women by Ethnic and National Affiliation

In 1992/93, 41.7 percent of women university students were Ashkenazi (origins in Europe/America), 25.2 percent Mizrahi (origins in Middle East or North Africa), and 4 percent Arab. (The remaining 29.1 percent were Jewish students of the third generation, for whose ethnic origins the Central Bureau of Statistics does not collect data.) (CBS, *Monthly Bulletin of Statistics*, 1995, No. 4, Tables 1 and 6.)

Women's representation varies among Israel's national and ethnic groups. Table 12 shows that women are more highly represented among Jewish students than among non-Jewish students; among Mizrahi students than among Ashkenazi students, and among Christian students than among Muslim.

12. Proportion of Women among Students, by Ethnic and Religious Group, 1995/96

	Jews	Ashkenazim	Mizrahim	Non-Jews	Christians	Muslims	Druze
Percent of women	57.1	52.1	59.3	44.1	54.3	39.9	33.2

Source: CBS, *Candidates for First Degree Studies, Students and Degree Recipients in Universities, 1993/94-1995/96, Demographic Characteristics and Dictrict of Residence*, September 1997, Table 16..

13. Proportion of Women Students in University Majors 1964/65 - 1995/96

Major	1964/65	1971/72	1976/77	1981/82	1988/89	1992/93	1995/96	% change, 1976/77-1995/96
General humanities	64*	69	57	57	58	60	60	5
Social sciences	34*	42	45	50	54	59	63	40
Languages, literature, and regional studies			78	81	82	83	82	5
Education and teaching			72	79	81	85	86	19
Business and administration		16	21	33	38	43	169	
Law	26	31	32	39	42	46	48	50
Medicine	21**	29**	26	33	40	46	48	85
Paramedical occupations			74	80	84	81	83	12
Statistics, mathematics, and computers	33***	39****	41	36	33	35	34	-17
Physics			29	27	35	37	35	21
Biology			63	63	62	67	64	2
Engineering and architecture	6	8	8	13	16	19	21	163
Agriculture	10	18	22	33	38	43	52	136
Arts and applied arts			71	78	79	75	77	8

Notes:
a. The last column pertains to 1976/77 because full data for all disciplines were not available in previous years.
b. All percents are rounded.
* Including languages, regional studies, education and teaching, and arts: the definitions were revised in 1973/74.
** Includes paramedical occupations.
*** Before 1973, the category was "Natural sciences and mathematics" and it included physics, chemistry, and biology.
Sources: CBS, Students in Academic Institutions, 1971/72-1978/79, 1979, Table 9; *Supplement to the Monthly Bulletin of Statistics,* 1978, No. 3, Table 7; *Supplement to the Monthly Bulletin of Statistics, 1983,* No. 4, Table 9; *Supplement to the Monthly Bulletin of Statistics,* 1990, No. 8, Table 3; *Supplement to the Monthly Bulletin of Statistics,* 1994, No. 5, Table 3; *Students in Academic Institutions, 1964/65, 1965/66*, Table 9; *Students in Universities and Other Institutions of Higher Education, 1995/96*, Table 3.

Women by Major

The uptrend in women's representation in universities is differently manifested in different disciplines, as Table 13 shows.

In several fields—the humanities, regional studies, biology, and art and applied art—women's share has been stable over the years. In only one discipline has their proportion decreased: statistics, computer sciences, and mathematics. In most other disciplines, their representation has risen.

The proportional increase in women's enrollment is especially salient in fields formerly considered "for men": business and management, engineering and architecture, agriculture, medicine, and law. In medicine and law, women are verging on equality at 48 percent of enrollment. In several fields, notably engineering and architecture (21 percent), women's representation has risen but still falls short of equality.

In education and teaching, in contrast, the share of women has climbed to 86 percent, a 19 percent increase since 1976/77. In the social sciences, their share has risen from 45 percent of total enrollment in 1976/77 to 63 percent in 1995/96.

As for the increase in the share of women in "men's" disciplines, it is worth noting that only a small proportion of total enrollment is involved. If we focus on the two disciplines that have attained the highest level of demand because of the prestige and market value presently attached to them—law and business administration—and add the discipline traditionally considered most prestigious in the past, medicine, we find that only 6,208 women are enrolled—11.6 percent of all women students. The number of men in these disciplines is also small—7,822, 18 percent of men's university enrollment (CBS, 1996 [a]: Table 3). The relative smallness of this group of women students, coupled with these faculties' stiff entrance requirements, gives reason to hypothesize that most of these women students come from affluent families and attended prestigious high schools.

