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ABSTRACT

This annual report of the Planning and Budgeting Committee of the Israeli Council for Higher Education reviews: (1) the status of the Planning and Budgeting Committee, its composition, its work, and its relationship with the Council for Higher Education; (2) Israel's higher education system and a statistical review of developments; (3) planning efforts, new academic units, and statistical information; (4) the higher education budget; (5) development of academic infrastructure and promotion of research and scientific excellence; (6) funds financed jointly with other organizations; (7) inter-university cooperation; (8) student support; and (9) other activities and allocations. The report notes the rapid expansion of the higher education system and a shortage of necessary physical infrastructures. Appendices list fields of study, and provide data on: students by university and degree level and by field of study and degree level, from 1979/80 to 1991/92, recipients of degrees; registration in academic courses and graduates of the Open University; students in non-university institutions of higher education, and active higher education staff. (JDD)

THE ISRAELI COUNCIL FOR HIGHER EDUCATION

PLANNING AND BUDGETING COMMITTEE

19th ANNUAL REPORT - 1991/92

THE PLANNING AND BUDGETING COMMITTEE

Annual Report No. 19
Academic Year 1991-92

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FOREWORD BY THE CHAIRMAN

OF THE PLANNING AND BUDGETING COMMITTEE (PBC)

The Israeli higher education system continued to expand rapidly in 1991/92. The growth in the number of students during this year was unprecedented - more than 8,000 students. Most of this growth, as expected and planned, was in the universities. Despite the many difficulties that such rapid and continued growth entailed, the universities succeeded in admitting the new students without any significant disruption of their functioning; however, a shortage of the necessary physical infrastructures began to be felt during the year.

The central challenge facing the higher education system in coming years remains expansion, which is expected to last at least until the end of this decade. We must continue to devote a great deal of thought to all aspects of the expansion of the higher education system; many opportunities for change and greater efficiency, as well as not inconsiderable risks, are inherent in the process of accelerated growth. In recent years we have witnessed changes in students' demand for academic studies. Whereas the demand for research-oriented programs has remained stable, the demand for professionally-oriented programs and general academic studies is increasing. This type of demand can be accommodated relatively easily, particularly during a period of growth, by diversifying the system. Steps must be taken, however, to ensure that expansion and diversification do not lead to any lowering of standards. The PBC's policy focuses on the diversification of the system by means of academic colleges, both professional and general, at the bachelor's degree level. When the existing universities reach their maximum capacity, which should occur in two or three years, additional students will be taken in by academic colleges. During 1991/92 the PBC discussed at length the question of how to develop this new sector of the higher education system while maintaining proper academic standards.

In the area of system-wide academic planning, the PBC considered the findings of the committee that reviewed the life sciences; this committee was appointed by the PBC late in 1988/89 and completed its work early this year. The committee found that the size of the academic staff active in the life sciences is sufficient to properly encompass all subjects, and that the training given to new researchers ensures the eventual renewal, quantitatively and qualitatively, of academic staff, even taking into consideration the scope of staff retirement anticipated at the end of the 90's. The committee pointed out the shortage and ageing of scientific research equipment, inhibiting research progress and diminishing the ability of researchers to obtain research grants from competitive sources. As a result of these findings, the PBC decided to initiate a one-time earmarked allocation to support the purchase of the type of scientific equipment for the life sciences that is lacking - medium-sized standard pieces of equipment.

At the end of 1990/91 the PBC decided on a three-year program for the renewal of instructional laboratories in the natural sciences. In 1991/92 this program was dedicated to providing instructional equipment for first- and second-year students in chemistry, physics and biology. Due to the success of the program this year, the PBC decided to increase its allocation and expand it in 1992/93, thereby covering all undergraduate instructional laboratories in the experimental sciences.

During 1991/92 the absorption of new immigrants into the higher education system continued as planned. The number of new immigrant scientists who entered the system on a permanent basis grew from 50 in 1990/91 to 150 in 1991/92. In addition, a further 700 new immigrant scientists were employed as temporary researchers. The PBC increased its support for new immigrant doctoral candidates who, during their first two years of study, are not yet able to work as junior teachers or teaching assistants; the number of subsistence scholarships of this type awarded increased from 50 in 1990/91 to 100 in 1991/92. During the year the PBC devised a special plan for the absorption of a limited number of distinguished new immigrant scientists who are at an advanced stage in their scientific careers and whose age does not enable them to join the institutions of higher education as regular staff members. These scientists will be employed by the universities, with PBC financing, according to special contracts outside of the regular academic track, with special consideration given to provisions for their retirement.

The PBC's policy for the expansion of the higher education system was made possible by supplementary funds allocated especially for this purpose. In 1990/91 and 1991/92 the Ministry of Finance increased the budget base for higher education to permit the expansion of the system. At the end of 1991/92 the PBC held a comprehensive series of negotiations with officials of the Ministry of Finance that lead to an agreement with the Ministry's Budgets Division on a long-term program for 1992/93 - 1995/96. This agreement represents a significant updating and expansion of the long-term plan for the development and advancement of the higher education system. It provides, among other things, for financing for the further expansion of the system anticipated during these years, both from the point of view of the ordinary budget for teaching and basic research and that of the development budget. It should be stressed that the long-term arrangements between the Budget Division of the Ministry of Finance and the PBC underpin the capacity for long-term planning of Israel's higher education system at both the system-wide and the institutional level.

Amnon Pazy

THE REPORT OF THE DIRECTOR-GENERAL

The higher education system in Israel grew impressively during 1991/92, in accordance with the development policy that the PBC set out in 1990; the increase in student numbers reached 11,000 by 1991/92. Most of this growth was in the existing universities, which successfully met the challenge of expansion. A substantial budgetary supplement accompanied the expansion, as part of the long-term agreeements between the PBC and the Ministry of Finance, which in recent years included provisions for the increase in student numbers.

The rise in student numbers stemmed mainly from three sources: immigration, natural growth, and additional demand for higher education. These factors will continue to influence the development and diversification of the higher education system in the future as well; in 1991/92 the PBC dealt extensively with the subject of new non-university academic frameworks, such as undergraduate colleges, regional colleges and schools for applied engineering, that can be established and operated already in the second half of this decade.

The budgetary supplement during 1990/91 - 1991/92 amounted, in real terms, to nearly NIS (New Israeli Shekels) 200 million. Approximately two-thirds of the budgetary supplement was financed by extra resources from the PBC, and one-third by increased income from tuition fees due to greater student numbers. This supplement facilitated the absorption of new immigrants and the growth of academic and administrative staffs, the purchase of equipment, expanded computerization, reinforcement of library holdings, and extension of services for student welfare.

The number of students grew while scrupulous attention was paid to the balancing of budgets and preventing the incurrence of additional debts; some institutions even participated in the PBC's program for the reduction of accumulated deficits. Even during a period of expansion budgetary balance is vital, although not sufficient in itself, in order to attain higher education's goals in teaching and research. Indeed, the PBC enlarged its earmarked allocations for research and inter-university cooperation over and above the increase in global allocations.

The year in review was the first year in which the recommendations regarding tuition fees were implemented. Tuition fees were adjusted only according to the consumer price index while, at the same time, programs for student assistance were expanded - primarily the tutorial project ("Perach"), which awarded almost 13,000 scholarships this year. The implementation of the committee on tuition fees' recommendations proved, once again, that cooperation between the institutions of higher education, the Ministry of Finance, students, and the PBC contribute to the stability of the system.

The PBC's administration continued to deal, devotedly and professionally, with the many requests for academization and the increased resources for the higher education system.

Despite the fact that the future of the massive immigration from the Commonwealth of Independent States is not sufficiently clear, the higher education system in Israel will undoubtedly continue to grow at an accelerated speed in coming years; proper preparation today is vital for a strong and broad infrastructure for the future.

Gury Zilkha

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THE PLANNING AND BUDGETING COMMITTEE (PBC)

The Committee

Prof. Amnon Pazy - Chairman

Prof. Yadin Dudai

Mr. Itzhack Ish-Hurvitz

Prof. Ernest Krausz

Prof. Gur Ofer

Mr. Haim Stoessel

The Administration

Mr. Gury Zilkha - Director-General

Mrs. Techia Karcz - Secretary, Council for Higher Education and PBC

Miss Ruth Silberberg - Deputy Director-General and
i/c Development and Planning

1.1
The Terms of Reference of the Planning and Budgeting Committee

The terms of reference of the Planning and Budgeting Committee, as defined in Government Decision No. 666 of June 5, 1977, are as follows:

The Government authorizes the establishment, as a subcommittee of the Council for Higher Education, of the Planning and Budgeting Committee, which the Minister of Education and Culture has appointed with the approval of the Council for Higher Education, in order to fulfill the following principal functions:

1. To be an independent body coming between the Government and the national institutions on the one hand, and the institutions of higher education on the other, in all matters relating to allocations for higher education. The Government and the national institutions shall refrain from receiving requests or recommendations from the institutions of higher education themselves or from any other source. They shall also refrain from allocating funds to an institution of higher education other than on the recommendation of the Planning and Budgeting Committee;

2. To submit the ordinary and development budget proposals for higher education, taking into account the needs of society and the State, while safe-guarding academic freedom and ensuring the advancement of research and learning;

3. To have exclusive authority to allocate to the institutions of higher education the global approved ordinary and development budgets;

4. To submit to the Government and to the Council for Higher Education plans for the development of higher education, including their financing;

5. To encourage efficiency in the institutions of higher education and coordination between them with a view to preventing superfluous duplication and bringing about economy;

6. To ensure that budgets are balanced and that there are no deviations from them;

7. To express its opinion to the Council for Higher Education before the Council reaches a decision on the opening of a new institution or a new unit having financial implications in an existing institution. The considered opinion of the PBC will include answers to the following questions:
   a. Is there a need for the new institution or for the new unit?
   b. What are the financial implications of opening the new institution or the new unit? The PBC will determine whether the opening of the new unit has or does not have financial implications.

1.2
The Status of the PBC and its Composition

The Planning and Budgeting Committee (PBC) of the Council for Higher Education was established in 1974, based on the model, at that time, of the British University Grants Committee. The Government determined that the PBC would be "an independent body, coming between the Government and the national institutions on the one hand, and the institutions of higher education on the other". The PBC's decisions in those matters delegated to it by the Government are completely independent.

The PBC is composed of six members: four professors from the university system, who may not hold any positions of administrative responsibility in their universities during their term of office as PBC members; and two public figures from the economic, business or industrial sectors of the economy. Two professors represent the humanities, social sciences, law or education and two the natural sciences, engineering, medicine or agriculture. This composition is intended to ensure a comprehensive and balanced view of subjects brought before the committee.

The PBC's responsibility as trustee for higher education on behalf of the Government sometimes places it in opposition to the heads of the universities while, at the same time, obligating it to represent the interests of higher education in Government and Knesset (Parliament) discussions and decisions.

1.3
The Work of the PBC

1.3.1 Plenary Sessions

Between October 1991 and September 1992 the PBC met for 28 sessions.

3.2 Subcommittees of the PBC

The following subcommittees were active in 1991/92:

* The Selection Committees for the Yigal Allon Fellowships;
* The Selection Committee for Fellowships for Outstanding Doctoral Candidates in the Humanities and Social Sciences;
* The Committee for Compucation;
* The Steering Committee for Super-Computers;
* The Steering Committee for the Inter-University Library Network;
* The Inter-Institution Academic Committee for the Institute for Desert Research;
* The Executive Committee of the Inter-University Center in Eilat;
* The External Review Committee for Life Science Subjects in the Universities;
* The Inter-Institution Academic Committee for the Ben-Gurion Research Center in Sede Boker;

* Referees who examined requests for national centers for scientific equipment during 1991/92;
* The Committee for Matching Allocations;
* The Committee for Budgetary Balance in the Institutions;
* The Committee for Loans to Students.

Members of the PBC serve as chairpersons or members of most PBC subcommittees. Members are selected according to their qualifications or area of specialization from among the senior staffs of the universities and the private or public sectors of the economy. Committee members do not receive any remuneration for their services. PBC staff members serve as committee coordinators. PBC members also serve as members of committees of bodies funded by the PBC, such as the Israel Science Foundation and the various joint research funds.

1.3.3 The Administrative Staff

The Council for Higher Education and the PBC have a permanent staff composed of 20 1/2 established posts, including the post of director-general. Fifteen of these posts require academic degrees.

The PBC's administrative staff is divided for functional purposes into three sub-units:

* **the secretariat** of the Council for Higher Education and the Planning and Budgeting Committee;
* **the ordinary budget**, including wages and matching allocations;
* **planning and development**, including statistics, indicators and academic development.

1.4
The PBC and the Council for Higher Education

The Council for Higher Education is the State institution responsible for higher education, including teaching, science and research, in Israel. The PBC is a permanent subcommittee of the Council and its executive arm. The Chairman of the PBC is ex-officio a member of the Council and reports to the Council at every session on the activities of the PBC. PBC staff are employed in accordance with the terms of the Council for Higher Education Law.

In addition to its regular work on budgets and planning, the PBC advises and assists the Council in such matters as the approval of new units and the authorization to award new academic degrees in accredited institutions or the granting of a permit to a new institution or its accreditation or authorization to award academic degrees. The PBC presents its reasoned opinion to the Council on these issues, taking into consideration the planned development of the higher education system, financial implications and the needs of the State.

New academic units are processed according to rules agreed upon with the institutions of higher education and approved by the Council. According to these rules the institutions apply to the PBC for approval of proposals for any new unit or change in an existing unit and present to the PBC detailed information regarding the proposal. The PBC examines the proposals from the point of view of the needs of the State, prevention of unnecessary duplication

and financial considerations. If the PBC is of the opinion that the new unit has no financial implications and there is no need to examine it from the aspects of the needs of the State or unnecessary duplication, the PBC approves the new unit or change and notifies the institution concerned and the Council accordingly. In all other cases as well as requests for a permit or accreditation, the PBC forwards the matter to the Council which then appoints an examining committee. The conclusions of the examining committee and the PBC's recommendation are presented to the Council for discussion and decision. In 1989/90 the Council decided that requests for a permit to open and maintain an institution of higher education and requests to open new units in existing institutions will be discussed first by the PBC. If the PBC is of the opinion that the request, prima facie, has no basis, it will advise the Council to reject it without examination.

Requests by teacher training institutions for permission to open programs leading to the the degree of "Bachelor of Education" are not examined by the PBC. The Council discusses them after the Ministry of Education and Culture has examined them and presented its recommendations.

A list of members of the Council for Higher Education appears in Appendix 1.

2

THE HIGHER EDUCATION SYSTEM

2.1
General Information

The higher education system in Israel includes research universities, the Open University, institutions providing instruction at the bachelor's degree level only in technology, the arts and teacher training, and courses in regional colleges for which universities are academically responsible.

Universities and research institutions:

The Hebrew University of Jerusalem

The Technion - Israel Institute of Technology

Tel-Aviv University

Bar-Ilan University

The University of Haifa

Ben-Gurion University of the Negev

The Weizmann Institute of Science

* * *

The Open University of Israel

* * *

Institutions of higher education that are not universities but are accredited and authorized to award the bachelor's degree:

Bezalel - Academy of Arts and Design, Jerusalem

The Jerusalem Rubin Academy of Music and Dance

Jerusalem College of Technology

Shenkar - College of Textile Technology and Fashion

Ruppin Institute of Agriculture
Accredited and authorized to award the bachelor's degree in the program in economics and management of communal settlements

The College of Management - Academic Studies, Tel-Aviv
The academic program is accredited and authorized to award the bachelor's degree in business administration;
it has received a "permit to open and maintain an institution of higher education" for a program in law

Seven institutions for the training of teachers that have received accreditation and authorization to award the degree of "Bachelor of Education" (for various programs of study):

Michlala, Jerusalem College

The David Yellin Teachers College

Beit-Berl Teachers College

The Zinman College of Physical Education at the Wingate Instiution

Levinsky Teachers College

State Teachers College Seminar Hakibbutzion

"ORT" Academic College for Teachers in Technology

* * *

"Oranim" The School of Education of the Kibbutz Movement
Has received a permit to open and maintain an institution of higher education for the course for the training of kindergarten, primary school and special education teachers

Academic courses in regional colleges for which universities are academically responsible:

The Municipal College of Eilat
Academic responsibility of Ben-Gurion University of the Negev

The S. Sapir Regional College of the Negev
Academic responsibility of Ben-Gurion University of the Negev

The Achva College
Academic responsibility of the Open University

The Menashe Regional College
Academic responsibility of Tel-Aviv University

The Alperin Regional College of the Jordan Valley
Academic responsibility of Bar-Ilan University

The Emek Yezrael Regional College "Ohel Sarah"
Academic responsibility of the University of Haifa

The Western Galilee Regional College
Academic responsibility of the Open University and the University of Haifa

The Tel-Hai Rodman Regional College
Academic responsibility of the University of Haifa; Agricultural courses academic responsibility of the Hebrew University of Jerusalem

The Judea and Samaria Regional College
Academic responsibility of Bar-Ilan University

The Safed Regional College
Academic responsibility of Bar-Ilan University

The Ashkelon Regional College
Academic responsibility of Bar-Ilan University

* * *

Da a in this report refer only to institutions that the PBC budgets. Fields of stu dy at the institutions of higher education are listed in Appendix 2.

* * *

2.2
Developments in the Highe' Education System - Statistical Review

2.2.1 Principal Developments*

The 1991/92 academic year in the institutions of higher education was influenced to a large degree by the wave of immigration from the Commonwealth of Independent States (CIS - the former Soviet Union). This influence was felt in the number of students in the universities and other institutions of higher education and in the extent of the temporary academic staff in the universities financed from research budgets. In contrast, the influence of the wave of immigration on the extent of university staffs financed from the ordinary budget, until the end of 1991/92, was slight.

During the 1991/92 academic year long-term upward trends continued in the following:

- the number of students in pre-academic preparatory programs;
- the percentage of candidates for undergraduate study in universities who are admitted to a university and the percentage of candidates who were admitted and commenced study;
- the percentage of undergraduate students studying in non-university institutions, that is - teacher training colleges and non-university institutions of higher education.

These trends and other will be discussed in more detail in the following review:

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* In 1992 the PBC published "*The Higher Education System in Israel - Statistical Abstract and Analysis*" which presented and analyzed trends in the higher education system by means of statistical data from various sources, primarily surveys of the Central Bureau of Statistics (see sects. 3.3 and 3.3.1 below). In this section we update briefly the main trends discussed in this publication, based on data published since it appeared. These and other data will be analyzed more fully in the next edition of this publication. In addition, supplementary data on students, recipients of degrees and staff in the institutions of higher education budgeted by the PBC appear in the appendices to this report. The reader will be referred to these data where relevant.