14. Percent of Women Senior Faculty, by Rank, 1978/79 and 1992/93

Rank	1978/79	1992/93	Percent increase in representation
Total	16.2	20.0	23
Full professor	4.6	7.3	59
Associate professor	7.7	14.2	84
Senior lecturer	16.6	30.0	81
Lecturer	28.9	36.6	27

Source: Council for Higher Education, *The Higher Education System in Israel, Trends and Developments, Statistical Report, 1994,* Table 1.9.

Women in Non-University Institutions

In 1995/96, women accounted for 64 percent of bachelor-degree students in non-university institutions (15,165 out of 23,747), and 62 percent of them were in teacher training programs. The share of women in enrollment was 87 percent in teacher training, 64 percent in arts and design, 58 percent in law, 33 percent in economics and business administration, and only 24 percent in the technological sciences (computed on the basis of CBS, 1997 [b], Table 9). The academic program of the Open University was attended by 14,305 women in 1995/96—52 percent of enrollment in this university (computed from ibid.).

Women on the Faculty

The uptrend in women's representation among students and degree recipients has not been accompanied by a commensurate increase in their representation on university teaching staffs.

About ten years ago, researcher Nina Toren warned about women's underrepresentation at the senior staff levels—lecturers, senior lecturers, associate professors, and full professors—and overrepresentation at junior levels such as teaching assistants, teachers, researchers, and visiting lecturers of various kinds in Israeli universities (Toren, 1987). Toren attributed the poor representation of women at the senior staff levels, especially in "masculine" disciplines such as the physical sciences, to their being a minority in the profession. She also alluded to another factor: the perception that traits deemed "feminine" are inconsistent with the requirements in these disciplines (Toren and Kraus, 1987).

Between 1978/79 and 1992/93, the overall representation of women in senior university teaching staffs increased by 23 percent. An especially strong upturn occurred at the ranks of associate professor (84 percent) and senior lecturer (81 percent). However, women's representation at all ranks, especially the two highest, still falls far short of their share of degree recipients.

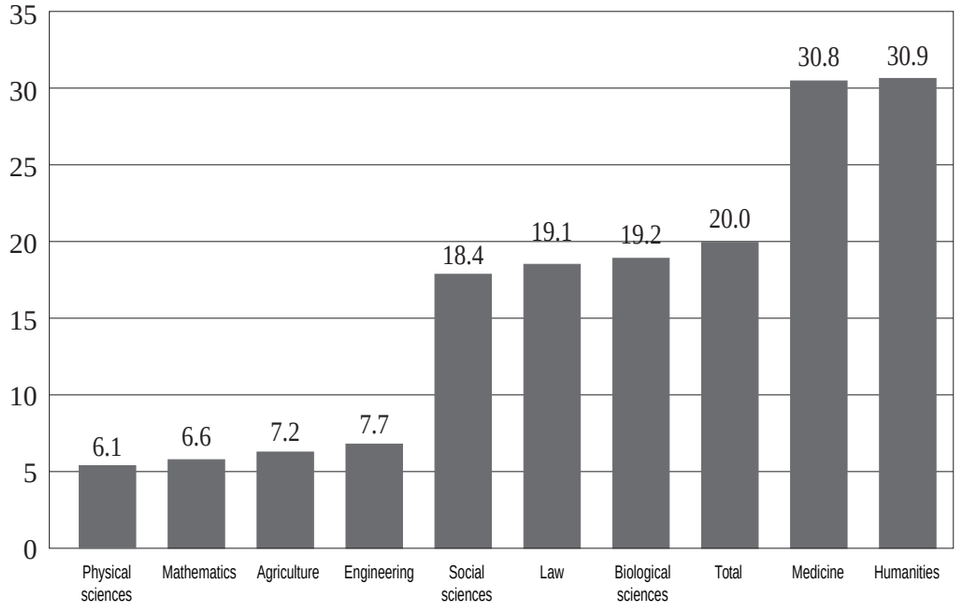
As for women's representation on teaching staff by academic disciplines, we find their representation highest at the senior staff level in the humanities and medicine, and lowest at the senior staff level in mathematics and the physical sciences (see Figure 1). Figure 2 and Table 18 present data on women's representation on the teaching faculty of the Hebrew University and the Technion.

15. Representation of Women on the Senior Faculty of the Technion

	Lecturer	Senior lecturer	Associate professor	Full professor
Women	14.8%	15.0%	10.0%	3.5%
Men	85.2%	85.0%	90.0%	97.0%
Total	100%	100%	100%	100%

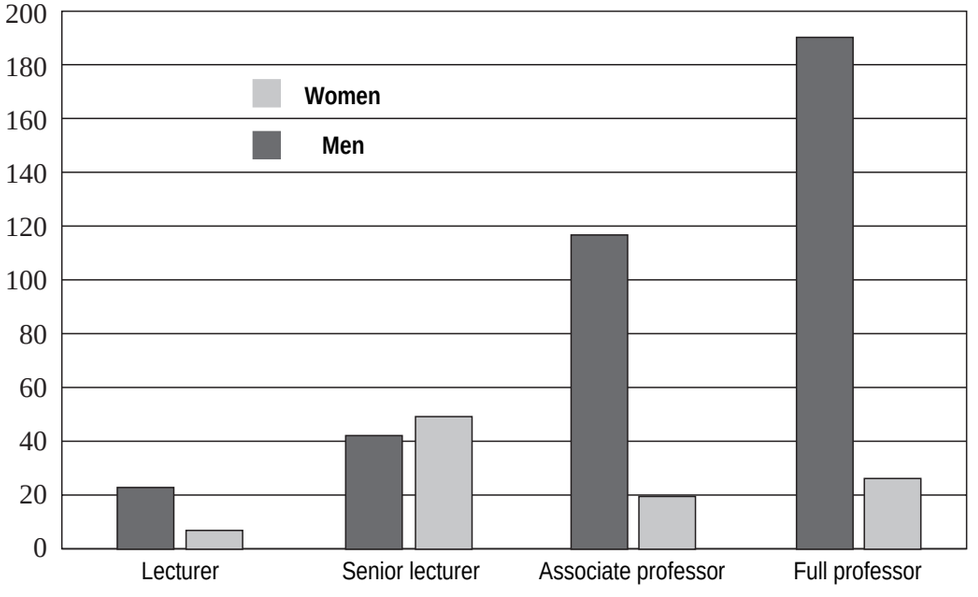
Source: Rachel Alterman, *Women and Men at the Technion—Teaching Staff and Students. Analysis of 1994/95 Data*, p. 2.

Figure 1. Percentage of Women Senior Faculty Members, by Discipline—1992/93



Source: Council for Higher Education, Planning and Budgeting Committee, *The Higher Education System in Israel, Trends and Developments, Statistical Report, 1994,* p. 47.

Figure 2: New Faculty at the Hebrew University of Jerusalem between 1983 and 1993, by Rank and Sex



Source: Nina Toren, *Women and Men on the Faculty of the Hebrew University of Jerusalem, The Situation Today, 1983/1993,* Jerusalem, undated (Hebrew).

MIZRAHIM

The representation of Mizrahim in universities falls short of their share of the relevant age group. In 1995/96, Mizrahim—those born overseas and those born in Israel whose fathers were born in Asia or Africa—accounted for 26.1 percent of Jewish university students as against 40.2 percent of the 20-24 age cohort. Ashkenazim—those born abroad and those born in Israel whose fathers were born in Europe or America—were 42.5 percent of Jewish university students and 32.9 percent of the age group (The remaining Jewish students are the third generation, for whom the Central Bureau of Statistics does not collect data on ethnic origin).

The underrepresentation of Mizrahim in universities is foremost the result of the obstacles mentioned in the section, "The Path to University." Mizrahim were a major target population of the policy first implemented in the 1960s, which introduced ability grouping at the primary level and vocational tracks in high schools. Although these measures were meant to boost Mizrahi high-school enrollment rates, they institutionalized a different and unequal set of expectations for different groups of students, and, consequently, had long-term stratification effects (Shavit, 1984; Swirski, 1990; 1995: Chapter 3). Today, the Mizrahi high-school enrollment rate is indeed high, but many take programs that do not lead to matriculation certificates that meet universities' requirements.