2.2.2 Sources of Undergraduate Students

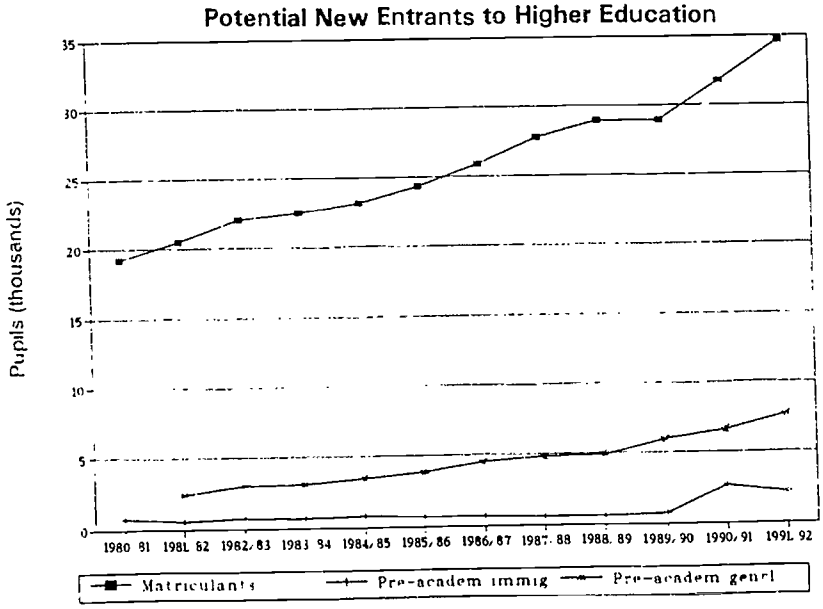
Students who commence their undergraduate studies in the institutions of higher education derive from three main groups:

1. Matriculants (i.e. - those who possess a matriculation certificate awarded by the Ministry of Education and Culture after a series of standardized nation-wide examinations, usually at the end of secondary school);[1]
2. Israelis who either lack a matriculation certificate or whose achievements in secondary school were low and who have completed their studies in a pre-academic preparatory program at an institution of higher education or a regional college;
3. New immigrants who prepared for academic studies abroad. Most of these students participate in a preparatory course for new immigrants at a university before their admission to a university.

Graph 2.1 shows that in 1991/92 the number of new matriculants and students in pre-academic preparatory programs continued to grow. In contrast, the number of students in preparatory programs for new immigrants at universities declined due to the smaller number of new immigrants from the CIS in 1991/92 compared to 1990/91. However, the first two groups are the largest and their continued growth portends increasing demand for higher education in coming years.

Graph 2.1

Potential New Entrants to Higher Education



Source: The Central Bureau of Statistics, the Ministry of Education and Culture and the Ministry of Immigrant Absorption

[1] Including those who successfully passed the examinations upon completion of twelve years of schooling, external examinees, and resit examinees from previous years.

2.2.3 Candidates for Undergraduate Study in the Universities

After a decade during which the number of candidates for undergraduate studies in universities remained stable, this number rose from approximately 26,000 in 1990/91 to almost 28,000 in 1991/92. This increase is primarily due to immigration from the CIS. The percentage of candidates admitted and the percentage of candidates admitted who commenced study both continued to increase. In 1991/92 approximately 79% of candidates were admitted to a university, compared with 75% in 1990/91 and 64% in 1984/85. The percentage of candidates who were admitted and commenced study reached 61.5% in 1991/92 compared with 58% in 1990/91 and 44% in 1984/85. See Graph 2.2

Graph 2.2

Candidates for Undergraduatge Studies in Universities by the Results of the Applications

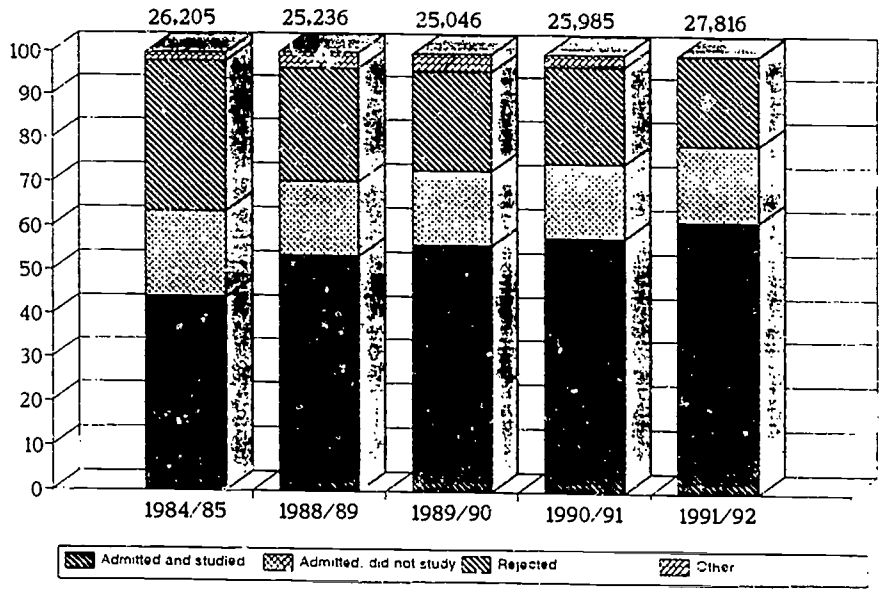


Table 2.1 presents the number of candidates and students who were admitted and commenced study in a university in 1991/92 according to preferred field of study, as well as the ratio of candidates to first year students in a particular field. As in past years, demand exceeds the supply of places to study in the following fields in particular: business and management sciences, law and medical and para-medical professions. However, the significant decline in the ratio of candidates to first-year students in the field of law is worthy of note: from 3.8 in 1990/91 to 2.4 in 1991/92. This is due to the fact that the number of students admitted who commenced study in law more than doubled, from 410 in 1990/91 to 868 in 1991/92, following the opening of a new faculty of law at the University of Haifa and the expansion of the existing faculties of law.

Table 2.1

Candidates and First-Year Undergraduate Students, by Preferred Field of Study - 1991/92

Preferred Field of Study	Candidates		FY Students		Ave. Cand./ Stud.
	Absol. Number	%	Absol. Number	%	
Total	27,816	100.0	17,112	100.0	1.6
Humanities	6,060	21.8	4,492	26.3	1.3
Social Sciences	6,060	21.8	3,947	23.1	1.5
Business and Management Sciences	1,710	6.1	493	2.9	3.5
Law	2,049	7.4	868	5.1	2.4
Medicine	1,187	4.3	333	1.9	3.6
Para-Medical Professions	2,081	7.5	721	4.2	2.9
Mathematics, Statistics and Computer Sciences	2,055	7.4	1,602	9.4	1.3
Physical Sciences	830	3.0	717	4.2	1.2
Biological Sciences	930	3.3	686	4.0	1.4
Agriculture	325	1.2	195	1.1	1.7
Engineering and Architecture	3,414	12.3	2,076	12.1	1.6
Other and Unknown	1,100	4.0	982	5.7	-

Source: Central Bureau of Statistics

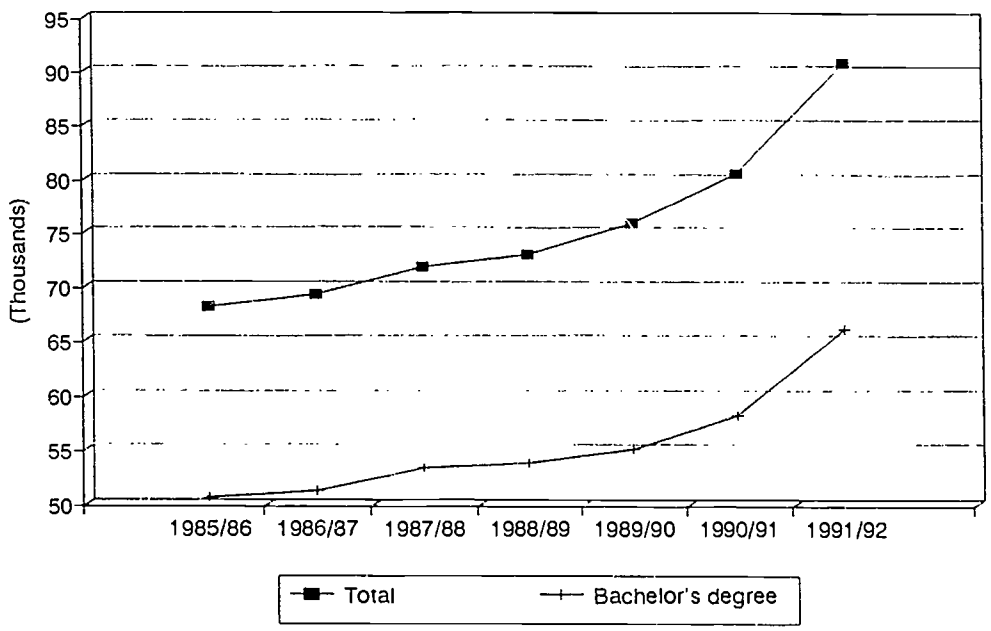
2.2.4 Student Numbers

In 1991/92 there were approximately 91,000 students in the institutions of higher education compared with 81,000 the previous year, that is - an unprecedented increase of 10,000 students in one year. Approximately 78,600 of these students studied in the universities, 7,700 in teacher training institutions and 4,600 in other institutions of higher education. In addition, 17,900 students took academic courses in the Open University.. Graphs 2.3 and 2.4 present the distribution of students according to degree level and field of study in 1991/92 compared with 1990/91.

Between 1985/86 and 1990/91 the annual rate of increase of student numbers was much higher in the non-university institutions of higher education (10.2%) than in the universities (1.6%) and, as a result, the percentage of total undergraduate students in these institutions rose from 11.6% in 1985/86 to 16.4% in 1990/91. This trend continued in 1991/92, with the percentage of total undergraduate students in these institutions rising to 18.4%. See Graph 2.5.

Graph 2.3

Students in Institutions of Higher Education - Total and Bachelor's Degree Level



Graph 2.4

Students in Institutions of Higher Education - Postgraduate Degree Level

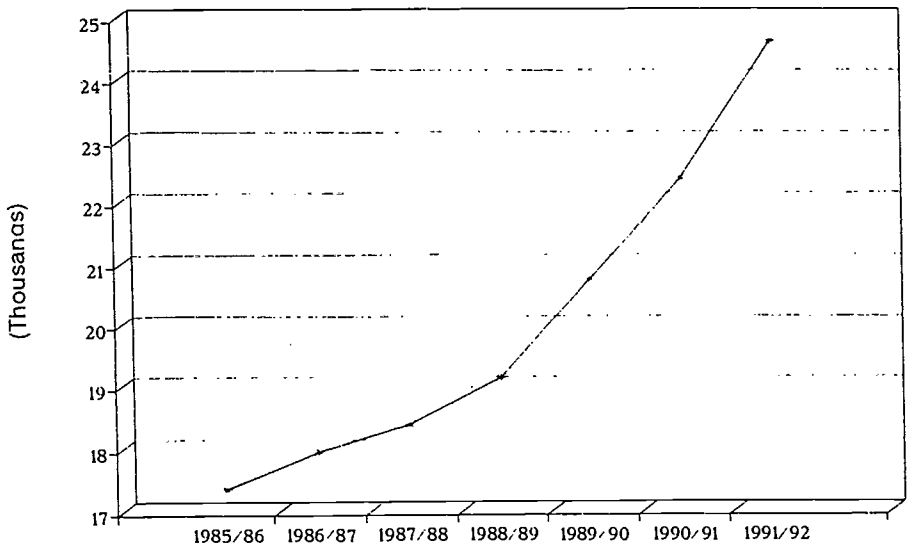


Table 2.2

Students in Institutions of Higher Education, By Degree Level - 1990/91, 1991/92

Degree Level	90/91	%	91/92	%	Rate of Change
Total Students	80,749	100.0	90,951	100.0	12.6%
Bachelor's Degree	58,309	72.2	66,261	72.9	13.6%
Master's Degree	17,140	21.2	18,860	20.7	10.0%
Ph.D.	4,960	5.4	4,680	5.1	7.3%
Certificate	940	1.2	1,150	1.3	22.3%

Source: Central Bureau of Statistics

Table 2.3

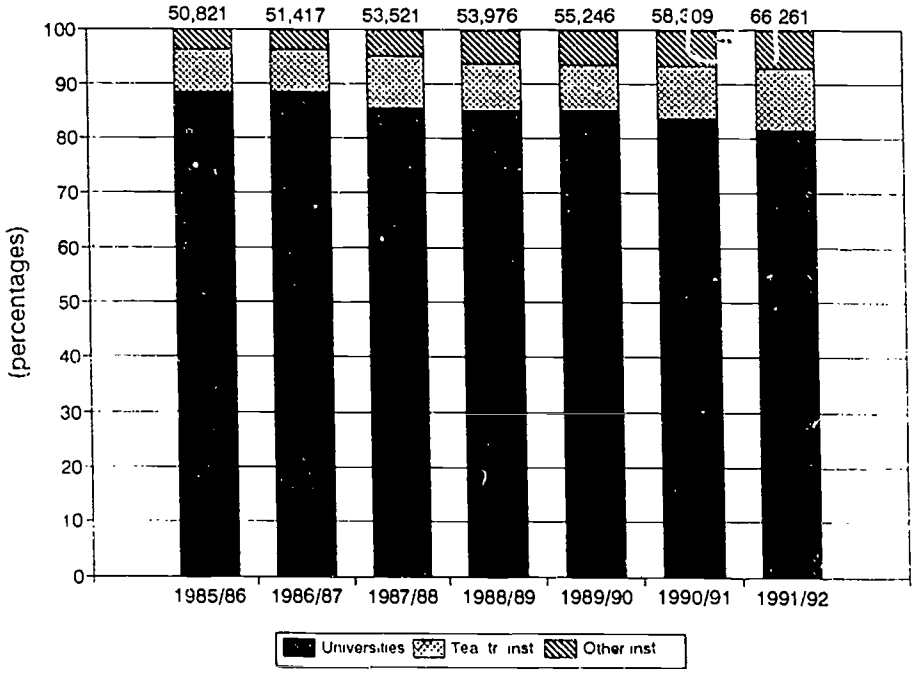
Students in Institutions of Higher Education by Degree Level and Field of Study - 1990/91, 1991/92 (Percentages)

	Bachelor's Degree		Master's Degree		Ph.D.	
Field of Study	90/91	91/92	90/91	91/92	90/91	91/92
Total	100.0	100.0	100.0	100.0	100.0	100.0
Humanities	35.2	36.7	23.9	24.8	25.5	24.2
Social Sciences	28.0	26.8	36.0	36.3	10.9	11.1
Law	3.3	3.7	1.1	1.0	0.9	0.9
Medicine	5.7	5.3	11.1	10.5	4.6	4.6
Maths. & Nat. Sciences	11.9	12.9	14.0	14.0	44.1	45.1
Agriculture	1.5	1.1	2.2	2.1	4.6	4.3
Engineering and Architecture	14.5	13.4	11.8	11.2	9.4	9.8

Source: Central Bureau of Statistics

Graph 2.5

Bachelor's Degree Students by Type of Institution



The above graphs and tables refer to students in all institutions of higher education except for the Open University. In the appendices to this report there are more detailed data on students in the institutions funded by the PBC - in the seven universities (Appendices 3, 4 and 5), in the Open University (Appendix 6) and in the other institutions of higher education (Appendices 7 and 8). The following description refers only to students in **universities**.

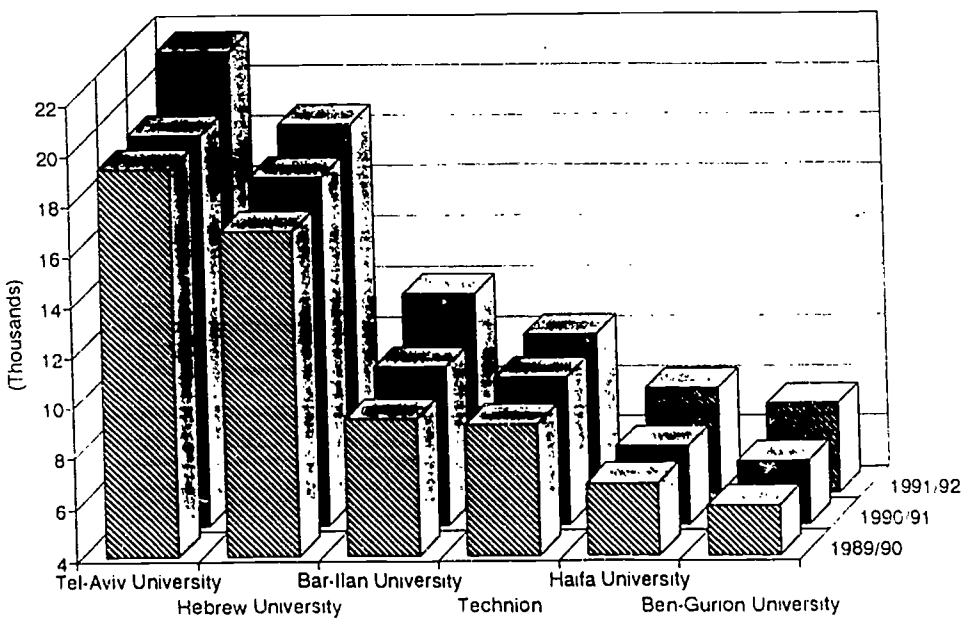
In 1991/92 there were 78,640 students in the universities, of whom 53,950 (about 68.6%) were studying for the bachelor's degree, 18,860 (24.0%) for the master's degree, 4,680 (6.0%) for the Ph.D. and 1,150 (1.5%) for an academic certificate, mainly a teaching certificate. The distribution of all university students according to field of study shows that approximately 60% studied subjects in the humanities, social sciences and law, 7% studied medical and para-medical professions, 19% studied mathematics, physical and life sciences (including agriculture) and 14% studied engineering and architecture.

Parallel to the wave of immigration from the CIS since 1990, there was a significant increase of 5% in the number of students in universities in 1990/91 compared with 1989/90. This trend accelerated in 1991/92, when the number of students increased to 78,000, from 71,200 in 1990/91 - an increase of 10.5%.