The entrenchment of low expectations is manifested with special acuity in the relatively low level of performance of primary schools in Mizrahi neighborhoods and development towns. The most comprehensive study in Israel on scholastic achievements in primary schools (Minkovich, Davis, and Bashi, 1980) found an average gap of approximately two years between Mizrahi-majority schools and Ashkenazi-majority schools in the performance level of sixth graders. At the high-school level, most academic schools—those that prepare their students for matriculation examinations at the highest level—are in affluent, mostly Ashkenazi neighborhoods. The typical schools in Jewish working-class neighborhoods and development towns are "comprehensive," i.e., combining academic and vocational curricular programs. In most development towns, students in the vocational-technological track outnumber those in the academic track (Ministry of Education, 1995: Table G.7). The universities do not recognize some of the vocational subjects (State Comptroller, 1995: 315). Furthermore, many students in vocataional education do not study the basics—English, Mathematics, and Hebrew—at the level required for university admission, let alone at a level that would give them a bonus on the weighted score for university admission. In 1989, the Ministry of Education introduced a reform in what it prefers to call "technological education" in order to qualify a higher proportion of students for matriculation certificates and induce a higher percent of vocational graduates to advance to higher education. However, an examination of the achievements of the first class after this reform did not find major improvements: the number of study units accrued by the graduates after the reform was not significantly greater than that preceding the reform (State Comptroller, 1995: 321).

Data from the CBS follow-up study on university enrollment of those who earned matriculation certificates in 1986 show that—as Table 7 indicates—by 1992 only 30 percent of Mizrahi certificate holders began to attend universities, as against 45.5 percent of their Ashkenazi counterparts. One reason for the disparity is the difference in the quality of curricula programs offered in different localities and neighborhoods.

Mizrahim by Majors

The representation of Mizrahim among university students, although lower than their share in the relevant age groups, has risen substantially in the past few decades, as Table 18 shows: from 11.9 percent of all Jewish students in 1965/66 to 26.1 percent in 1995/96.

The general increase is also manifested in the share of Mizrahi students (Israel- and foreign-born) in various academic disciplines (see Table 19). However, several disciplines remain pronouncedly "Ashkenazi": In 1995/96, Ashkenazim were more strongly represented in the faculties of engineering and architecture, mathematics and natural sciences, and medicine—prestige faculties all—than in the university student body all told. In contrast, the share of Mizrahim was relatively high in the social sciences, business and management, and in the humanities.

16. Jewish University Students in 1995/96, by Origin and by Representation in the 20-24 Age Cohort

Origin	Percent of Jewish university students	Percent of Jewish 20-24 age group
Mizrahi	26.1%	40.2%
Ashkenazi	42.5%	32.9%

Sources: CBS, *Candidates for First Degree Studies,Students and Degree Recipients in Universities, 1993/94-1995/96, Demographic Characteristics and District of Residence*, September 1997, Table 11; *Statistical Abstract of Israel 1996,* Table 2.22.

17. Women Among Jewish Students, by Origin, 1984/85 - 1995/96

	1984/85	1988/89	1992/93	1995/96
Percent of women among Ashkenazi students	49.3	50.1	52.1	55.8
Percent of women among Mizrahi students	48.0	51.7	57.2	59.3

Sources: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1988, No. 6, Table 6; *Supplement to the Monthly Bulletin of Statistics,* 1990, No. 6, Table 6; and *Supplement to the Monthly Bulletin of Statistics,* 1995, No. 4, Table 6;

Mizrahi and Ashkenazi Women

Mizrahi women are more strongly represented in higher-education institutions than Mizrahi men. The ratio of Mizrahi women to Mizrahi men is even higher than that of Ashkenazi women to Ashkenazi men: 59.3 percent of Mizrahi students were women in 1995/96, in contrast to 55.1 percent of Ashkenazi students.

The high proportion of women among Mizrahi students is presumably related to their high share, relative to men, in enrollment in high-school academic tracks. Table 7 shows that 56 percent of those eligible for academic matriculation certificates in 1986 were women (11,707 of 20,943), as against only 33 percent of those eligible for vocational

18. Jewish University Students, by Origin and Degree, 1965/66-1995/96

	1965/66	1970/71	1974/75	1980/81	1984/85	1990/91	1992/93	1995/96
Total								
Ashkenazim	78.4	76.4	67.7	65.9	58.6	46.4	45.3	42.5
Mizrahim	11.9	13.7	14.7	22.3	24.1	25.3	24.9	26.1
Israel-born	6.6	7.0	6.7	11.8	17.3	28.2	29.8	31.5
Bachelors degree								
Ashkenazim	79.2	75.8	67.9	62.3	53.7	42.4	42.3	40.3
Mizrahi	12.6	14.9	16.6	24.9	27.1	27.2	26.3	27.1
Israel-born	7.0	7.3	7.2	12.8	19.2	30.4	31.5	32.5
Masters degree								
Ashkenazim	72.3	78.8	72.1	75.0	70.4	54.9	50.8	45.9
Mizrahim	8.2	10.0	9.8	15.0	16.5	20.8	22.3	24.4
Israel-born	5.1	6.5	5.6	9.2	13.1	24.2	27.0	29.7
Ph.D.								
Ashkenazim	81.0	77.9	60.6	81.5	78.4	67.4	63.9	58.1
Mizrahim	6.4	7.6	6.7	11.4	12.4	14.2	14.5	15.7
Israel-born	4.0	5.4	3.2	7.1	9.1	18.4	21.7	26.3

Sources: CBS, *Supplement to the Monthly Bulletin of Statistics*, 1995, No. 4, Table 1; *Students in Academic Institutions, 1971/72-1978/79*, Table 3; *Students in Academic Institutions, 1970/71*, *Table 4; Statistical Abstract of Israel, 1981, Table 22/31; Statistical Abstract of Israel, 1986, Table 22/31; Candidates for First Degree Studies, Students and Degree Recipients in Universities, 1993/94-1995/96, Demographic Characteristics and District of Residence, September 1997, Table 11.*
Note: "Ashkenazim" and "Mizrahim" include those born abroad and those born in Israel whose fathers were born abroad; "Israel-born" denote those born in Israel whose fathers were also Israel born.

19. Jewish University Students, by Origin and Major, 1970/71 - 1995/96

	1970/71		1974/75		1984/85		1988/89		1992/93		1995/96	
	Ashk.	Mizr.	Ashk.	Mizr.	Ashk.	Mizr.	Ashk.	Mizr.	Ashk.	Mizr.	Ashk.	Mizr.
Engineering, architecture	74.6	11.8	77.1	16.3	59.8	23.0	50.6	24.0	46.4	25.9	45.5	21.5
Mathematics and sciences	78.0	12.7	76.1	13.7	59.2	21.1	51.1	20.9	49.6	23.2	51.0	18.1
Paramedical professions									47.0	28.7	50.2	20.7
Medicine	80.3	9.5	77.7	11.7					49.6	21.8	47.8	16.8
Paramedical professions + medicine					67.6	15.5	57.5	18.1				
Law	74.7	12.9	69.5	15.5	52.5	24.9	46.6	21.5	39.9	24.4	37.5	21.2
Social sciences, business, and management	78.0	12.8	74.1	16.0	57.4	25.4	49.0	26.0	38.5	33.4	39.0	29.1
Humanities	73.7	14.6	70.1	17.4	57.8	27.1	51.1	27.4	38.7	38.9	40.1	31.9
Agriculture	71.8	18.4	69.8	19.5	58.7	18.2	52.1	20.4	41.2	26.2	40.0	18.8

Sources: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1995, No. 4, Table 7; *Supplement to the Monthly Bulletin of Statistics,* 1988, No. 6, Table 7; *Supplement to the Monthly Bulletin of Statistics,* 1990, No. 6, Table 7; *Students in Academic Institutions, 1979/80,* Table 23; *Students in Academic Institutions, 1970/71,* Table 19; CBS, *Candidates for First Degree Studies, Students and Degree Recipients in Universities, 1993/94-1995/96, Demographic Characteristics and District of Residence,* September 1997, Table 17.

matriculation certificates (1,961 out of 5,906). (The Central Bureau of Statistics releases data on certificate eligibility by ethnic groups but not by sex within each ethnic group.)

Mizrahim in Pre-Academic Preparatory Programs

Pre-academic preparatory programs provide a "second chance" for young people who do not hold a matriculation certificate at the level needed for admission to universities or other higher education institutions. In a certain sense, these programs reflect, and aspire to correct, the results of the poor performance of the school system in working-class urban neighborhoods and largely Mizrahi development towns.

In 1993/94, pre-academic preparatory programs were attended by 7,789 students—32 percent in university-affiliated programs, 51.5 percent in programs affiliated with regional colleges, and 16.6 percent in programs at teachers' colleges. About half were Mizrahi and two-thirds were deemed "disadvantaged," i.e., eligible for financial assistance because of their socioeconomic status (Council for Higher Education, 1994 [b]: Table 2.3). In 1992/93, 71 percent of pre-academic students came to these programs without matriculation certificates (ibid.).

Mizrahim in Non-University Institutions

Since the Central Bureau of Statistics and the Council for Higher Education release data on ethnic origin for university students only, we cannot gauge the extent of representation of various ethnic groups in non-university institutions.

A survey in 1993/94 among students in four regional colleges—Ashkelon, Negev, Jezreel Valley, and Western Galilee—found a relatively high proportion of Mizrahi students: of the 359 students in the sample, 44 percent were Mizrahi, 22 percent Ashkenazi, and 34 percent Israel-born who were the offspring of Israel-born (Sherman, 1995: 64, 69). Furthermore, a majority of those interviewed—73 percent—lived in localities on the periphery (ibid: 94-95).