The increase in student numbers during the past two years at all degree levels was distributed between all the institutions, with the highest rate of increase at the relatively newer or smaller institutions - 28% at Bar-Ilan University, 27% at Ben-Gurion University of the Negev, and 20% at the University of Haifa. See Graph 2.6.

Graph 2.6

Students in Universities by Institution - 1989/90 - 1991/92



The growth in undergraduate student numbers during the past two years was particularly conspicuous, compared with the situation during the 80's. The average rate of growth in the number of undergraduate students in 1990/91 and 1991/92 was 7.2% compared to only 1.6% during all of the 80's. The absolute increase in the number of undergraduate students from 1989/90 to 1991/92 - 6,990 - was greater than the increase during the whole of the decade - from 1979/80 to 1989/90 - 6,710.

Approximately half of the increase in student numbers during the past two years can be attributed to immigration, while the remaining half can be explained by a number of factors, but primarily due to natural population growth.

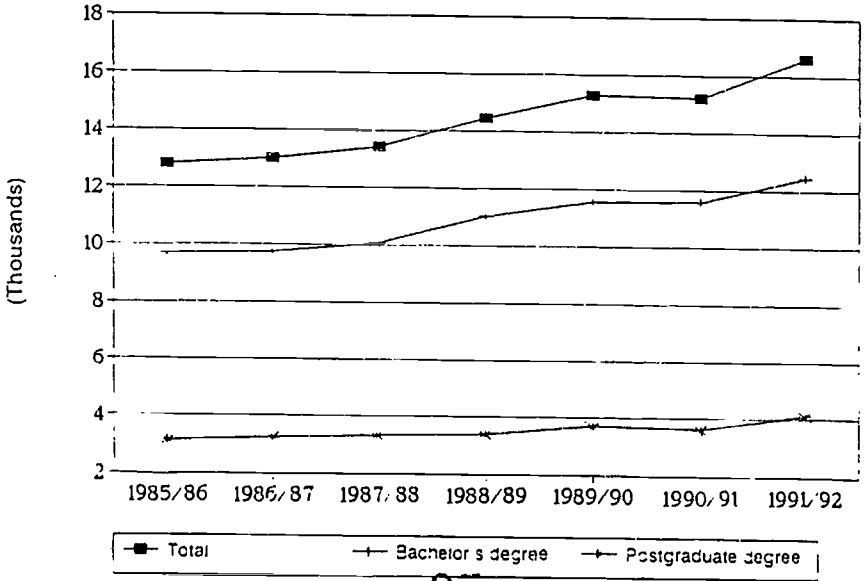
2.2.5 Recipients of Degrees

In 1990/91 (final data for 1991/92 are not yet available) approximately 15,200 students received academic degrees or certificates from institutions of higher education, 13,600 of them (89.7%) from the universities, 800 of them (5.4%) from teacher training institutions, 400 of them (2.7%) from non-university institutions of higher education, and almost 350 (2.2%) from the Open University.

Trends in the numbers of recipients of degrees from 1985/86 to 1990/91 in all institutions of higher education are presented in Graph 2.7. Corresponding to the growth in the relative percentage of undergraduate students in the non-university institutions of higher education during this period, there was also an increase in the relative number of bachelor's degree recipients from these institutions. See Graph 2.8.

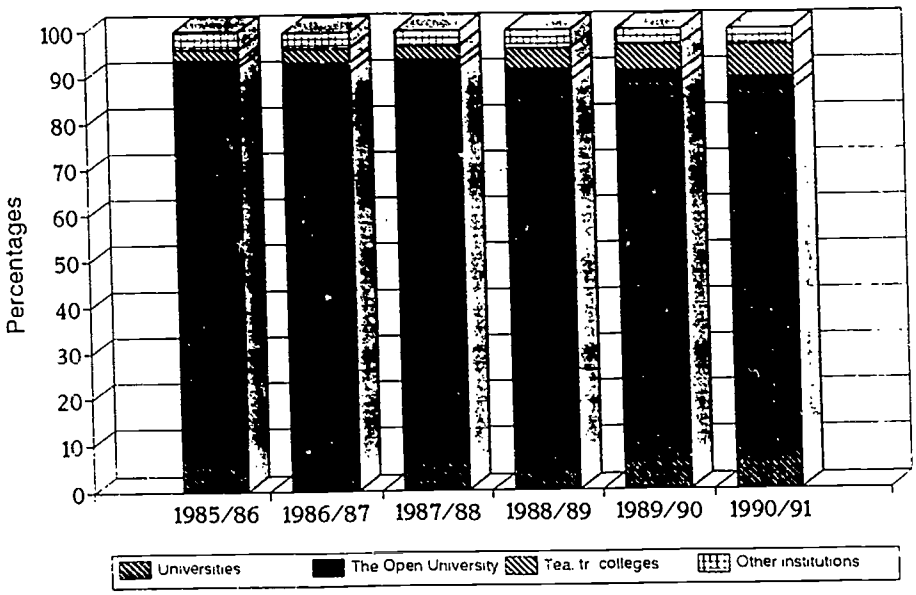
Graph 2.7

Recipients of Degrees in Institutions of Higher Education - by Level of Degree



Graph 2.8

Recipients of Degrees in Institutions of Higher Education - by Type of Institution



More detailed data on the recipients of degrees awarded by institutions funded by the PBC may be found in the appendices to this report - on the universities in Appendix 5, the Open University in Appendix 6, and some of the non-university institutions of higher education in Appendix 8. The following description refers on the recipients of degrees awarded by universities.

The total number of recipients of academic degrees and certificates from the universities in 1990/91 was 13,633. Of these, 9,995 were the bachelor's degree (73.3%), 2,726 the master's degree (20.0%), 404 the Ph.D. (3.0%) and 508 academic certificates, mainly teaching certificates (3.7%).

The distribution, according to field of study, of all graduates was as follows: the humanities, social sciences and law - almost 60%; the medical and para-medical professions - 9%; mathematics, physical and life sciences (including agriculture) - 17%; and engineering and architecture - 14%.

The number of degrees awarded by universities in 1990/91 was lower by about 2% than the number awarded in 1989/90, when the number reached 13,915. This decrease was felt at all degree levels, but particularly at the level of the Ph.D.: the decrease was 1.9% at the bachelor's degree level, 2.3% at the master's degree level and 10.25 at the Ph.D. level. In view of the constant increase in the number of university students at all degree levels in recent years, these decreases are probably temporary and incidental: the increase in student numbers at all degree levels is expected to continue in coming years.

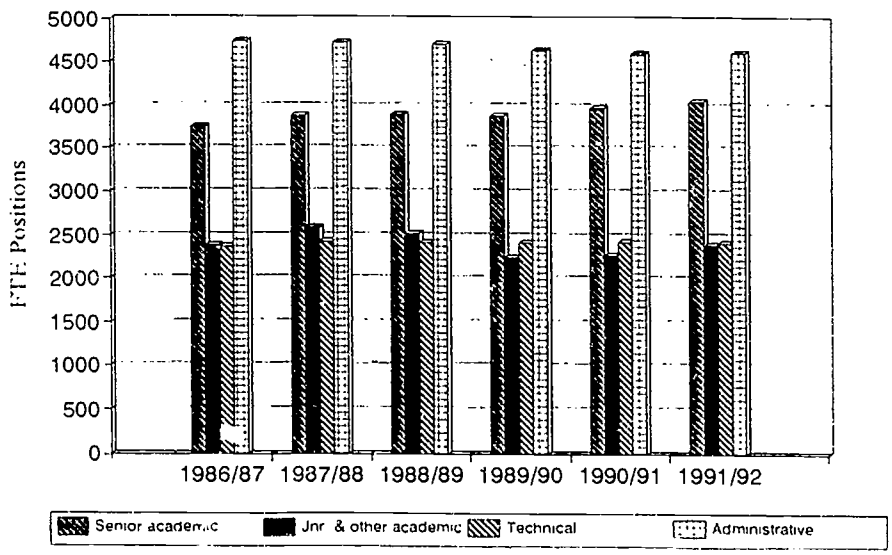
2.2.6 University Staffs

The lion's share of expenses in the higher education system is on staff - staff expenses amount to 75-80% of all expenditures in the system's budgets.

University staffs are composed of academic, technical and administrative staffs, employed within the following budgetary frameworks: the ordinary budget, closed budgets, and research budgets. The vast majority of university staff members are funded from the ordinary budget, most of them in established posts and some in temporary non-established posts. In the academic staff, non-established posts include those of junior staff, teaching and research assistants and external teachers paid on an hourly basis. In the technical and administrative staff these posts include temporary employees and special-contract employees. In contrast to the situation in ordinary budget frameworks, most of the employees funded by research budgets are in temporary, non-established posts. The situation in closed budgetary frameworks is more similar to that of the ordinary budget than research budgets. In addition to these staff members, who are all considered as employees of the universities, some universities also employ other workers through sub-contractors. The development of university staffs funded by the ordinary budget from 1986/87 to 1991/92, according to type of staff, is shown in Graph 2.9.

Graph 2.9

Staff Financed From Ordinary Budget - by Type of Staff



In 1991/92 the seven universities employed approximately 17,500 active employees (that is, excluding staff members on sabbatical leave, leave without pay, fellowships, etc.) - an increase of 4.2% or 710 full-time posts over the previous year. This is the second consecutive year in which university staffs grew after a continued trend of slow and gradual decline in university staffs that lasted from 1982/83 to 1989/90. Most of the growth in posts in 1991/92 (as in 1990/91) was in teaching and research staffs, which amounted to 8,110 in 1991/92 compared with 7,500 in 1990/91 - an increase of 8.1% or 610 posts. Most of these posts are temporary non-established posts employing new immigrant scientists in research activity. Increases in technical and administrative staffs were more moderate - 1.8% or 64 full-time posts and 0.6% or 35 full-time posts respectively. In 1991/92 the distribution of university staffs was: teaching and research staff - 46.2%; technical staff - 20.4%; and administrative staff - 33.4%.

The majority of university employees in 1991/92 were funded from the ordinary budget - 76.9%, while 7.7% were funded from closed budgets and 15.4% from research budgets. During the year the number of employees funded from research budgets grew rapidly - from 2,231 full-time posts in 1990/91 to 2,698 in 1991/92 - an increase of 20.9% or 467 posts. Most of this increase was in teaching and research staff classified as "others" in the statistical tables: from 154 full-time posts in 1991/92 to 492 in 1991/92 - an increase of 340 posts, or almost three-fold in one year. In recent years this category of staff refers almost entirely to new immigrant scientists employed in research activity in the universities on a temporary basis, as a first stage in their occupational absorption in Israel. The employment of these new immigrant scientists is financed primarily from two government programs established specifically for this purpose: one operated by the Center for Absorption in Science of the Ministry of Immigrant Absorption in conjunction with the PBC, and the second operated by the Ministry of Science and Technology. These scope of these programs expanded rapidly during 1991/92, with additional new immigrant scientists joining each month. For this reason, the number of full-time posts in 1991/92 in the "others" category referred to above - 492 - does not accurately present the number of scientists supported by these programs. In September, the end of the 1991/92 academic year, their number reached almost 700.

In contrast, the number of senior academic staff members (of the rank of senior lecturer and above) grew by only 1.8%, or 74 full-time posts, in 1991/92 - from 3,977 in 1990/91 to 4,051 in 1991/92. This was despite the more than 10% increase in the number of students in the universities in 1991/92 compared with the previous year. It seems that the universities are responding cautiously to the expansion of the system and only slowly and gradually recruiting new senior academic staff members.

Two-thirds of university employees in 1991/92 were concentrated in three institutions - the Hebrew University of Jerusalem (27.7%), Tel-Aviv University (23.4%) and the Technion (16.0%). Both Ben-Gurion University of the Negev and the University of Haifa expanded their staffs significantly in 1991/92 compared with 1990/91 - by 10.6% (159 full-time posts) and 9.8% (90 posts) respectively. In the other institutions, excluding the Weizmann Institute of Science, staff grew more moderately, by 2-5%. Contrary to the general trend of increases in staffs, the Weizmann Institute of Science reduced its staff by a total of 44 full-time posts, or 3% in 1991/92 compared with 1989/90.

More detailed information on university staffs appears in Appendix 9 with data on employees in the other institutions of higher education funded by the PBC in Appendix 10.

3

PLANNING, NEW UNITS AND STATISTICAL INFORMATION

3.1
Planning

The PBC is involved with long-term planning of the higher education system as well as current issues having planning aspects.

The PBC advises the Council for Higher Education before the Council reaches decisions on the granting of permits "to open and maintain an institution of higher education" and accreditation and/or authorization to award academic degrees to new institutions or new fields or new units in existing institutions. The PBC is obliged to present its considered opinion on the need for the new institution or unit and its financial significance.

In 1991/92 the PBC continued its activity in general and specific subjects as it is obligated to do.

In 1991/92 the PBC dealt with two main planning issues: continued preparations of the higher education system for wide-scale immigration; and the readiness of the system to cope with the anticipated increase in demand for undergraduate studies in the near future, while maintaining academic quality.

3.1.1. Immigrant Absorption

The wave of immigration from the CIS, the Commonwealth of Independent States (the former Soviet Union), brings to Israel many students who stopped their studies at various stages, as well as young people who are interested in commencing academic study. There are also many scientists and scholars who were employed at institutions of higher education or at governmental or industrial research institutes.

During the year under review the PBC continued to deal with the absorption into the higher education system of these immigrants. This encompassed both the immediate absorption needs ofimmigrants and long-term needs, that is - preparations for the absorption of the immigrants expected to arrive in coming years.

Already in 1989/90 the PBC decided to focus its attention on the absorption of new immigrant students, with all the planning and budgetary implications that this entails. The absorption of new immigrant scientists will be limited to that necessitated by the expansion of the system; only some of the new immigrant scientists will thus be able to find employment in the higher education system. Employment for the others will have to be found in the industrial sector of the economy or in government research institutes, although the higher education system will be able to assist by providing some temporary employment opportunities for researchers, until they find permanent employment.

As to the admission of new immigrant students - the PBC directed the institutions of higher education to admit all qualified applicants, without adversely affecting the admission of Israeli students.

When the wave of immigration began it was forecasted that a million immigrants would arrive from the Soviet Union within four to five years, which would mean approximately 70,000 young people in the relevant age group (18-25) for higher and post-secondary education, of whom about 40,000 would be interested in admission, at various degree levels, to the institutions of higher education. Immigration is also expected to contribute to the increase in the number of high school graduates, including Israelis, in the future.

Furthermore, it was anticipated that a wave of immigration of this scope would include approximately 20,000 scientists and scholars, many of whom would be interested in finding employment in the higher education system.

These forecasts served as the basis for the PBC's policy discussions, which began in 1989/90, on the higher education system's preparations for coping with the wave of immigration. In 1990/91, however, it became clear that the PBC would have to operate in conditions of uncertainty, both as to the scope and timing of the arrival of the immigrants and as to their inclination to enter higher education, and in which fields.

In 1990/91 there was as yet no significant increase in the number of new immigrant students from the CIS who were admitted to the institutions of higher education as regular students; most of them were still studying in special preparatory programs for new immigrant students at that time. In 1991/92, however, there were approximately 4,300 new immigrant students at the bachelor's and master's degree levels in the higher education system. A further 340 new immigrant students were studying for the doctorate and there were close to 2,000 students in non-academic post-secondary institutions. All in all, 6,600 new immigrant students from the CIS were absorbed in the higher education system and in other post-secondary education, out of a total of 320,000 new immigrants who had arrived by September 1991 (based on the assumption that a year usually passes from the date of immigration to entrance into higher education, due to the need to study Hebrew and complete any other necessary preliminary studies). The deceleration of the rate of immigration has already had a significant effect on the number of students in preparatory programs for new immigrant students; there were only 1,800 students in these programs in 1991/92 compared with 2,600 in 1990/91.

As shown above, there appears to have been some exaggeration in forecasts of the percentage of new immigrants who would be interested in and qualified for admission to the institutions of higher education, although it is still difficult to make more realistic forecasts. In one or two years' time it will be possible to investigate the inclinations of the new immigrants to continue their education, their choice of higher or other post-secondary education, their preferred fields of study, their suitability to the Israeli higher education system, and their ability to realize their wish to continue their education, from the aspect of the economic means available to them and the assistance that the State is willing to extend to them for this purpose.

By the end of 1991/91 approximately 150 new immigrant researchers, from all countries, had been appointed as regular permanent members of the academic staffs of the institutions of higher education and a further 700 were employed on a temporary basis with the assistance of the Center for Absorption in Science.

The PBC continues to deal with the long-term planning aspects of the anticipated expansion of the higher education system, based on the assumption that forecasts for a million new immigrants will be realized, even if spread out over a longer period of time than originally thought.

3.1.2 The Expansion of the Higher Education System

The PBC estimates that between 1990/91 - 1999/2000 an additional 30,000 students - veteran Israelis and new immigrants - will enter the higher education system. The PBC prefers that these additional students be admitted primarily to the institutions in the periphery, in accordance with the governmental policy of population dispersal in order to reinforce the north and the south of the country, and because of academic considerations - to strengthen those institutions that have not yet attained their optimal size.

These policies guided the PBC in its discussions with the heads of the institutions of higher education, at which the following targets for growth were determined:

The Hebrew University of Jerusalem	2,000 students
The Technion	2,000 "
Tel-Aviv University	2,000 "
Bar-Ilan University	5,000 "
The University of Haifa	5,000 "
Ben-Gurion University of the Negev	6,000 "

Several hundred more students can be admitted to the non-university institutions of higher education (teacher training colleges and the institutions for music, art, administration, etc.). For the remainder of the growth (approximately 6,000-7,000 students) new options will have to be created at a later stage, when the capabilities of the existing universities to admit additional students will be exhausted.

During 1991/92 the PBC held a series of discussions on the subject of the expansion of the higher education system and summarized them with the following guidelines:

1. The existing universities can, in the foreseeable future, fulfill the requirements of the economy for qualified personnel with research master's degrees and doctorates, even taking into consideration the demand for these degrees generated by new immigrants. The expansion of the system at these levels will, therefore, be implemented as necessary, solely in the universities.

2. The PBC takes note of the significant growth in student numbers in the universities in 1990/91 and 1991/92, growth that is mainly in accordance with PBC planning and allocation.

3. Until the targets for growth agreed upon between each university and the PBC are reached, expansion of the system will be centered on the universities. At the same time, plans will be made for the expansion of the system that will be necessary at a later stage (see item 4 below) and limited expansion, according to this plan, will commence.