Mizrahim on the Faculty

There are no data on the representation of Mizrahim on the teaching faculties of higher-education institutions. Neither the Central Bureau of Statistics nor the Council for Higher Education has released such information, and research surveys on the subject have not been undertaken.

ARABS

Young Arabs are very poorly represented in higher-education institutions, notwithstanding the substantial increase that occurred in the 1970s and the first half of the 1980s. As Table 22 shows, in 1964/65 young Arabs accounted for 1.3 percent of university students and 13.4 percent of the 20-24 age cohort. Corresponding figures in 1984/85 were 6.7 percent and 21.1 percent, respectively. The trend then reversed direction, and a decline actually occurred: in 1992/93, Arabs' representation in the student body decreased to 5.3 percent while their share in the age group was 21.7 percent. The ratio of the share of Arabs in the age group to their share of university enrollment returned to the 1974/75 level—4:1. In 1995/96, the representation of Arab students rose somewhat, to 5.9%. (The Israel Central Bureau of Statistics classifies Arab students and youth as "non-Jews" and not as Arabs. Our assumption is that most of the "non-Jews" are Arabs.)

For years, enrollment in universities in the Communist Bloc had served as a counterweight to the low enrollment rates of Arabs in Israeli universities. According to one of the sources, 1,090 Israeli Arabs earned academic degrees from higher-education institutions in Communist-Bloc countries between 1966 and 1986, 60 percent in medicine and 20 percent in engineering (al-Haj, 1996: 172).

Notably, despite the recent general decrease in Arab enrollment rates, the proportion of Arab students among doctoral candidates has actually been rising steadily, from 0.2 percent in 1970/71 to 2.7 percent in 1984/85 and 3.5 percent in 1995/96 (see Table 22). In other words, a growing proportion of the few who attend university are going on to advanced degrees.

Sociologist Majd al-Haj attributes the proportional decrease in Arab higher-education enrollment to a feeling among young Arabs that higher education is not an efficient avenue of social mobility. In the Israeli labor market, which typically discriminates against Arab citizens, university education guarantees neither a respectable job nor an appropriate income (al-Haj, 1996: 160). Degree-holding Arabs are generally barred from the government service, except for teaching jobs in Arab localities (ibid.: 173). Members of the liberal professions, such as doctors and lawyers, struggle to find employment in Jewish institutions and are forced to compete with each other in the congested sector of private clinics and offices in Arab localities. In the 1990s, Arab doctors, including those trained in the Communist Bloc, also find themselves competing with masses of Jewish physicians who have come to Israel from the very same countries (ibid.: 172).

Thus, young Arabs who hold matriculation certificates and consider going on to academic studies appear to be influenced by labor-market constraints. However, their numbers are few: in 1996, only 23.1 percent of seventeen-year-old Arabs earned matriculation certificates (Ministry of Education, 1997 [b]: 5). The data for 1995 reveal the internal breakdown: 22.2 percent of Muslims aged 17, 28.7 percent of Druze, and 5.7 percent of Negev Bedouin earned matriculation certificates, as against 43.8 percent of Jews of like age (Ministry of Education, 1996; the Ministry did not release data concerning Christians).

Young Arabs, much like young Mizrahim, encounter hurdles at earlier levels of the education system. The first problem is non-enforcement of the Compulsory Education Law: 24.5 percent of Arab pupils drop out before they reach ninth grade; only 45 percent of Arabs aged seventeen attend twelfth grade (see Table 6 above).

A second problem is the quality of performance in Arab schools. Bashi, Kahan, and Davis, in a study on the scholastic achievements of Israeli primary-school pupils, found a disparity between those in Arab schools and those in Jewish schools. The disparity they found resembles that between achievements in Mizrahi-majority schools and those in Ashkenazi-majority schools (Bashi, Kahan, Davis, 1981: 458-464). The low achievement level recurs in the high schools. Here, unlike in the development towns, the main reason is not the existence of vocational tracks that do not train students for matriculation examinations, since vocational schools are a relative latecomer to Arab localities. The main reason seems to be the differentiation among Arab high schools between high-quality private institutions, most of which belong to Christian orders, and the poorly performing State schools (al-Haj, 1996: 81).

Some Arab students come away with matriculation certificates that do not meet the universities' admission requirements. (See, for example, Abu-Rabiyya et al., 1996.) The rejection rate of Arab university candidates exceeds that of Jewish candidates; in 1995/96, Arabs accounted for 11.9 percent of university candidates but 30.6 percent of rejections (CBS, 1997c, Table 1).

Within the ranks of Arab students, internal disparities along religious and gender lines are discernible. In 1992, Muslims accounted for 76 percent of non-Jews in Israel but only about half of non-Jewish university students. In contrast, Christians represented 14 percent of non-Jews and 32 percent of non-Jewish students (computed on the basis of CBS, *Statistical Abstract of Israel*, 1993, Table 2.1, and *Supplement to the Monthly Bulletin of Statistics*, 1995, No. 4, Table 1).

The enrollment rate of Arab women falls short of that of Jewish women—both Ashkenazi and Mizrahi—and of Arab men. However, as Table 20 shows, their participation rate more than quadrupled in the past twenty years—from 8.9 percent of Arab students in 1971/72 to 44.1% percent thereof in 1995/96. An upturn in the enrollment rates of women at earlier stages of the education system coincides with this increase (See Ministry of Education, 1997 [a]: Table c. 9.).

20. Proportion of Women among Arab University Students, 1971/72-1995/96

	1971/72	1974/75	1984/85	1988/89	1992/93	1995/96
Share of women (percent)	8.9	11.8	28.7	35.1	41.0	44.1

Sources: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1995, No. 4, Table 6; *Supplement to the Monthly Bulletin of Statistics,* 1990, No. 6, Table 6; *Supplement to the Monthly Bulletin of Statistics,* 1988, No. 6, Table 6; Students in Academic Institutions, 1971/72-1978/79, Tables 7, 9; CBS, *Candidates for First Degree Studies, Students and Degree Recipients in Universities, 1993/94-1995-96, Demographic Characteristics and District of Residence,* September 1997, Table 16.

21. Arab University Students, by Majors, 1970/71-1995/96 (Percent)

	1970/71	1974/75	1984/85	1988/89	1992/93	1995/96
Engineering and architecture,	0.7	1.0	6.1	4.2	4.3	5.7
Mathematics and natural sciences	1.1	3.6	7.6	6.6	6.6	6.1
Paramedical occupations			8.5*	8.1*	7.8	9.1
Medicine	2.5	3.6			6.0	6.6
Law	2.6	3.4	3.9	5.2	5.7	5.7
Social sciences, business, and management sciences	0.9	1.6	4.7	4.3	3.2	3.5
Humanities	3.9	4.5	8.4	7.7	7.0	8.1
Agriculture	1.2	2.6	4.2	4.1	2.6	2.3
Total	1.7	2.9	6.7	5.9	5.3	5.9

* Including medicine and paramedical professions.
Sources: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1995, No. 4, Table 7; *Supplement to the Monthly Bulletin of Statistics,* 1988, No. 6, Table 7; *Students in Academic Institutions, 1971/72-1978/79*, Table 23; *Students in Academic Institutions, 1970/72*, Table 19; CBS, *Candidates for First Degree Studies, Students and Degree Recipients in Universities, 1993/94-1995-96, Demographic Characteristics and District of Residence,* September 1997, Table 17.

Arabs by Majors

Arab students tend to focus on mathematics and the natural sciences, on medicine and the paramedical professions, and on the humanities. Their share in the other disciplines falls short of their share in the student body all told. The few Arabs who enroll in universities evidently choose majors that they perceive as giving them a better chance of economic advancement. One of the fields in which Arab students are overrepresented—the humanities—has relatively low admission requirements and may accommodate students who do not meet the standards of more desired disciplines.

Arabs in Non-University Institutions

In 1993/94, four post-secondary Arab education institutions had a combined enrollment of 1,211, a large majority of whom—851—attended teachers' colleges. Arab students accounted for 2.1 percent of enrollment in non-university institutions—those that offer bachelors degrees in at least one discipline (not including academic programs in regional colleges), post-secondary institutions for practical engineering, and technological schools that offer two additional years of high school (grades 13 and 14 (CBS, 1996 [a], Tables 2 and 3).

Arabs on the Faculty

Teaching in academic institutions is not a real option for degree-holding Arabs. Sociologist Majd al-Haj found that only 0.4 percent of Arab degree holders, as against 4.5 percent of their Jewish counterparts, have positions on the teaching staffs of higher-education institutions. Of 4,500 teaching positions at universities in 1994, only 15 were held by Arabs (al-Haj, 1996: 173).