4. Toward the end of the planned growth of the universities, the system will expand primarily through professionally-oriented and general colleges in

which the scope of subjects studied is sufficiently broad and which will award only the bachelor's degree. To this end:

a. the academic activity of the regional colleges will be extended;
b. colleges for applied engineering that will grant the degree "Bachelor of Technology" will be established;
c. the potential for extending the academic activity of the teacher training colleges to general fields such as humanities and social sciences will be examined;
d. the possibility of establishing and expanding general colleges in the field of humanities and social sciences and professionally-oriented colleges will be studied.

3.1.3 Long-Term Program for Financing the Expansion of the System

As a first stage, the PBC requested the institutions to draw up plans and present their evaluation of the financial means that they will require for expansion in accordance with the targets of growth detailed above; these should be in terms of physical infrastructure and the current resources necessary for recruitment of academic staff and for other expenditures.

The Ministry of Finance provided the PBC with sufficient resources to commence the expansion process; this was reflected in the State budget for 1992, which was a continuation of the funds allocated in 1991. The PBC, for its part, gave guidelines to the institutions on the resources that will be made available to them for the absorption of additional students, and transferred to them advances on this account.

During 1991/92 the PBC held a number of discussions with the Ministry of Finance on the long-term program for the development and advancement of the higher education system for the period 1992/93 - 1995/96 and the government assistance, to the ordinary budget as well as the development budget, needed for this purpose.

The program is intended to provide for the expected continuation of the growth of student numbers in the system on the one hand, and for continued necessary improvements in the research infrastructure of the universities on the other hand. It is based on the assumption that student numbers, including new immigrants as well as veteran Israelis, will grow by 16,500 between 1992/93 and 1995/96, further to the 11,000 students already added to the system in 1990/91 and 1991/92. This assumption is based on estimates of natural growth, immigration, (according to Ministry of Finance forecasts of 80,000 new immigrants in 1992 and 120,000 annually from 1993 to 1995), and increased demand for higher education.
An agreement was reached with the Ministry of Finance on the enlargement of the budgetary base, both of State participation in the ordinary budget of higher education and in the allocations for State participation in the physical development of the system. Further discussion of this agreement will be found in the relevant sections of this report.

3.1.4 Subject Reviews

The PBC conducts occasional reviews of subjects or organizational frameworks that are in need of up-dating, modifications or development. These reviews are carried out by subcommittees of the PBC and their recommendations assist the

PBC in determining priorities and long-range planning with the confines of the resources available to it.

3.1.4.1 **The Life Sciences**
The review of the life sciences is being conducted in stages. The first stage is a mapping of all activities in the life sciences in all frameworks (faculties of biology, medicine, agriculture, etc.) and their analysis from different aspects such as staff, equipment and plans for the development or curtailment of programs. A committee was appointed at the end of 1987/88 to conduct this stage of the review.

In 1988/89 the committee prepared two types of questionnaires for the mapping of activities in the life sciences: a general questionnaire intended for rectors and deans with questions regarding development plans and policy, and a more detailed questionnaire intended for department and unit heads with requests for information on staff and their activities, research activities (as evidenced in research contracts and grants and cooperation between researchers), teaching activity (as shown by the number of courses taught, the number of hours taught, number of students, etc.) and the scientific equipment available to the unit or department. Questionnaires were sent out and the replies, which were received in the middle of the 1989/90 academic year, were classified and processed early in 1990/91. The committee met to discuss the results of the survey and began to formulate its recommendations during 1990/91.

In 1991/92 the committee concluded its findings and recommendations.
The findings of the mapping exercize showed the following:

a. Most of the research activity in the life sciences in the past generation has, in Israel as elsewhere in the world, passed from the classical fields of research at the organism and population level to the newer fields of research of molecular and cellular biology.

b. In research organization there are great differences in size and composition of departments. The average department has 12 senior academic staff members, 10 technical and administrative staff members and approximately 14 research students.

c. Researchers in the life sciences (not including clinical medical research in hospitals) represent approximately 20% of all senior academic staff members in the higher education system and 60% of all senior researchers in the natural sciences.

d. About 50% of bachelor's degree recipients in the life sciences continue their studies toward the master's degree, while 60% of the recipients of the master's degree continue on to a doctorate.

e. The average amount of research funds available to a senior researcher in the life sciences in 1989/90 was $40,000, over and above his salary and funds for general infrastructure provided by the institution.

f. There is a delay in the renewal of research equipment necessary for the advancement of research and for obtaining research funds for competitive sources. This applies to standard, medium-sized equipment that can be used by a number of researchers.

Teaching laboratories also lack equipment and there is a delay in the renewal of equipment. This situation exists in other fields of the experimental sciences, as a result of the budgetary difficulties faced by the institutions during the 1980's.

The conclusions that the committee reached, based on the above findings, are as follows:

a. Despite the fact that the life sciences are the fastest developing field of all the natural sciences, the extent of this field in the higher education system in Israel seems sufficient, in comparison with other countries, from the point of view of its share of staff and research funds, in the system as a whole and in the various institutions separately.

b. Some imbalance in fields of activity may exist - priority given to molecular specializations rather than the more "classical" subjects, in which there have also been many innovations. Furthermore, in certain areas of research the fostering of classical subjects connected to the flora and fauna of our region may contribute to the uniqueness of Israeli science, as well as being important for ecological research and the training of teachers.

c. The average extent of funding for research teams in the life sciences seems sufficient.

d. The number of doctorate degrees awarded in the life-sciences is larger than the number required for the renewal of the academic staff in the universities. If the excess doctorates do not find employment outside of the higher education system (in industry, for example) problems may arise and it may become necessary to consider a reduction of the number of doctoral students and their replacement by foreign students or foreign post-doctoral researchers so as not to impair the scope of research and its quality.

e. Steps should be taken to solve the problem of the renewal of research equipment and teaching laboratories in the life-sciences.

3.1.5 Visits to Institutions

Each year the PBC visits institutions of higher education. The purpose of these visits is to gain an overall impression of the institution's activities, especially academic development, which serves as the background to a discussion of the institution's specific problems. Prior to each visit the institution presents background material and the PBC holds a preliminary discussion. Following the visit the PBC holds a summary discussion.

In January 1992 the PBC visited the Weizmann Institution of Science. In addition, in December 1992 the senior administrative staff of the PBC, including the Chairman, visited the Tel-Hai Regional College and the "ORT" Braude College in Carmiel.

3.2 New Academic Units

According to agreed-upon procedures, the institutions of higher education must notify the PBC of their plans to open any new academic unit or to carry out changes in any existing unit, including closures. The PBC must advise the Council for Higher Education on all new units proposed, the financial significance of the unit and its place in the general plan for higher education, all with a view to preventing unnecessary duplication.

3.2.1 New Academic Units Discussed by the PBC in 1991/92

In 1991/92 the PBC discussed the financial and planning aspects of the following proposals to open new units, and presented its opinion to the Council for Higher Education:

3.2.1.1 New Graduate Programs in the Faculty of Humanities and Social Sciences at Ben-Gurion University of the Negev

Ben-Gurion University of the Negev requested the Council for Higher Education's permission to open the following new graduate programs:

- A doctoral program in the Department of Economics;
- A master's degree program in the Department of Hebrew Language and Literature;
- A master's degree program in the Department of Bible and Ancient Near Eastern History.

The subcommittee that the Council appointed to examine these requests recommended that they be approved, providing that the staff be augmented and that the new programs be overseen by special committees during the initial stage of their implementation. Both the PBC and the Council adopted these recommendations.

3.2.1.2 A Master's Degree Program in Occupational Therapy at the Hebrew University of Jerusalem

The Hebrew University of Jerusalem requested the Council for Higher Education's permission to open a program of study leading to a master's degree in occupational therapy. The Council appointed a subcommittee to examine all aspects of the request. This subcommittee recommended that the request be approved if certain conditions (regarding staff and subjects studied) are met. The PBC then recommended that the Council approve the request only after the University informs the PBC that it has taken the necessary steps to correct the curriculum and improve the staff as advised by the subcommittee. Since new programs in the para-medical professions are usually funded by health organizations such as the Ministry of Health, the health funds, etc., and the University has not yet presented the PBC with an explicit assurance that this program will be fully funded, it has not yet been brought before the Council for approval.

3.2.1.3 A Program in Mangerial Accounting at Jerusalem College of Technology

Jerusalem College of Technology requested the Council for Higher Education's permission to open a new program of specialization in managerial accounting, as part of its program in industrial management, and to authorize it to award the degree of "Bachelor of Managerial Accounting" to graduates of the program. The Council appointed a subcommittee to examine the request, which recommended that the College open a new program (rather than a

specialization in a new or existing program) in "managerial accounting and information systems. The subcommittee further recommended that the Council approve the proposed curriculum in managerial accounting, that graduates of the program be awarded the degree of "Bachelor of Managerial Accounting and Information Systems", that additional staff be recruited for the program, and that the program be limited to 40 new students per year. The program should be reevaluated after two years of operation. The PBC adopted these recommendations and approved the recruitment of an additional staff member for the program, although it did not authorize any additional budget for the program. The PBC's decisions were then forwarded to the Council for discussion.

3.2.1.4 **A Bachelor's Degree Program in Architecture at Bezalel**

In 1983 Bezalel - Academy of Art and Design, Jerusalem, requested permission to initiate a bachelor's degree program in architecture to be based on the existing department of environmental design. At that time, after a careful examination by a special subcommittee, the Council decided that the time was not yet ripe for such a step. The Council suggested that Bezalel upgrade the level of the department of environmental design to a level that is appropriate for a school of architecture.

In December 1990 Bezalel asked that the Council reconsider its earlier decision in view of developments that had transpired since that time. The PBC appointed a member of the earlier subcommittee to examine to what extent Bezalel had fulfilled the recommendations of that subcommittee. The results of this review were favorable and the PBC recommended to the Council that Bezalel be allowed to prepare for the opening of a bachelor's degree program in architecture, contingent upon the appointment of an "oversight" committee and certain other conditions, both academic and budgetary. Most of these conditions were met and the PBC recommended that the Council grant Bezalel provisional accreditation for the department of architecture. The Council then decided to grant Bezalel provisional accreditation for the program for three years, during which time the oversight committee would continue its work. The program of study will take five years to complete and graduates will receive the degree of "Bachelor of Architecture".

3.2.2 New Academic Units Approved

The PBC authorized the opening of the following new academic units in 1991/92 after it decided that they do not require approval by the Council for Higher Education:

The Technion - Israel Institute of Technology

- The status of the department of food and biotechnology was changed to a faculty.

Tel-Aviv University

- An amended program leading to the bachelor's degree in the arts was implemented;
- A dual-major program leading to the bachelor's degree in "general science" was opened.

Bar-Ilan University

- A specialization in information systems was opened in the program of studies leading to the degree of Master of Business Administration;
- A program of studies in Jewish art was opened as an undergraduate minor.

The University of Haifa

- Dual-major programs were initiated in the departments of Land of Israel studies and archaeology;
- An English language program (intended mainly for overseas students) in English language and literature was opened.

3.3 Statistics and Indicators

The methodical collection, processing and analysis of statistical data are an important contribution to the day-to-day activities of the PBC - for planning and budgeting as well as the determination of policy in matters connected to higher education. During 1991/92 work continued on the formation of a data base for the PBC which will allow for the integration and analysis of data of different types and from different sources on input, the progression of studies and the output of higher education in Israel. Work on a set of performance indicators of various aspects of higher also continued. A data base for the scientific output of the universities in Israel is part of this project. The development of a methodology for the computation of teaching costs in different fields and at different levels of study is also underway.

During 1991/92 an updated edition of the statistical abstract on higher education in Israel, in a new and expanded format, was published in both Hebrew and English versions.

The following activities connected to statistical data and indicators were carried out during 1991/92:

3.3.1 Data Collection and Processing by the Central Bureau of Statistics

The PBC commissions the Central Bureau of Statistics to collect and process most of the data on higher education in Israel. Every year statistical reports are published on candidates, students, and recipients of degrees in the universities and non-university institutions of higher education.

A new series of publications dealing with the progress of studies of university students is being planned. This series will provide data on the duration of studies until their completion, cessation of study, changing of majors, etc. The first publication of this series, focusing on the progress of undergraduate studies, has been prepared and will be published in 1992/93.

A new project undertaken in 1991/92 is a follow-up review of university studies of recipients of Israeli matriculation certificates, in cooperation with the Ministry of Education and Culture. The first publication resulting from this project is anticipated in 1992/93.

The Central Bureau of Statistics collects other data relevant to the planning of higher education, such as: the scope and fields of study in secondary schools; recipients of matriculation certificates; the number of academics in the population; manpower characteristics, including education and employment; and research activities and research manpower.

The following reports were published in 1991/92:

1. **Candidates for First Degree Studies in Universities 1990/91.** Series of Education and Culture Statistics no. 202, reprinted from the Supplement to the Monthly Bulletin of Statistics, no. 3, 1992.
2. **Students in Universities and Other Institutions of Higher Education 1990/91.** Series of Education and Culture Statistics no. 204, reprinted from the Supplement to the Monthly Bulletin of Statistics, no 7, 1992.
3. **Recipients of Degrees from Universities 1990/91.** Series of Education and Culture Statistics no. 206, reprinted from the Supplement to the Monthly Bulletin of Statistics, no. 11, 1992.
4. **Demographic Characteristics of Recipients of Degrees from Universities 1989/90.** Series of Education and Culture Statistics no. 205, reprinted from the Supplement to the Monthly Bulletin of Statistics, no. 8, 1992.

The following publications are in preparation:
1. **Candidates for First Degree Studies in Universities, 1991/92;**
2. **Students in Universities and Other Institutions of Higher Education, 1991/92;**
3. **Recipients of Degrees from Universities and Other Institutions of Higher Education, 1991/92;**
4. **The Progress of Studies of Undergraduate Students in Universities;**
5. **Demographic Characteristics of Students in Universities, 1989/90.**

Data on higher education and other relevant data such as recipients of matriculation certificates and the study habits of twelfth-graders are published in the "Education and Culture" chapter in the Statistical Yearbook and in other publications of the Central Bureau of Statistics.

3.3.2 Other Commissioned Activities in the Areas of Statistical Data and Indicators

In addition to the surveys of the Central Bureau of Statistics listed above, the PBC engages other organizations, on an ad hoc basis, to carry out projects in the fields of statistical data and indicators. During 1991/92 these projects included the following:

Scientific Publications of Researchers from Israeli Universities
The purpose of this project is to concentrate up-to-date statistical information on the extent of scientific publications by researchers from Israeli universities in various institutions and fields of study. Three organizations assisted in this project, each one dealing with different subject areas, as follows:
- The Samuel Neaman Institute for Advanced Studies in Science and Technology, at the Technion - natural sciences and technology;
- The Henrietta Szold Institute - National Institute for Research in the Behavioral Sciences - social sciences;
- The Central Library of the University of Haifa - humanities, law and arts.

During 1991/92 data bases were set up for the numbers of scientific publications during the second half of the 1980's in the fields of natural sciences, technology and the social sciences. Collection of information on publications during 1990-91 in the above fields as well as in the humanities, law and the arts, is also underway.

Cost-accounting of University Expenses
The purpose of this project is to distinguish and classify the activities of the universities into teaching and other (mainly research) activities while attempting to estimate the cost per student according to field of study and level of study. A detailed methodology was developed for this purpose and an examination of costs according to this method, at two representative times was begun, with the assistance of an external accountant.

Accessibility of Higher Education, in the Public's View
Toward the end of the year the PBC contacted the "Gutmann" Israeli Institute of Applied Social Research to carry out a public-opinion survey of this subject on its behalf. The final report of this survey will be prepared by June 1993.

4

THE HIGHER EDUCATION BUDGET

The higher education budget includes the PBC's allocations to the institutions of higher education (direct allocations to ordinary budgets and special allocations), allocations for development, and the PBC's administrative budget.

4.1
PBC Allocations to the Higher Education System

One of the functions of the PBC, as set forth in its terms of reference, is to submit budget proposals for higher education to the Government and to allocate the global budget to the institutions of higher education after it is approved by the Knesset.

According to the Council for Higher Education Law the institutions of higher education are at liberty to conduct their academic and administrative affairs autonomously, within the limitations of their approved budgets. The authorities in each institution approve its budget only after the heads of the institution have discussed and finalized it with the PBC.

The total approved ordinary budget of the higher education system in 1991/92 was NIS 1,968,530,000.

Total PBC allocations in 1991/92, excluding the development budget, amounted to NIS 1,280,466,000, according to implementation, of which NIS 1,200,803,400 were to the institutions of higher education and the remainder were to other activities in the higher education system that are not financed directly by the universities (financial aid to students, the students loan fund, the Israel Science Foundation, etc.).

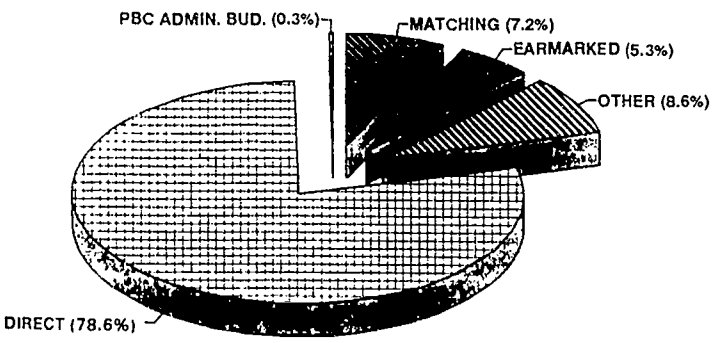
The largest portion of the higher education budget is allocated in the form of direct allocations to the ordinary budgets of the institutions of higher education, including allocations for immigrant absorption. The remainder is allocated for special subjects and for activities connected with research and academic development.

PBC Allocations to Ordinary Budgets - 1991/92
In NIS Thousands and as Percentage of Total Allocations

Total [1]	1,280,466	100%
Direct allocations to the budgets of the institutions of higher education	1,007,783	78.6%
Matching allocations to endowment funds	91,698	7.2%
Earmarked allocations for research and special subjects [2]	67,380	5.3%
Other allocations [3]	109,675	8.6%
PBC Administrative budget [4]	3,930	0.3%

1 Includes compensation for the increase in student numbers and immigration.
2 Includes allocations for research, earmarked allocations and inter-university activities (budget items 3, 4 and 5).
3 Includes allocations for aid to students, miscellaneous subjects, the Israel Academy of Sciences and Humanities, and budgetary transfers (budget items 6, 7, 9 and 10).
4 The PBC administrative budget is a separate budget item which is not part of the higher education budget (budget item 8).

PBC ALLOCATIONS TO ORDINARY BUDGETS



Details of PBC Allocations to Ordinary Budgets
(NIS Thousands, Current Prices)

Budget Items	1990/91	1991/92
Total	1,033,619.1	1,280,466.2
1 Direct Allocations	834,740.8	1,007,783.2
1.1 Universities - Direct alloc.[1]	699,752.7	837,554.2
1.2 Universities - long term plan	111,858.1	143,300.0
1.3 Non-university institutions[2]	23,130.0	26,929.0
2 Matching Allocations	79,151.1	91,698.1
2.1 Universities	78,633.4	91,091.3
2.2 Non-university institutions	517.7	606.8
3 Allocations for Research	32,266.5	40,176.3
3.1 Yigal Allon Fellowships	4,151.0	4,476.1
3.2 Scientific equipment for inter-university use	1,386.4	820.8
3.3 Israel Science Foundation[3]	19,859.0	23,880.1
3.4 Joint PBC - Ministry of Defense Research Fund[3]	900.0	1,400.0
3.5 Joint PBC - Atomic Energy Commission Research Fund[3]	1,164.0	2,000.0
3.6 USA-Israel Education Found.[3]	31.0	60.0
3.7 Research fellowships - humanities & soc. sciences	343.5	417.0
3.8 Equip. grants for young staff	932.2	945.0
3.9 Post-doctoral research grants	2,259.4	3,574.3
3.10 Scholarships for immigrant doctoral students	1,240.0	2,227.5
3.11 Guastella Fellowships	-	375.5
4 Earmarked Allocations	17,134.5	21,688.2
4.1 Computer infrastructure	2,707.0	1,086.7
4.2 Purchase - books, periodicals	12,020.0	16,219.0
4.3 Special progr. in electronics at Tel-Aviv University	2,407.5	
4.4 Research labs - life sciences	-	2,012.5
4.5 Teaching labs - renovation	-	2,370.0
5 Inter-University Cooperation	7,028.5	5,515.3
5.1 Inter-Univ. Computing Center	673.0	762.5
5.2 Inter-library cooperation and "Aleph" program	589.5	-
5.3 Inter-Univ. Center in Eilat	2,040.0	2,563.0
5.4 Super-computers	3,346.0	1,241.5
5.5 Computer communications lines	380.0	276.0

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	1990/91	1991/92
6 Aid to Students	24,699.7	32,305.3
6.1 "Perach" scholarships [3]	17,519.7	24,599.8
6.2 Students Loan Fund	7,180.0	7,705.5
7 Other Subjects	21,737.3	61,309.3
7.1 Pre-academic prep. programs	4,791.0	6,435.9
7.2 Academic programs in regional colleges	1,546.4	647.4
7.3 Teaching of accountancy	79.5	440.0
7.4 Tax refund - Open University	5,626.2	7,106.6
7.5 Israeli Academic Center in Cairo [3]	660.0	720.0
7.6 Peripheral hospitals [4]	482.0	505.2
7.7 Reduction of debts [5]	7,800.0	44,650.0
7.8 Data and guidance system for students [3]	43.0	-
7.9 Misc. (occupational therapy) [6]	709.2	804.3
8 PBC Administrative Budget	3,300.0	3,930.0
9 Israel Academy Sci. & Humanities	2,120.0	2,410.0
10 Budgetary Transfers	11,440.6	13,650.5
10.1 Medical research - Hadassah Medical Organization [3]	10,360.0	12,310.0
10.2 Part. by Govt. Ministries [7]	1,080.6	1,340.5

1 Including special allocations for the absorption of new immigrants in the universities, severance pay at Ben-Gurion University of the Negev and the Weizmann Institute of Science, and other one-time allocations connected to the direct global allocation.

2 Includes an allocation to the Ruppin Inst. of Agriculture amounting to NIS 259,000 in 1990/91 and NIS 319,000 in 1991/92, and additional sums for the absorption of new immigrants and for student growth at the non-university institutions of higher education.

3 Allocations not transferred directly to the universities.

4 Includes transfers from the Ministry of Health and the General Sick Fund for clinical appointments amounting to NIS 321,000 in 1990/91 and NIS 335,000 in 1991/92.

5 In 1991/92 this allocation was made to all the universities excluding the Weizmann Institute of Science and the Open University.

6 Transfers for occupational therapy at the Technion and the University of Haifa.

7 Transfers by the Ministry of Education and Culture for a program for the university training of school principals and educational personnel.

4.2
The Ordinary Budget of the Insitutions of Higher Education

Activities in the institutions of higher education can be classified according to three budgetary types:

* the ordinary budget - for current activity in teaching and research;
* closed budgets, mostly financed from outside sources, for research and special study programs;
* the development budget.

Most expenditures of the institutions of higher education are included in the ordinary budget: salaries, purchase of scientific equipment, books, periodicals, materials and expendable supplies, routine maintenance, renovations, aid to students, etc.

The PBC approves the budgetary outlines of the institutions of higher education as a condition for participation in their budgets. Approved outlines for the ordinary budgets of the institutions in 1991/92 amounted to NIS 1,968,530,000. Two-year budgetary outlines for 1990/91-1991/92 were concluded with most of the institutions. These were made possible due to agreements with the Ministry of Finance regarding long-term State allocations.

The components of the ordinary budgets of the institutions of higher education are presented in the following table:

Income of All Institutions of Higher Education Included in the Ordinary Budget 1991/92 and Distribution According to Source (NIS Thousands) [1]

Total Income	1,968,530	100.0%
Direct PBC allocations [2+5]	1,007,530	51.2%
PBC matching allocations to endowment funds [5]	91,698	4.7%
PBC earmarked allocations [5] for research and other subjects [3]	94,724	4.8%
Income from tuition fees	401,890	20.4%
Income from donations	183,880	9.3%
Other income [4]	188,874	9.6%

1 Universities and non-university institutions of higher education. Excludes the Ruppin Institute of Agriculture and PBC participation in tax rebates.

2 Includes one-time allocations to Ben-Gurion University of the Negev and the Weizmann Institute of Science. The PBC direct allocation includes supplements to compensate for growth in student numbers.

3 Includes earmarked allocations for research (excl. items 3.3 - 3.8 in the implementation report), other earmarked allocations, inter-university activities and other subjects.

4 Other income, less budgetary transfers.

5 According to actual implementation.

The Ordinary Budget of the Universities - 1990/91 - Implementation, and 1991/92 - Budget
(NIS Thousands, at Current Prices)

	Total	Income						
		PBC Allocations		Income From Donations	Income From Tuition Fees	Other Income	Transferred to Other Budgets	Total Income
	Expenditures	Direct	Earmarked					
1990/91[1] Total	1,605,329	799,590[3]	135,854[5+4]	176,311	299,055	242,888	16,037[4]	1,673,661
Hebrew University	415,821	216,730	34,094	67,252	58,850	53,884	6,039	424,771
Technion	266,383	154,170	23,252	34,317	32,567	29,537	6,222	267,621
Tel-Aviv University	339,499	167,470	23,696	10,390	85,848	52,235	-	339,639
Bar-Ilan University	130,524	69,160	8,753	1,535	36,977	17,654	2,649	131,430
University of Haifa	80,701	35,550	6,810	851	25,634	24,856	933	92,768
Ben-Gurion Univ.	138,092	74,240	18,513	8,942	27,338	18,185	-	147,218
Weizmann Institute	187,957	70,790	20,431	51,406	-	43,737	-	186,356
Open University[2]	46,352	11,480	305	1,618	31,841	2,800	194	47,850
1991/92 Updated[2+5] Total	1,880,490	980,854	185,780[4+5+7]	179,970	391,680	232,491	45,635[4]	1,925,140[6]
Hebrew University	473,990	258,172	53,354	80,580	78,700	49,744	33,560	486,990
Technion	298,370	182,489	28,687	28,990	41,960	29,344	4,900	306,570
Tel-Aviv University	402,750	210,678	37,246	10,100	114,360	43,465	1,350	414,500
Bar-Ilan University	163,750	89,609	14,455	2,400	47,290	15,746	1,450	168,050
University of Haifa	105,910	44,696	9,929	1,500	36,600	16,055	170	108,610
Ben-Gurion Univ.	170,470	95,674	19,328	10,000	28,200	25,928	3,960	175,170
Weizmann Institute	205,150	85,576	22,424	45,600	-	51,795	245	205,150
Open University[2]	60,100	13,960	357	800	44,570	413	-	60,100

Notes:

1 According to the notes to the balance sheets of the universities as prepared for the PBC (except for the Technion - according to financial reports).

2 Budget outlines and PBC participation do not include indirect returns to the Open University (in 1990/91 - NIS 7,106,000 and in 1991/92 - NIS 7,110,000).

3 In addition - NIS 34,950,000 transferred from 1989/90 (over-budgeting).

4 Includes earmarked allocations transferred to closed budgets and research budgets.

5 Includes allocation for the reduction of debts (in NIS thousands) in 1991/92: Hebrew University - 13,000; Technion - 8,200; Tel-Aviv U - 11,750; Bar-Ilan - 4,300; Haifa - 2,700; Ben-Gurion - 4,700. In 1990/91: Technion - 3,300; Bar-Ilan - 1,800; Haifa - 1,100; Ben-Gurion - 1,600.

6 Surplus of income over expenditures is due to PBC allocation for debt reduction, amounting to NIS 44,650,000.

7 According to actual implementation. See Table "Details of PBC Allocations to Ordinary Budgets".

Regular Activity of the Non-University Institutions of Higher Education - 1990/91 (Implementation) and 1991/92 (Budget)

(NIS Thousands, at Current Prices)

	Total Expenditures	Income					
		PBC Allocations		From Donations	From Tuition Fees	Other Income	Total Income
		Direct	Earmarked				
1990/91[1] Total	39,035	22,646[2+3]	517	4,488	8,091	5,092	40,834
Bezalel Academy of Art and Design, Jerusalem	12,920	7,920	161	1,281	3,018	1,676	14,056
Jerusalem Rubin Academy of Music and Dance	8,333	4,692	154	284	2,050	1,671	8,851
Jerusalem College of Technology	10,425	4 960	150	2,651	1,493	1,311	10,565
Shenkar - College of Textile Technology and Fashion	7,357	5,074	52	272	1,530	434	7,362
1991/92[4] Total	43,390	26,610[5]	642	3,910	10,210	2,018	43,390
Bezalel - Academy of Art and Design Jerusalem	13,960	9,010	190	890	3,545	325	13,960
Jerusalem Rubin Academy of Music and Dance	9,260	5,620	183	250	2,875	332	9,260
Jerusalem College of Technology	11,730	5,890	207	2,620	1,965	1,048	11,730
Shenkar - College of Textile Technology and Fashion	8,440	6,090	62	150	1,825	313	8,440

Notes:

1 According to the notes to the balance sheets prepared by the institutions.

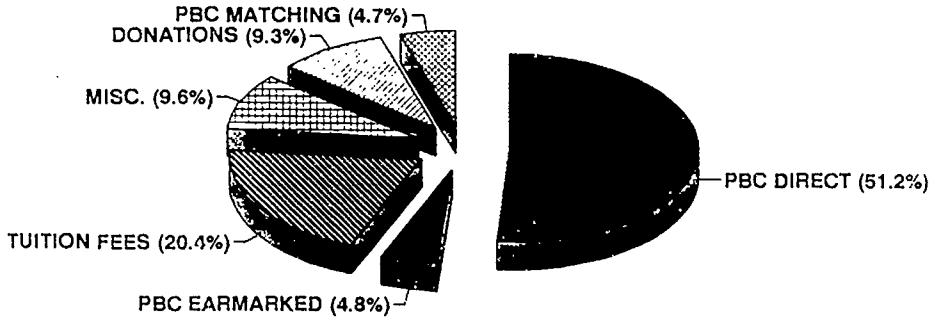
2 Includes over-budgeting from 1989/90 NIS 1,040,000.

3 Includes an allocation for immigrant absorption - NIS 101,000.

4 Updated and approved budget outline for 1991/92.

5 According to actual implementation.

SOURCES OF INCOME



4.2.1 The Direct PBC Allocation

The PBC's direct allocation represents the principal component of the budgets of the institutions of higher education. The apportionment of the allocation between the institutions is determined each year based on various indices such as the number of students, the number of graduates, the relative cost of different fields and levels of study, essential teaching fields and the scope of research.

4.2.2 PBC Matching Allocations to Endowment Funds

Matching allocations were originally intended to encourage the accumulation of donations in endowment funds, the profits from which are added to the current budgets of the institutions of higher education. These allocations had their beginnings in "historical obligations" by Ministers of Finance, in the period preceding the PBC's establishment, to allocate special sums over and above direct government allocations for this purpose.

Since 1982/83 a new method of determining matching allocations has been implemented. Each institution presents to the PBC a detailed annual report audited by an accountant on any movements or changes in eligible endowment funds, as well as the status of investments of assets in Israel. This report serves as the basis for the approval of the matching allocation for endowment funds, which are computed as a percentage (7%) of total eligible endowment funds.

Since the Ministry of Finance no longer views endowment funds as vital for the State's foreign exchange balance, and in order to give the PBC greater leeway in the allocation of the resources available to it, the PBC decided in 1987/88 to limit its obligations to grant matching allocations for new eligible endowment funds. The PBC therefore "froze" its obligations as of 30.9.1987 - that is, matching allocations for 1987/88 were "advance allocations", although the PBC allowed the institutions a "transitional year" for additional funds received until 30.9.1988 on account of commitments made prior to 30.9.1987.

According to the reports that the institutions must make to the PBC each year, the total value of all eligible funds as of the end of 1990/91 (30.9.91) was approximately NIS 1,294 million (about $540.7 million) and served as the basis for computing the matching allocations for 1991/92.

Matching allocations to the institutions of higher education in 1991/92 amounted to approximately NIS 91.7 million, as detailed in the following table:

Matching Allocations - 1991/92
(NIS Thousands)

	Value of the funds 30.9.91	Matching Allocation 1991/92
Total	1,294,036.1	91,698.0
The Hebrew University of Jerusalem	354,394.4	24,807.5
The Technion - IIT	185,955.9	14,132.4
Tel-Aviv University	226,006.2	15,820.4
Bar-Ilan University	86,265.8	6,038.6
The University of Haifa	40,478.5	2,833.5
Ben-Gurion University of the Negev	141,189.1	9,883.2
The Weizmann Institute of Science	247,433.3	17,320.3
The Open University	3,646.0	255.2
Bezalel - Academy of Art & Design	2,669.2	186.8
Jerusalem Rubin Academy of Music and Dance	2,617.7	183.2
Jerusalem College of Technology	2,488.3	174.2
Shenkar - College of Textile Technology and Fashion	892.7	62.5

4.2.3 The PBC's Earmarked Allocations

These allocations are in the following fields:

Allocations for research;
Earmarked allocations for computers, equipment and books;
Inter-university activities;
Aid to students;
Other subjects.

These subjects are discussed in greater detail in Chapters 5 (development of academic infrastructure and promotion of scientific excellence), 7 (inter-university cooperation) and 9 (other subjects and allocations).

4.2.4 Income from Tuition Fees

Early in 1990/91 a public committee composed of representatives of the public, the universities, students, the Ministry of Finance, and the PBC was appointed to determine tuition fees and supplemental fees for the years 1991/92 - 1995/96. This committee decided that tuition fees would be fully up-dated according to the consumer price index, based on the rate of NIS 3,866 in July 1990 prices, and would be payable by students in six installments. In 1991/92 tuition fees were set at NIS 4,677 at July 1991 prices.

Beginning in 1992/93 tuition fees will be increased, in real terms, by 1% for 1992/93 and 2% per year for the years 1993/94 - 1995/96; in 1992/93 tuition fees will therefore be NIS 5,180 at July 1992 prices. This increase will be directed to the expansion of programs for financial aid to students, through the addition of 2,000 "Perach" (tutorial project) scholarships as of 1991/92 and to the improvement of student services in the universities.

The committee decided that the collection of extra fees for student services will be dependent on whether or not the student is required to use the services in order to receive a degree. As a result, two categories of services were determined: obligatory and optional services.

Obligatory services were defined as those that are necessary in order to study or to acquire a degree. They include:
a. admission and registration fees;
b. fees for mandatory studies (English and field trips);
c. administrative services such as confirmation of eligibility for a degree, completion of studies, etc.

The prices for these services will not deviate from the general level of tuition fees prevalent in 1987/88. However, the price of any English language course, as part of the exemption from foreign language studies, will not be more than 15% of the annual tuition charge for a one-year course.

Optional services were defined as:
a. services that the universities can offer optionally for the convenience of students and the use of which is at the students' discretion;
b. comprehensive services for which there is centralized fee collection from students. Payment for these services may be collected from students only if an agreement to this effect has been signed with one of the local student unions.

In 1991/92 income from tuition and supplemental fees were approximately 20.4% of the total income of the institutions of higher education.

4.2.5 Income from Donations

Most donations come from abroad. Income from donations to the ordinary budget was expected to reach approximately NIS 184 million in 1991/92, or 9.3% of the total income of the institutions. This does not include income from endowment funds, donations to endowment funds and donations to the development budget.

4.2.6 Miscellaneous Income

This category includes:
a. income from investments and the assets of the endowment funds;
b. the sale of services (including overhead from other budgets);
c. participation by government ministries and others in the operation of special programs such as advanced training courses for teachers, para-medical professions, etc.

4.3 University Debts

With the PBC's assistance, debts owed by the institutions of higher education have decreased, in real terms. In the following table, loans owed by the universities at the end of 1991/92 are compared with those owed at the end of 1990/91. They include credit in current drawing accounts ("overdraft"), bank credit and internal credit. The figures are nominal and reflect a decrease in real terms of about 5% in the debts owed by the universities due to loans at the end of 1991/92 compared with the end of 1990/91.

Debts Owed by the Universities as of 30.9.91 and 30.9.92
(In NIS Thousands, at Current Prices)

(1)	(2)		(3)		(4)		(3) + (4) = (5)	
Institution	Highest Overdraft in Last Quarter		Bank Credit at end of Sept.		Internal Credit at end of Sept.		T o t a l (Excl. overdraft)	
	1990/91	1991/92	1990/91	1991/92	1990/91	1991/92	1990/91	1991/92
Hebrew University	4,348		28,981	27,617	96,677	110,487	125,658	138,104
The Technion	290	302	-	-	-	-	-	-
Tel Aviv University	14,042	13,602	2,395	1,700	29,846	25,348	32,241	27,048
Bar Ilan University	74.		2,404	533	-	-	2,404	533
University of Haifa			-	-	-	-	-	-
Ben Gurion Univ			1,033	320	-	-	1,033	320
Weizmann Institute	7,662	1,320	4,965	8,495	51,835	48,348	56,800	56,843
Grand Total	27,082	14,324	39,778	38,665	178,358	184,183	218,136	222,848

Notes:

1 1990/91 - according to data supplied by institutions and audited reports.
2 1991/92 - according to data supplied by institutions.
3 The increase in the Hebrew University's internal debt is due in part to the charging of internal interest between the university and the funds committee.