NEW IMMIGRANTS

The arrival of recent Jewish immigrants - mainly from the former Soviet Union - who had been, or who were about to become, students in their countries of origin was one of the reasons for the liberalization of university admissions in the early 1990s. Indeed, in 1992 and 1993 the universities admitted 3,400 and 3,100 immigrant students, respectively, as freshmen—one-sixth of the total freshmen during those years (Council for Higher Education, 1994 [b]: 16).

The State funds immigrant students' entire tuition expenses for three years, on the condition that they begin their studies within eighteen months of their arrival in Israel (Lifshitz and Noam, 1996: 5). Immigrant students are also eligible for housing aid, assistance for tutoring, and a basic-needs allowance.

22. University Students by Degree and Nationality (Percent), 1964/65 - 1995/96

	1964/65	1970/71	1974/75	1980/81	1984/85	1990/91	1992/93	1995/96
Total								
Jews	98.7	98.3	97.1	95.3	93.3	94.6	94.7	94.1
Arabs	1.3	1.7	2.9	4.7	6.7	5.4	5.3	5.9
Bachelors degree								
Jews		98.0	96.5	94.6	92.1	93.7	93.8	93.0
Arabs		2.0	3.5	5.4	7.9	6.3	6.2	7.0
Masters								
Jews		99.2	98.7	97.4	96.8	97.1	97.2	97.0
Arabs		0.8	1.3	2.6	3.2	2.9	2.8	3.0
Ph.D.								
Jews		99.8	99.7	98.4	97.3	96.4	96.3	96.5
Arabs		0.2	0.3	1.6	2.7	3.6	3.7	3.5
Arabs as pct. of 20-24 age cohort	13.4	11.4	13.2	17.5	21.1	22.3	21.7	22.2

Sources: CBS, *Supplement to the Monthly Bulletin of Statistics,* 1995, No. 4, Table 1; *Students in Academic Institutions, 1971/72-1978/79*, Table 4; *Statistical Abstract of Israel, 1981,* Table 22/31; *Statistical Abstract of Israel, 1986,* Table 22/31. CBS, *Candidates for First Degree Studies, Students and Degree Recipients in Universities, 1993/94-1995-96, Demographic Characteristics and District of Residence,* September 1997, Table 11.

Immigrants from the Former Soviet Union

In 1994/95, 11,701 recent immigrant students attended post-secondary institutions; 8,342 of them were recent arrivals from the former Soviet Union. Slightly under half of the former Soviet immigrants—48.7 percent—pursued bachelors or masters degrees in universities; the others (5,216) attended preparatory programs, non-university institutions, or other post-secondary institutions such as teachers' colleges (information provided by David Sudari, director of the Students Administration at the Ministry of Immigrant Absorption, April 14, 1996).

Immigrants from Ethiopia

Among Jewish Ethiopian imigrants, the picture in 1993/94 was different and the data less unequivocal. According to Lifshitz and Noam, 410 Ethiopian-origin students attended post-secondary institutions that academic year, slightly more than half (56 percent) in universities and the rest in colleges. Only about half of them were enrolled in degree programs; the rest took preparatory courses for degree programs (Lifshitz and Noam, 1996:3). Ethiopian-origin students are assisted in various ways, including funding of tuition for five years, assistance in housing, a basic-needs allowance, and tutoring.

According to data released by the Israel Association for Ethiopian Jewry a year later, pertaining to the 1994/95 academic year, 250 Ethiopian-origin students attended universities and colleges and another 400 attended preparatory programs (Israel Association for Ethiopian Jewry, 1994:17). According to Ministry of Education data on the 1995/96 academic year, released in February 1996, the number of Ethiopian-origin students in colleges had doubled to 500 and enrollment in preparatory programs had climbed to 600 (*Ha'aretz*, February 8, 1996).

The key to the higher education opportunities of Israelis of Ethiopian origin lies in the quality of the educational services they receive at earlier stages. The Ministry of Education does not release statistics on the number of Ethiopian-origin young people eligible for matriculation certificates. According to a research report by the Israel Association for Ethiopian Jewry, the rate in 1994 was 7 percent of the age-seventeen group (Israel Association for Ethiopian Jews, 1994: 16). The report also notes that almost all of the matriculation eligibles took special tests for recent immigrants and that some were not tested in English. Under such conditions, the chances for university admission are poor. In 1996, 12.5% of Ethiopian 17 year olds received matriculction eertificates, compared with the nationwide average of 38.8% (Israel Association for Ethiopian Jews, *Kav Haofek*, January 1998).

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