4.4
Salaries

In 1991/92 the PBC continued to deal with salaries in the higher education system, in coordination with the official in charge of wages and labor agreements in the Ministry of Finance. The PBC's guiding principle is that each and every institution is totally and directly responsible for fulfilling wage agreements. Approval by the official in charge of wages in the Ministry of Finance, recommendations of the salary committee of the Committee of Heads of Universities, and coordination with the PBC serve as upper limits to the decisions of each institution. The PBC was active in the following:

- A statistical follow-up on the payment of research bonuses to the senior academic staff of every university. Since 1987/88 allocations for research bonuses ("type B") are included in the regular PBC allocation, as are those for "type C" research bonuses.

- Observance of the discussions and recommendations of the salary committee of the Committee of Heads of Universities.

Toward the end of the 1991/92 academic year the academic staff of the universities commenced work disruptions and a partial strike of instruction in order to obtain higher salaries.

In an exchange of letters between the Committee of Heads of Universities and the Chairman of the Academic Staffs Coordinating Committee, the following was agreed upon:

1. A public committee will be appointed to examine the level, structure, and method of up-dating academic staff salaries. The previous Minister of Education and Culture was prepared to appoint such a committee but following the change of Government in the July 1992 elections the staff representatives requested that the appointment be delayed until the formation of the new Government. The new Minister of Education and Culture referred to the Minister of Finance, who expressed his strenuous opposition to the appointment of a public-State committee. After consultation, the Minister of Education and Culture then recommended that the Committee of Heads of Universities set up a committee.

2. A special comparative examination will be carried out that will include civil servants who were previously, but no longer, in the "control group" for comparison. The special examination "awarded" the academic staffs with a 6.93% pay rise, with 4.83% retroactive to 1.4.92.

In negotiations with the staff representatives it was proposed, with the consent of the official in charge of wages and labor agreements in the Ministry of Finance, that civil servants employed according to certain types of contract will be included in the control group.

The inclusion of this group of employees in the control group may increase the compensation for erosion by a further 2-3%, but the refusal of the staff representatives to come to an agreement on various issues on which there is contention prevented the conclusion of the wage dispute in 1991/92 and it ended only in January 1993.

4.5
The Development Budget

4.5.1 Construction in the Institutions of Higher Education

1991/92 was a pivotal year for physical development in the higher education system. On the one hand it was the final year for approval of construction projects within the framework of the long-term development plan that began in 1981/82; on the other hand, it was the first year of implementation of a new long-term development plan that is intended to meet the needs of the rapidly growing system, caused by demands for higher education by both new immigrants and veteran Israelis (See Chapter 3 for a fuller discussion of this topic). The two long-term plans therefore overlapped during this year.

The Long-Term Development Plan 1981/82 - 1991/92

The long-term development plan (originally for the period 1981/82 - 1985/86) was agreed upon between the PBC and each of the institutions of higher education and the PBC and the Ministry of Finance in 1982. It was intended to encompass 115,000 square meters of construction, which would be financed partly by the PBC. It was composed of essential projects approved by the PBC from among plans totaling about 300,000 square meters proposed by the institutions. The approved plans represented an increase of about 8% over the built-up area, or less than 1% a year until the end of the plan.

Projects included in the plan are for the development of fields having national priority (such as engineering, especially electrical engineering and electronics and dentistry) or for the alleviation of specific instances of shortage of space that hamper the proper functioning of an institution.

The PBC's participation in each of the projects was pre-determined according to set tariffs which took into account the importance of the project, the total cost of the investment and the resources available from donations. The PBC's participation usually covers up to a third of the cost and in special cases may be up to half the cost.

Every construction project included in the plan must receive final approval by the PBC (in addition to the approval in principle when the plan was formulated) at which time the tariff of PBC participation in the financing and the pace of financing are determined.

The long-term plan, which was approved in principle by the Ministry of Finance, was based on the agreement that the Israeli Shekel equivalent of about $10 million (at 1982 prices) would be allocated yearly for five years. However, due to budgetary cutbacks, the sums available to the PBC for implementing the long-term plan were less than anticipated. As a result, implementation of the plan was slowed down and some approved projects were postponed. The plan that was to have ended in 1985/86 is only now being completed.

By the end of 1991/92 the construction of approximately 84,000 square meters was completed and a further 9,000 square meters were under construction. Building projects that were approved by the end of 1991/92 and the construction of which will begin in 1992/93 will add about 12,000 square meters to the current built-up area, or approximately 90% of the area of the long-term plan.

During the period of the long-term plan approval was given for the construction of a number of buildings not included in the plan that are to be fully financed by a special allocation from the State budget. During 1991/92 the construction of two buildings of this nature was approved, both at Ben-Gurion University of the Negev: approval was given for one building in order to honor an obligation made to the donor in 1972, and for the second building as a result of a decision by the Ministerial Committee for the Negev. Both buildings were constructed between 1989/90 and 1991/92.

Even projects financed entirely, including maintenance costs, from donations require the PBC's approval. Each request is examined from four aspects: the needs of the university; the requirements of society and the economy; the total investment involved including maintenance costs; and the availability of resources. Generally these are projects, such as student dormitories or welfare services, in which the PBC does not participate. In 1991/92 the PBC approved seven projects of this nature, encompassing 5,000 square meters. During the whole period of the long-term plan approximately 85,000 square meters of buildings (almost identical to the extent of publicly-financed construction), fully financed from donations, were constructed; about half of this construction was at the Technion.

The New Long-Term Development Plan 1992 - 1996

The accelerated expansion of the higher education system necessitates increased floor space on campuses. The PBC is dealing with this subject on two parallel planes:

A. Discussions with the Ministry of Finance on the long-term development budget were based on the total forecasted and planned increase in the number of students and on a comprehensive estimate of the floor-space that will be needed to absorb these students in the system. At the start of the discussions the Ministry of Finance agreed to provide a special allocation in 1992 (amounting to NIS 40 million) for the absorption of new immigrants, over and above the planned allocation for the previous long-term plan for the special projects mentioned above.

   The discussions with the Ministry of Finance were concluded toward the end of the 1991/92 academic year with an agreement regarding the long-term development plan for 1992-1996. According to this agreement the Ministry of Finance will make available to the PBC for participation in investments in construction for the expansion of the system the sum of NIS 240 million (in 1992 prices) and an additional NIS 40 million contingent upon the realization of forecasts of immigration - a total of NIS 280 million.

   These funds will enable the PBC to participate in the construction of buildings for instruction and research encompassing a total of 160,000 square meters, thus facilitating the absorption of approximately 16,000 additional students into the higher education system by the end of 1992/93, out of the total increase of 30,000 students mentioned in Chapter 3 above. The PBC's participation will be based on set tariffs of up to 50% of the cost of construction, similar to the procedures used in the previous long-term plan. The year 1993 was selected as the target year for student numbers for construction plans in accordance with PBC policy that construction only follow proven long-range growth in student numbers. During the period of growth the universities will thus have to find temporary solutions and make more efficient use of the space available to them; the

PBC will assist them in the financing of investments in adaptations and renovations of existing buildings for this purpose.

The construction of 160,000 square meters over the five years of the long-term plan represents an increase of 14% over current floor-space available for instruction and research in the system (1,100,000 square meters).

The 14,000 additional students expected to join the system (the difference between the total anticipated increase of 30,000 and the 1993 target of 16,000) will necessitate further construction. Toward 1995/96 a plan for continued construction will be presented to the Ministry of Finance, based on growth trends from 1994 and an analysis of needs.

B. The PBC requested the universities to draw up and present long-term construction plans that define space requirements in terms of function and use (that is, not in terms of specific buildings). These plans were examined and analyzed in 1991/92 prior to the formulation of a detailed long-term development plan for the institutions of higher education.

In view of the fact that the universities have just commenced the planning process (both general and detailed) and in order not to delay urgent construction projects that will be entitled to PBC participation, the institutions were advised that they may separate specific projects from their general plans and request that the PBC approve them in principle. A number of such projects, of a limited scope, were approved in 1991/92.

According to PBC policy stateed above, the first stage of development will therefore be more efficient utilization of existing space through adaptations and renovations. In 1991/92 a number of universities presented projects of this nature to the PBC; they were approved and the PBC will finance 50% of the costs involved.

4.5.2 Financing

Total investment in construction in the higher education system in 1991/92 amounted to approximately NIS 135 million, most of this in the universities. Public participation in development budgets in 1991/92 increased again, as in the previous year, compared with 1989/90 and amounted to NIS 40 million for projects included in the long-term plan, those financed by special allocations from the State budget, and those included in the new program of expansion.

The development budgets of the universities for the years 1989/90, 1990/91 and 1991/92 and PBC participation in them are presented in the following table. It should be noted that figures for investments and participation in any particular year do not always correspond because the accounting extends over several years.

Development Budgets of the Universities - 1989/90 - 1991/92
(NIS Thousands, at Current Prices)

	1989/90		1990/91		1991/92	
	Actual Investments (1)	PBC Partici-pation	Actual Investments	PBC Partici-pation	Actual Investments	PBC. Partici-pation
Total	74,310	7,620	97,670	39,570 (6)	130,000	40,400
Hebrew University	4,490	-	8,940	-	15,000	5,000
Technion - IIT	13,200 (3)	-	14,300 (3)	2,500	12,000 (3)	1,000
Tel-Aviv University	14,470	- (4)	17,430	3,940	22,000	4,500
Bar-Ilan University	4,620	1,090	6,860	3,190	10,000	2,400
University of Haifa	1,260	365	3,510	3,070	10,000	3,800
Ben-Gurion University Total	16,540	6,165	22,230	21,870	30,000	28,700
Inst. for Desert Research (2)	(2,910) (5)	(365)	(1,690) (5)	(200) (5)	-	(150)
Weizmann Institute of Science	19,420	-	23,440	-	30,000	
Open University	290	-	960	-	1,000	-

Notes
(1) According to the financial reports of the universities. Includes construction, installations and furniture in new buildings but does not include scientific equipment.
(2) Defined as a project of special national importance.
(3) After deduction of estimated commitments pending and investments in equipment from the development budget.
(4) Does not include a special allocation of NIS 696,000 in 1989/90 for a classroom building for electrical engineering at Tel-Aviv University (from the ordinary budget).
(5) Includes equipment.
(6) Includes a special allocation for immigrant absorption, half of it from the funds of the Administrator-General.

Investments in construction in the institutions of higher education declined steadily until 1990/91; in 1990/91 investments in universities were only about 28% of their scope in 1973/74. Whereas at the beginning of the 70's the development budget was about 25% of the total higher education budget, in 1990/91 it was only about 3%. In this same period PBC participation in the development budgets of the institutions diminished even more rapidly. In 1989/90 it was 11% of what it was in 1973/74: at that time PBC participation in development budgets was about 16% of total PBC participation in higher education budgets and in 1989/90 the percentage was less than 2%. In 1973/74 PBC participation was about 50% of total investments but in 1989/90 it was only about 15% (in the entire system). This was due in part to the PBC policy of fixed tariffs for its participation, which lessened the rate of participation in most eligible projects, but was mainly due to relatively wide-scale construction without any public funding - that is, financed entirely from donations.

A turning-point occurred in 1990/91. Participation increased due to special allocations for development to accommodate the large numbers of new immigrant students and the expansion of the system, and this trend continued in 1991/92. As a result, government participation as a percentage of total investments in construction in the higher education system rose again.

The table below presents data on the development budget of the higher education system from 1973/74 to 1991/92.

Due to delays in funding and in the collection of donations which were to finance a large share of the development programs, certain institutions, in particular Tel-Aviv University, accumulated deficits in development budgets. According to agreements with the institutions, these deficits are to be covered during the coming years.

The accelerated investment in construction will begin to be felt in 1992/93 since during 1990/91 and 1991/92 efforts were devoted to preparations, planning and fund-raising to supplement government participation. It must be stressed that the universities will have to make major fund-raising efforts in order to implement the new long-term development plan.

The Development Budget of Institutions of Higher Education Funded by the PBC 1973/74 - 1991/92
(NIS Thousands)

	Universities (1)		Other Institutions		Universities (1)		Other Institutions	
	At Current Prices				At 1991/92 Prices (2)			
	Invest-ments	PBC Alloc.	Invest-ments	PBC Alloc.	Invest-ments	PBC Alloc.	Invest-ments	PBC Allo.
1973/74	26	13	-	-	319,970	159,370	-	-
1974/75	31	14	-	-	282,300	127,170	-	-
1975/76	29	9	-	-	205,300	62,670	-	-
1976/77	32	13	-	-	178,600	71,660	-	-
1977/78	51	17	-	-	186,670	61,490	-	-
1978/79	76	17	-	-	160,610	36,070	-	-
1979/80	161	45	-	-	153,150	42,220	-	-
1980/81	381	84	3	2	151,780	33,580	1,040	720
1981/82	735	181	42	43	137,970	33,940	7,960	8,020
1982/83	1,725	337	63	51	144,350	28,220	5,270	4,230
1983/84	5,583	1,358	1,067	106	116,670	28,380	22,300	2,210
1984/85	25,074	4,992	2,697	900	119,380	23,770	12,840	4,280
1985/86	40,770	9,407	3,581	152	113,580	26,210	9,980	420
1986/87	50,530	7,971	2,993	279	111,590	17,600	6,610	620
1987/88	54,670	4,440	4,396	2,560	99,210	8,060	7,980	4,650
1988/89	43,420	5,460	12,110	4,240	66,750	8,390	18,620	6,520
1989/90	74,310	7,620	14,660	5,780	97,780	10,030	19,290	7,610
1990/91	97,670	39,570	4,430	430	109,830	44,500	4,980	480
1991/92	130,000 (3)	40,400 (4)	5,000 (3)	-	130,000 (3)	40,400 (4)	5,000 (3)	-

Notes
(1) Includes the Open University
(2) 1991/92 prices are based on the Construction Price Input Index.
(3) Estimate.

5

DEVELOPMENT OF ACADEMIC INFRASTRUCTURE AND PROMOTION OF RESEARCH AND SCIENTIFIC EXCELLENCE

The universities are engaged in both teaching and research. University teaching not accompanied by research cannot maintain a proper academic level for any length of time. PBC participation in the ordinary budgets of the universities (see Sect. 4.2 above) is therefore intended for research, as well as instruction, in the universities (that part of the academic staffs' time that is devoted to research, purchase of scientific equipment, books and periodicals, maintenance of laboratories, etc.).

It should be noted that virtually all of the basic research in Israel is carried out in the universities, financed from the ordinary budget and from external research funds (amounting to tens of millions of dollars). As a result, almost 35% of all research and development in Israel in the civilian sector in the natural sciences, medicine, agriculture and engineering takes place in the universities. Most research in the humanities and social sciences is conducted in the universities.

Almost all the technological advances in industry and defense in Israel were achieved due to basic research conducted in the institutions of higher education ten or even twenty years earlier. The foundations for science and technology in the 21st century must be laid in the universities now.

To this end the PBC, in addition to its allocations to ordinary budgets, utilizes earmarked allocations to promote research in the universities and to create the infrastructure necessary for research.

5.1
The Israel Science Foundation

The Israel Science Foundation (until 1991/92 known as the Basic Research Fund), which is financed by the State budget for higher education for which the PBC is responsible, awards grants for original high quality basic research to researchers in the universities on a competitive basis, based on quality and excellence. The system for the support of basic research was established in 1972 following a decision of the Prime Minister and the Minister of Education and Culture; its administration was entrusted to the Israel Academy of Sciences and Humanities. Until 1978 this support system operated in two branches: the Arm for Applied Research at the National Council for Research and Development and the Basic Research Branch at the Israel Academy of Sciences and Humanities. The basic research branch became an independent foundation in 1979. From 1979-1988 the Israel Academy of Sciences and Humanities operated the Israel Science Foundation in cooperation with the PBC. The Foundation had a council composed of representatives of the Academy and the PBC.

The agreement between the PBC and the Ministry of Finance regarding the long-term budgetary plan to advance the higher education system and its implementation enabled the PBC to increase significantly its allocation to the Israel Science Foundation beginning in 1988. It was also decided that as of 1988/89 the Research Fund for Electronics, Computers and Communication (also funded by the PBC) would merge with the Israel Science Foundation. As of 1988/89 the PBC also transferred to the Foundation its program of special allocations for the purchase of scientific equipment on a competitive basis, which existed from 1977/78 to 1988/89. This subject is now an integral part of the Israel Science Foundation.

The PBC made the increase of the Foundation's activities conditional on the drafting of new regulations for the Foundation and the appointment of a public council and administration, as a preliminary step in the establishment of an independent foundation. The new regulations, which were implemented in 1989/90, are based on two premises: the Foundation will be operated according to scientific criteria and public standards; and the resources of the Foundation, composed of a current budget deriving from income from endowment funds and other income generated by the Foundation according to its rules, will be kept separate from the budgetary responsibility and maintenance of the endowment funds themselves.

A new council was set up, composed of ten members: the President of the Academy, two representatives of the Academy's council, the Chairman and another representative of the PBC, three full professors from the higher education system, and two public representatives of national standing. A new administration, composed of seven members, was also appointed: the Chairman of the Foundation, who is a scientist, three leaders of fields of research, a representative of the PBC, a member of the scientific community, and the Director of the Academy.

The Academy's efforts to recruit endowment funds, the income from which will finance research grants awarded through the Israel Science Foundation and according to its criteria, have begun to show results. It is hoped that these sources will prove to be a suitable complement to the PBC's increased allocations and will enable the Foundation to expand its activities even further.

The PBC allocation to the Israel Science Foundation in 1991/92 was set at the NIS equivalent of $10 million, and will be increased in 1992/93 to $11 million. The expansion of the Foundation's budget is part of the PBC's long-term plan.

PBC transfers to the Israel Science Foundation in 1991/92 amounted to NIS 23,880,000.

In 1991/92 the Foundation awarded 369 grants, 150 of them for new research projects, 131 for second-year grants and 88 for third year grants. The Foundation also awarded 17 grants to researchers for the purchase of permanent equipment.

The Foundation allocated grants totalling $10,795,000, of which $8,550,000 derived from the PBC and $2,245,000 from awards and donations to research.

Grants from the Israel Science Foundation in 1991/92
(In US$)

	New Research Projects	Continuing Projects			Total
		Second Year	Third Year	All Continued Projects	
Total	5,678,213	3,292,350	1,824,500	5,116,850	10,795.063
Natural Sciences	5,154,213	2,986,450	1,667,500	4,653,950	9,808,163
Of this: Exact Sciences	1,221,150	1,181,750	568,500	1,750,250	2,971,400
Life Sci. & Medicine	2,134,000	1,804,700	1,099,000	2,903,700	5,037,700
Scient. Equip.	1,799,063	-	-	-	1,799,063
Humanities & Social Sciences	524,000	305,900	157,000	462,900	986,900

Based on data from the Israel Science Foundation.

5.2 Grants for the Development of Academic Staff

5.2.1 Yigal Allon Fellowships for Outstanding Young Researchers

The Allon Fellowship Program is designed to enable the universities to recruit outstanding young researchers to their staffs. Competition for the fellowships is based on personal excellence and there are no quotas for institutions or subjects. The fellowships permit the universities to provide the fellows with initial full-time appointments as "lecturer" or "senior lecturer". The universities undertake to employ the fellows and include their salaries in their ordinary budgets at the end of the three years of the fellowship, thus ensuring the integration of the fellows into the higher education system.

The PBC awards over 20 three-year fellowships per year, each equivalent to the average salary of a lecturer or senior lecturer as the case may be. In addition, since 1989/90 each fellow receives a one-time research grant which, in

1991/92, amounted to NIS 70,000 for fellows in the experimental sciences and NIS 21,000 for fellows in other fields.

Twenty-five Allon fellows took up their positions in 1991/92, the eleventh year in which Allon Fellowships were awarded, and four who were awarded fellowships in 1990/91 also took up their positions this year: 7 in the humanities, 4 in the social sciences, 7 in the life sciences and 11 in the exact sciences and engineering.

NIS 4,476,000 were transferred to the universities in 1991/92 to cover the expenses of 70 fellows in three different three-year cycles.

Nine Allon fellows in the experimental sciences and 15 in the theoretical subjects received research grants totalling NIS 945,000.

In 1991/92 the selection committees chose the fellows of the 12th cycle, who will commence work in 1992/93. In this cycle 26 fellows were chosen: 4 in the humanities, 4 in the social sciences, 7 in the life sciences and 11 in the exact sciences and engineering.

Yigal Allon Fellowships - 12th Cycle
(1992/93-1993/94-1994/95)
Statistics by Subject Area

	Total	Human-ities	Social Sciences	Life Sciences	Exact Sciences & Engineering
Requests	87	13	16	23	35
Candidates	83	13	15	22	33
Fellowships Awarded	26	4	4	7	11

Note: The difference between the number of requests and the number of candidates stems from the fact that some candidates were presented by more than one institution.

5.2.2 Guastella Fellowships

In 1990/91 the Rashi Foundation inaugurated a fellowship program for the recruitment of new immigrants to university staffs. Fellows receive an initial full-time appointment to the rank of "lecturer", "senior lecturer" or "associate professor" in a university.

No institutional or subject field quotas are determined for the selection of the fellowships, which are for three consecutive years. The criteria for selection are: the personal excellence of the candidate, the needs of the universities and the needs of the State of Israel. The same selection committees that select the Allon Fellows also select the Guastella Fellows.

The fellowship is equivalent to the average salary of an academic staff member of the same rank (lecturer, senior lecturer or associate professor) and, in addition, the fellows may receive from the Rashi Foundation, as needed, a grant of $30,000 for the purchase of equipment. The universities undertake to employ the fellows and include their salaries in their ordinary budgets at the end of the three years of the fellowship. In 1991/92 (for the 1992/93 academic year) 22 fellows were selected. The PBC provided approximately 20% of the cost of the fellowships.

5.2.3 Fellowships for Distinguished New Immigrant Scientists

The wave of immigration from the former eastern-bloc countries includes older senior scientists whose age prevents their absorption into regular tenure-track positions, despite the fact that the universities are interested in employing them, based on their achievements in their former countries.

The PBC therefore decided in 1991/92 to establish a program for the support of this category of scientists, who will be employed according to the terms of special contracts outside of the regular tenure-track for periods of five years, with the possibility of extension up to ten years.

In 1991/92 a selection committee appointed for this purpose chose ten scientists, out of 27 candidates presented by the universities. Eight of these scientists will commence work in 1992/93.

5.2.4 Post-Doctoral Fellowships

Post-doctoral fellows undertake advanced training, in the years immediately following completion of their doctorates, in their own fields of research in small, established research teams, generally in an institution other than the one that awarded them the Ph.D. This practice is common throughout the world and has become an integral part of modern research, particularly in the experimental sciences. In the US, for example, post-doctoral researchers represent the major source of research personnel in leading research laboratories in the life sciences and experimental chemistry. There are fields of research in which a competitive edge cannot be maintained without a critical mass of post-doctoral researchers.

The PBC reached the conclusion that this link is lacking in Israel research teams, with adverse affects on the competitive capacity of Israeli science. The PBC therefore decided to operate an experimental fellowship program for three years, as of 1990/91, in order to increase the number of post-doctoral researchers, especially from abroad, working in research teams in the universities.

Each institution selects its fellows according to the terms of eligibility set by the PBC in the regulations of the program. The number of fellows available to each institution is determined by the PBC according to various criteria, in order to encourage, in particular, those institutions that now have only a few post-doctoral researchers.

Each fellowship is worth approximately NIS 28,000 and is intended to serve as a subsistence fellowship, according to the customary conditions at each institution, with the remainder intended for the research needs of the fellow. The fellowship is for one year, with the option of an extension for an additional year.

During the 1991/92 academic year, 91.5 fellowships were awarded to 94 researchers proposed by the universities. Approximately 30% of the fellows were from abroad, mainly from the US, compared with only 19% during the previous year. Close to a third of the Israeli fellows in the program in 1991/92 received their doctorates abroad, compared with a quarter in the previous year.

In view of the success of the program and the interest in it displayed by academic staff members in the universities, the PBC decided to extend it for a further three years

The PBC allocated NIS 3,300,000 to the universities for implementation of this program in 1991/92.

5.2.5 Scholarships for Outstanding Doctoral Students in the Humanities and Social Sciences

After examining the subject the PBC reached the conclusion that a problem exists in the training of potential academic staff in the humanities. This is due to a decline in the qualifications of students admitted to these subjects and to the length of time necessary to complete research theses because students are not able to devote all their time to research (as opposed to the situation in the experimental sciences). A survey of subsistence grants to graduate students that was carried out in 1986/87 showed that the universities awarded only 115 grants to students in all fields of the humanities and the social sciences, compared with 945 grants to students in the exact sciences. The PBC therefore decided to inaugurate a special program for the award of 10 three-year subsistence scholarships for outstanding doctoral students in the humanities and some of the social sciences. The program is for four years, with the possibility of an extension, and began in 1987/88.

The scholarships are equivalent to $7,000 a year, for three years. The institutions present lists of candidates and undertake to provide scholarship recipients with $750 a year (in NIS) for research expenses and to refrain from employing them as a condition for the scholarship award. Furthermore, if they are employed as teaching assistants they may not be burdened with more than 4 weekly teaching hours per year. Scholarship recipients, for their part, must complete their research projects within three years.

Requests are presented by the universities. Each request includes an assessment of previous work by the student, his or her plans for doctoral research, and academic record. Decisions are made on the basis of this material.

In 1991/92 the PBC operated the fifth cycle of this program by awarding scholarships to nine students, from among 16 candidates presented by the universities.
The PBC transferred NIS 417,000 to the universities in 1991/92 for the scholarships of 27 students from the first three cycles.

5.3
Allocations for Scientific Equipment

5.3.1 Support for the Purchase of Scientific Equipment through the Israel Science Foundation

At the end of the 1970's the PBC decided that special encouragement should be provided for the purchase of scientific research equipment, which constitutes the infrastructure for academic activity. Between 1977/78 and 1987/88 the PBC operated a program for PBC participation (of up to 50%) in the purchase of items of scientific research equipment, on a competitive basis. In 1988/89 this program became part of the activities of the Israel Science Foundation (See Sect. 5.1 above).

5.3.2 Support for Inter-University Centers for Scientific Equipment

The PBC will now concentrate on allocations for the establishment of national centers for scientific equipment for basic research - that is, a laboratory or expensive equipment that is purchased by a specific institution and operated by it but available for use to researchers from all institutions. Since a program of this nature involves many considerations with planning aspects the PBC decided to operate it directly.

PBC participation is up to 50% of the cost of investment in the center, with the institution concerned supplying the remainder from its own resources.

For each national center approved by the PBC a committee of users is formed, composed of researchers from the host institution as well as other institutions. The committee's task is: to inform the academic community of the possibility of utilizing the equipment of the national center and the procedures for such use; to review the research proposals of those who request to use the equipment of the national center; and to decide to whom to charge the expenses incurred by this use.

A referee, appointed for each request, recommends that the PBC either approve or reject the request.

In 1991/92 the PBC approved two requests (one of which was presented in 1990/91) and one request was still pending at the end of the year. The requests that were approved are:

- A spectrometric photoelectron X-ray system at the Weizmann Institute of Science, costing $670,000, with PBC participation of $335,000.

- A system for the determination of DNA sequences, at the Weizmann Institute of Science, costing $540,000, with PBC participation of $270,000.

In 1991/92 the PBC transferred NIS 820,000 for its participation in the first of these systems.

5.3.3 Allocations for Equipment in Research Laboratories in the Life Sciences

The PBC subcommittee that is reviewing the fields of the life sciences in the universities (see above, Sect. 3) reached the conclusion that a problem exists relating to equipment, which constitutes the research infrastructure in this field and is essential in order to enable researchers to compete successfully in the forefront of scientific research. The equipment in question is mainly medium-sized standard equipment that can serve many researchers.

The PBC therefore decided in 1991/92 to designate a one-time allocation, equivalent to $1,000,000, for assisting the institutions to renew their research equipment in the life sciences. The institutions, for their part, were required to provide 20% of the cost of the equipment from their own resources, with the PBC supplying 80% of the investments in equipment.

The allocation was apportioned among those institutions that have departments of study in the life sciences, according to an index based on the number of senior academic staff in the subject and the extent of external research budgets available to them.

The decision as to how to make use of the resources made available to them was left to the institutions, with purchases to be guided by a list of typical items of equipment, each costing up to $45,000. At the end of 1991/92 the institutions provided the PBC with detailed reports of their purchases.

The PBC transferred NIS 2,012,500 to the institutions in 1991/92 for this allocation, with some payments to be concluded in 1992/93.

5.3.4 Allocations for the Renewal of Instrumentation in Instructional Laboratories in the Natural Sciences

The PBC reached the conclusion that there has been an accumulated neglect of instructional laboratories in the natural sciences. The obsolescence of instrumentation and equipment in the laboratories has an adverse effect on the quality of instruction for undergraduate students.

To facilitate the renewal and modernization of laboratories (entire laboratories - not just isolated items), the PBC decided to designate a special allocation for this purpose, for three years, beginning in 1991/92.

The PBC allocated $1,000,000 in 1991/92 and decided to focus, in the first year, on laboratories in the basic experimental sciences - that is, chemistry, physics and biology - that serve as instructional laboratories for students during their first two years of study. PBC participation was set at 80% of the investments, with the institutions required to provide the remaining 20% from their own resources.

The allocation was apportioned among those institutions that have undergraduate programs in the natural sciences, according to an index based on the number of laboratory hours required of students in the different subjects and the number of first and second year students in the relevant fields.

The decision as to which laboratories should be upgraded was left to the institutions, which, at the end of 1991/92, provided the PBC with detailed reports of their investments. The PBC allocated NIS 2,370,000 to this subject in 1991/92.

5.4
Allocations for the Purchase of Books and Periodicals

In view of the importance of the acquisition of books and periodicals and the danger of diminishing acquisitions in times of budgetary constraints, the PBC makes a special annual allocation for the purchase of books and periodicals by university libraries. Since the allocation is intended to encourage universities to purchase more books and periodicals, its amount depends upon the sum each institution devoted from its own resources to this purpose.

Since ten years have passed since the PBC began to award earmarked allocations for the purchase of books and periodicals, the PBC held a fundamental discussion of the subject at the end of 1988/89. It decided to increase its allocations significantly and to change the method of allocation. Allocations increased from $2,900,000 in 1988/89 to $4,500,000 in 1989/90, $6,000,000 in 1990/91 and $7,000,000 in 1991/92.

The institutions' allocations from their own resources for this purpose amounted to NIS 17,200,000 in 1991/92 and the PBC's special allocation for university libraries was NIS 16,200,000.

Beginning in 1989/90 the basis for the apportionment of this allocation among the institutions is their share in the division of the institutions' own expenditures on the acquisition of books and periodicals in the past three years. The PBC's allocation is conditional: the institutions must allocate from their own resources at least 10% more, in dollars, than they allocated in the previous year. The allocation is also limited to no more than 50% of total expenditures on the acquisition of books and periodicals.

6

FUNDS FINANCED JOINTLY WITH OTHER ORGANIZATIONS

6.1
The Joint Atomic Energy Commission - PBC Research Fund

The purpose of this fund is to encourage cooperation between the AEC and the institutions of higher education and to promote scientific research in fields which are of joint interest.

This fund operates through a joint PBC-AEC administration and a selection committee. Research projects must be in a field of activity which is of interest to the AEC and must be carried out in institutions of higher education.
The PBC's participation in this fund in 1991/92 amounted to NIS 2,000,000.

6.2
The Joint PBC - Ministry of Defense Research Fund

The purposes of this fund are:

* to promote scientific research in the universities in fields of joint interest;
* to expand the scientific-technological infrastructure of the universities in areas that are of mutual interest;
* to foster and advance young researchers or researchers returning from abroad in relevant subjects in the universities or to train them for employment in high-tech industries.

A joint administration operates the fund. Research projects are chosen by professional committees and are carried out by researchers in the universities.
PBC participation in the fund for 1991/92 was NIS 1,400,000.

6.3
The United States - Israel Education Foundation

This fund, also known as the "Fulbright Foundation", is a bi-national fund based on an agreement between the two governments signed in 1956. Each year the foundation finances visits to Israeli universities by US lecturers, researchers and students and also awards scholarships to Israeli students and post-doctoral researchers who wish to study in the US. The fund's budget in 1992 was approximately $1,200,000.

Half of the foundation's annual budget is financed directly by the US Government, and a third derives from the prceeds of an endowment fund of $5,000,000 that was set up in 1985.

Since 1967 the Government of Israel participates in the foundation through the Ministry for Foreign Affairs and the PBC. The PBC's participation in the foundation in 1991/92 was $25,000, while the Ministry for Foreign Affairs' participation was $35,000.

7

INTER-UNIVERSITY COOPERATION

The PBC encourages cooperation among the institutions of higher education. To this purpose the following measures have been taken in recent years: the Inter-University Computing Center (IUCC) was established; a communications network to facilitate computer communication between universities in Israel and abroad was set up; university libraries were computerized uniformly; the National Center for Testing and Evaluation was established, replacing separate centers in each university; and a national information system on the requirements for admission to the institutions of higher education was developed.

Coordinated purchasing is practiced by the universities, mainly in the field of computers. In this area they can utilize their joint purchasing power.

The Hebrew University of Jerusalem's institute for oceanography in Eilat serves as an inter-university institute for oceanographers, marine biologists and geologists from all universities and holds inter-university courses for students of all institutions. In addition, the activities of the Institute for Desert Research and the Ben-Gurion Research Center, both part of Ben-Gurion University of the Negev and located at Sede Boker, were expanded and are available to researchers from all the institutions. The Israel Academic Center in Cairo serves researchers from all universities.

Joint academic degrees are awarded in some academic programs: a master's degree and Ph.D. in economics awarded jointly by the Technion and the University of Haifa; a master's degree in music awarded jointly by the Hebrew University of Jerusalem and the Jerusalem Rubin Academy of Music and Dance; and a bachelor's degree program in occupational therapy offered jointly by the University of Haifa and the Technion.

7.1
Computers

For the past ten years the PBC has been supporting computerization in the universities in two ways: by participating in the development of university computing centers and by participating in the expenses of the IUCC (Inter-University Computing Center).

7.1.1 Super-Computers

In 1987/88 a PBC subcommittee that examined the subject of super-computers presented its report, which was adopted by the PBC. The report recommended that three or four mini-super-computers be installed on a gradual and coordinated basis in university computing centers and that researchers from other institutions should have access to these computers. The committee also recommended that a steering committee for super-computers be appointed.

During 1988/89 and 1989/90 three institutions purchased Convex C-220 mini-super-computers. The PBC undertook to allocate to the three institutions the NIS equivalent of $1,600,000, over a three-year period. In 1990/91 the PBC approved the steering committee's recommendation to grant a one-time allocation of $ 900,000 (in NIS) to three additional institutions for the purchase of heavy numerical computing equipment. In 1991/92 the PBC approved an allocation for its participation in 50% of the cost ($150,000) of expanding the memories of three super-computers. Total PBC allocations in 1991/92 amounted to NIS 1,999,000.

Toward the end of 1990/91 the steering committee presented a report that summarized its activities and recommendations and its conclusion that in view of changes in the computing market during its existence, the committee had become superfluous. As a result, the committee recommended that it cease to operate. The PBC accepted this recommendation and thanked the committee for its work.

7.1.2 Development of Infrastructure for Computing Services

Until 1989/90 the PBC supported the development of university computing centers with the aim of encouraging rational long-range planning in each institution while taking into account the over-all computing needs of the academic community in Israel. The PBC encouraged the reciprocal utilization of computer resources in order to enable equipage of the system as a whole to progress in a gradual and orderly manner and to allow for the regulation of demand in each institution, as well as facilitating decision making without pressure.

In 1989/90 a new subcommittee for compucation (communication and computers) was appointed to re-examine the PBC's activities in this area.

As a result of this committee's recommendations, the PBC decided to alter the direction and form of its allocations for computing. As of 1990/91, instead of general allocations for the development of computing centers, allocations will be for clearly defined projects presented by the institutions for the development of computing services for teaching and research needs. The projects should serve a large number of researchers and students and should be based on standard equipment rather than on experimental equipment. The institutions must undertake to obtain supplemental financing for the projects, beyond the PBC participation, which is 50% of the investment.

In 1991/92 the institutions presented 33 projects for approval, with a total cost of $7,600,000. The PBC approved the compucation committee's recommendation to allocate funds for 16 of these projects, with a total cost of $3,700,000. PBC allocations to these projects amounted to $1,850,000.
Since implementation of the projects extended into the 1992/93 academic year, the PBC's allocation was transferred at the start of 1992/93.
In addition, in 1991/92 support for the computing centers was completed according to the previous plan (amounting to $ 75,000).

7.1.3 The Inter-University Computing Center (IUCC)

The Inter-University Computing Center, which was established at the initiative of the PBC at the end of the 1982/83 academic year, was registered as a "registered society" by seven universities in 1989/90. The institutions,

members, authorities amd work procedures of the registered society were defined. The executive committee of the registered society was chosen, including a chairman; a director for the registered society was also chosen.

The purpose of the registered society is to deal with all matters concerning compucation (communication and computers) and to promote cooperation and mutual assistance between the member institutions in this field and between them and research institutions or other corporations interested in university teaching and research.

The aims of the IUCC were defined as follows:

1. Administration, operation and development of an inter-university communication network in Israel.

2. Administration, operation and development of the contact with academic and research communication networks abroad.

3. Representation of Israel in international forums that deal with academic communication networks.

4. Coordination of purchase and maintenance agreements (of hardware and software) and implementation of joint university purchases.

5. Coordination in the use of existing inter-university computer resources, hardware and software, including a policy for mutual charges for use.

6. Examining the requirements for computing power of the universities as a whole, and meeting these requirements.

7. Coordinating and encouraging inter-university cooperation in everything connected with policies on compucation and the management of computing centers and systems in general.

8. Coordination of activities connected with evaluation of software and hardware, methods of operation and management of computer resources, the development of data systems and training.

9. Coordination and regulation of the unique professional knowledge available in the system, for inter-institutional assistance.

10. Providing services to the members of the company, as set out by the executive committee.

The activities of the IUCC in 1991/92 focused on the following areas:

1. Preparations for the expansion of the infrastructure of the "ILAN" communications network.

2. Conclusion of negotiations for making the "ILAN" network available to those involved in industrial research and development, education and culture.

3. Exp nsion of the basis for inter-university software agreements.

Toward the end of 1991/92 the speed of four of the ten main communications lines in the network were doubled, to 128Kb/s. The speed of the remaining lines is expected to be accelerated at the start of 1993. The speed of the international line to the US is also slated for acceleration (from 64Kb/s to 128Kb/s).

At the initiative of a number of ministries (Communications, Science, Commerce & Industry and Education and Culture), the IUCC's license for operating the network was expanded so that communications services can be supplied to industrial research and development agencies and educational and cultural institutions on an experimental basis for 18 months. These agencies and institutions will assist in the financing of the network during this experimental period.

During 1991/92 a number of agreements relating to software were reached with different suppliers for IUCC use of various platforms (mainly UNIX and PC work stations). These agreements enable the computer systems on the different campuses to be utilized more efficiently and contribute to higher standardization of these tools, for both inter- and intra-institutional use.

The PBC supports the IUCC budget in order to encourage inter-university cooperation in the field of computers. The total budget of the IUCC in 1991/92 was NIS 1,891,316, of which NIS 1,202,000 was allocated from the PBC (including NIS 452,000 for the direct communications line to the US) and the remainder from the institutions that comprise the IUCC registered society as well as external users. In 1991/92 the PBC decided to gradually decrease its support as of the 1992/93 academic year; by 1995/96 the IUCC budget should be financed entirely by the members of the registered society and external users.

The forum of university computing center directors continued to convene monthly in 1991/92. The forum discusses coordination between computing centers and makes recommendations to the executive committee of the IUCC registered society. The forum operates working groups in different areas such as: communication, personal computers, data protection, and VM, UNIX and VMS operating systems.

7.2
University Libraries

The libraries of the institutions of higher education cooperate in the following areas:

The Inter-Library Loan Project, allowing users to order and borrow books from libraries in all the institutions;
The Union List of Serials in Israel, containing catalog data and the location of all periodicals in the libraries of the institutions of higher education and research institutes in Israel;
The Inter-University Library Network, which connects the university library computers and permits computerized cataloging, searches and loans in all university libraries and between them. The network is based on the "Aleph" program developed by the Hebrew University of Jerusalem and operates in a VAX-VMS environment.

The Steering Committee for the Inter-University Library Network, established in 1983/84, guided the Network until 1991/92. The function of the committee was to direct the development policy of the "Aleph" program regarding computer software and hardware and the services provided by the "Aleph" staff to university libraries. In 1991/92 the PBC decided that, since development of software was completed, it was time for a users' committee to take over the subject. A users' committee was set up as a subcommittee of the Committee of Heads of Universities, and the PBC steering committee ceased to function.

The PBC promotes the following activities by budgetary allocations.

In 1991/92 the PBC allocated NIS 630,000 for inter-library cooperation, of which NIS 370,000 (transferred only in 1992/93) was for inter-library loans and the Union List of Serials, NIS 40,000 was for the appointment of a MARC data file, and approximately NIS 224,000 was upon the recommendation of the "Aleph" network steering committee for the development and operation of a computer in which all the joint data (the Union List of Periodicals and the MARC data file) is located and for maintenance of the data-files.

The directors of the university libraries meet several times a year to discuss the strengthening of cooperation between libraries, with a view to greater economy and efficiency.

7.3 Cooperation in Research Institutes

7.3.1 The Institute for Desert Research at Sede Boker

In order to encourage the Institute's development as a national inter-university center for desert research, the PBC appointed an inter-institution academic committee to monitor its activities. The committee's functions are to initiate and foster cooperation between the Institute, which is part of Ben-Gurion University of the Negev, and the institutions of higher education. This includes cooperation between researchers, national and international meetings on desert research, and courses in this subject for students of other universities.
The PBC contributes to the Institute's budget through its direct allocation to the ordinary budget of Ben-Gurion University of the Negev. Total participation in 1991/92 amounted to NIS 7,700,000.

7.3.2 The Ben-Gurion Research Center at Sede Boker

On June 2, 1982 the Council for Higher Education decided to approve the agreement between Ben-Gurion University of the Negev and the Ben-Gurion Heritage Research Institute regarding transfer of the Institute's teaching and research functions, within the framework of the Ben-Gurion Research Center, to the University. The Council instructed the PBC to implement this decision in all matters concerning plans for academic and physical development and budgeting of the Center.

The PBC carried out the directives of the Council and designated a special allocation for the Ben-Gurion Research Center at Sede Boker as part of its allocation to Ben-Gurion University of the Negev (similar to the arrangement

regarding the Institute for Desert Research, which was also covered by the Ben-Gurion Heritage Law of 1976).

In March 1989 the PBC set up an inter-institution academic committee to monitor the activities of the Center, similar to the inter-institution academic committee for the Institute for Desert Research.

The functions of the committee are to follow the Center's development plans and to guide their formulation and to initiate and establish frameworks for cooperation between the institutions of higher education and the Center, including cooperation on research projects and joint research centers, meetings of research teams, joint appointments for researchers, etc. The committee was requested to present annual progress reports to the PBC.

The PBC contributes to the Center's budget through its direct allocation to the ordinary budget of Ben-Gurion University of the Negev. Total participation in 1991/92 amounted to NIS 2,300,000.

7.3.3 The Inter-University Institute in Eilat

In 1983/84, in order to encourage inter-university cooperation in the operation of the Marine Biology Laboratory in Eilat, which is part of the Hebrew University of Jerusalem, the PBC designated the laboratory as an inter-university institute. The Institute is managed by an administrative committee appointed by the chairman of the PBC after consultation with the rector of the Hebrew University. University scientists serve as committee members. The committee's function is to determine the Institute's scientific programs, priorities for the Institute's work, and development trends. In addition, the committee determines the curriculum in oceanography, the schedule of conferences, employment procedures for scientists at the Institute, and possibilities for cooperation between the Institute and universities and research institutes in Israel and abroad.

In 1991/92 the Institute held inter-university courses in which teachers and students from most of the institutions of higher education in Israel participated. Students from all universities were able to participate in courses organized by other universities. Extensive research activity was carried out at the Institute, by local researchers as well as by researchers from different universities.

The PBC participates in the Institute's budget, which is defined as a closed budget within the budget of the Hebrew University of Jerusalem, and the Hebrew University is responsible for operating the Institute and reporting on it.

The PBC's allocation to the Inter-University Institute in Eilat in 1991/92 was NIS 2,563,000.

7.3.4 The Israeli Academic Center in Cairo

The Israeli Academic Center in Cairo was established in 1981/82 by the institutions of higher education, the Israeli Oriental Society, and the Israel Academy of Sciences and Humanities following a cultural agreement between Israel and Egypt signed in May 1980. Its purpose is to promote academic and scientific cooperation between the two countries.

The PBC finances the Center, which is administered by the Israel Academy of Sciences and Humanities on behalf of the institutions of higher education in Israel. A council and an administration direct the activities of the Center. The council appoints the center's director. Prof. Joseph Ginat of the University of Haifa directed the Center in 1991/92.

The Center organizes seminars, lectures and meetings that are attended by Egyptian lecturers and students. The Center maintains an expanding library and gives advise to visitors, particularly in the field of Judaica.

Of special note is the Center's assistance in the project for a library of synagogues and the documentation of the Jewish heritage in Cairo, which was completed this year. The library was inaugurated in January 1989 in its permanent location in the "Shaar HaShamayim" Synagogue in Cairo. Upon completion of this project, consideration is being given to a similar project for the synagogues of Alexandria as well as assistance for the establishment of a Jewish museum in Cairo.

Researchers, writers and students from Israeli universities visit the Center for research purposes or to give lectures at the Center. The Center publishes a periodic bulletin in English and in Arabic.

The PBC's allocation to the Israeli Academic Center in Cairo in 1991/92 was NIS 720,000.

7.4
"Meida'at" - Data and Guidance System for Students

A computerized data system for candidates for admission to the institutions of higher education has been developed by the Committee of Heads of Universities' National Center for Testing and Evaluation. Development of the system was financed and encouraged by the PBC.

The system is designed to assist candidates for admission to the universities with information on fields of study and institutions for undergraduate study. The system, which is called "Meida'at" in Hebrew, provides personal replies to each candidate on the probability that he or she will be admitted to a desired field for undergraduate study. The replies are based on the personal data supplied by the candidate (the weighted average of the applicant's matriculation marks and his or her score on the psychometric entrance examination) compared with those of students who were admitted to the institution and field in question in recent years.

In addition, the system provides general information on a wide scope of subjects: procedures for admission, student dormitories, preparatory programs, financial assistance, psychometric and other classifying examinations, academic reserves, improvment of matriculation marks, pre-academic preparatory programs, counselling and guidance services, etc. The system also provides information on the structure and course of studies, as well as curricula, etc.
The system is operated on a personal computer and is user- friendly; it carries on a "conversation" with the candidate. Even someone who has no previous experience with computers can take part in this "conversation" without outside assistance. Candidates are not required to identify themselves.

8

STUDENT SUPPORT

8.1
Tutorial Project ("Perach")

The tutorial project is a joint project of the Ministry of Education and Culture, the PBC, the universities and the National Union of Students. Students volunteering to devote four hours a week to acting as tutors to school pupils are eligible for yearly scholarships which, in 1991/92, amounted to a basic level of NIS 2,070.

In 1991/92 14,229 students served as tutors, including tutors who served only part of the year. The numbers of students serving as tutors from 1984/85 - 1991/92 appear below:

Tutors in Universities 1984/85 - 1991/92

	84/85	86/87	88/89	89/90	90/91	91/92
Total	12,072	10,924	10,555	11,725	12,309	14,229
Hebrew Univ.	1,914	1,751	1,357	1,703	2,839	3,124
Faculty of Agriculture*	(702)	(828)	(937)	(1,027)	(1,013)	(1,174)
Technion-IIT	2,004	1,768	1,560	1,629	1,869	2,274
Tel-Aviv Univ.	1,737	1,419	1,282	1,573	1,439	1,714
Bar-Ilan Univ.	1,599	1,161	1,268	1,357	1,519	1,890
Univ. of Haifa	1,822	1,775	2,082	2,296	1,508	2,967
Ben-Gurion U.	2,234	2,173	2,042	2,115	2,110	2,240
Weizmann Inst. of Science	60	50	27	25	25	20

* The Faculty of Agriculture in Rehovot, while part of the Hebrew University of Jerusalem, is considered separately from the Hebrew University for this purpose.

In 1991/92 eight tutorial centers were operated in seven universities and one regional college. They were active in 528 schools located in 137 different communities, as set out below:

Tutorial Project Activity - 1991/92

	Coordi-nators	Schools	Commu-nities	Tutors
Total	332	528	137	14,229
Hebrew University - Total Faculty of Agriculture	76 (28)	113 (51)	21 (12)	3,124 (1,174)
Technion-IIT	50	78	22	2,274
Tel-Aviv University	43	48	10	1,714
Bar-Ilan University	39	95	22	1,890
University of Haifa	67	126	49	2,967
Ben-Gurion University	57	68	13	2,240
Weizmann Inst. of Science	1	5	1	20

Source: Tutorial Project Administration

The main expenditure of the tutorial project is on scholarships. In 1991/92 the PBC financed about 82% of the scholarships. The remainder are financed by the universities, the Ministry of Education and Culture and other sources.

In 1991/92 the PBC's allocation to the tutorial project was NIS 25,599,790.

The administration of the tutorial project is located in the Weizmann Institute of Science, which provides assistance for the project. A council, appointed by the Minister of Education and Culture, and an administration direct the project. The Ministry of Education and Culture also covers administrative expenses and selects the schools and pupils participating in the project.

8.2
Student Loans

The Students Loan Fund in the Institutions of Higher Education, in which commercial banks were partners, ceased to function in 1984/85. Since 1985/86 the system for loans to students has been financed from the PBC budget. The system is administered by a committee headed by the PBC and with the participation of representatives of the Ministry of Education and Culture and the Accountant General of the Ministry of Finance.

The PBC has adopted the criteria for eligibility for loans that were recommended by the "Katzav Committee". These include: the economic situation of the student's parents, the student's income, the number of family members in the student's home, army service, marital status, and place of residence (i.e., if in a development area). These criteria were also adopted by the public committee that determined the level of tuition fees for the years 1991/92 - 1996/97.

Loans are approved by the department for tuition fees and student loans in the Ministry of Education and Culture and are implemented by commercial banks. Following the 9% increase in tuition fees that took effect in 1989/90, the PBC decided to implement the following improvements in the award of student loans and grants:

- The basis for computing loans will be raised by 9%;
- The maximum level of loans will be raised to 100% of tuition fees;
- Standing loans (available to students from development areas) will be replaced by grants.

Conditions for loans have not changed and they continue to be interest-free but linked to the consumer-price-index.

During the 1991/92 academic year 7,070 students applied for loans, of whom 5,684 were found eligible, according to pre-determined criteria, for either loans or grants. 822 loans were in fact implemented, as well as 3,474 grants. In all, 4,296 students received either loans or grants, amounting to NIS 7,700,000.

8.3
Stipends for New Immigrant Doctoral Students

As part of the efforts to facilitate the absorption into the universities of new immigrants from the CIS, the PBC developed a program of stipends for new immigrant doctoral students. The program is intended for doctoral students who are neither eligible for support from the Center for Absorption in Science of the Minsitry of Immigrants Absorption, nor for support from the Ministry's Students' Authority. The stipends are intended to assist the students during their first two years in the universities, while they are unable to teach because they are not yet fluent in Hebrew.

In 1991/92 the stipends were NIS 23,000 for the year; the institutions could use their own judgement as to the splitting of stipends between more than one student, on condition that the amount of the stipend actually given to the student not be less than NIS 16,000. The stipend is for one year and is extendable for an additional year.

Each institution decides who will receive stipends, based on criteria for eligibility which include dates of immigration and commencement of doctoral studies. The PBC determines how many stipends each institution is allocated, based on the number of new-immigrant doctoral students studying there.

The program was first implemented in 1991/92, financed from a special grant from the Administrator-General for the absorption of new immigrants in the universities. In 1991/92 the PBC financed the program.
During the 1991/92 academic year 99 full stipends were awarded to 140 recipients, with some of the institutions splitting stipends between more than one recipient.

During 1991/92 there were 370 doctoral students who had immigrated to Israel since October 1989. In 1990/91 there were only 190 such students - an increase of 95%. It follows that approximately 38% of the new immigrant doctoral students in 1991/92 were supported by the PBC.

9

OTHER ACTIVITIES AND ALLOCATIONS

9.1
Foreign Students

The Steering Committee for Foreign Students is composed of representatives of the universities and the Jewish Agency and is headed by a member of the PBC. The Jewish Agency finances the budget of the committee.

The functions of the committee are:
a. to determine policy and guidelines for operating programs aimed at increasing the number of Jewish students from abroad (mainly from America and western Europe) in Israeli universities;
b. to allocate the budget for these programs.

The committee's activities include the following:
* **scholarships for students** - Scholarships for undergraduate students and students in special programs are based on the student's socio-economic background; scholarships for graduate students are based on academic excellence.

* **recruitment of students abroad** - The committee supports the recruitment efforts of the universities and Jewish student organizations abroad. Most of the activity is centered in North America but in recent years greater efforts have been made to recruit students from Latin America, South Africa and Europe.

* **academic development in the universities** - The choice of courses offered to foreign students is being expanded in order to suit the courses to the plans and needs of these students, who usually come for short periods of time.

* **social and cultural activities** - These are intended to enable the students to become acquainted with Israeli people, the land, the State and society.

The budget of the Steering Committee in 1992 was $180,000.

In 1991/92 there were 2,188 foreign students in undergraduate degree programs or special programs (either for one year or one semester) and 172 foreign students in graduate programs. It must be stressed that these numbers do not include new immigrant students from the former Soviet Union and other former eastern bloc countries.

Undergraduate Students from North America in One-Year or One-Semester Programs

	85/86	86/87	87/88	88/89	89/90	90/91	91/92
Total	1,280	1,434	1,723	1,837	1,895	1,521	2,188
Hebrew University	730	820	936	848	896	124	1,142
Technion	-	-	7	9	11	1	5
Tel-Aviv Univ.	329	375	384	550	537	306	647
Bar-Ilan Univ.	63	93	95	89	104	177	126
Univ. of Haifa	105	105	122	121	170	79	119
Ben-Gurion Univ. of the Negev	53	41	66	67	42	23	24
Bezalel - Academy of Art & Design	-	-	-	1	-	-	-
Academy of Music and Dance	-	-	-	-	-	-	1
Jerusalem College of Technology	-	-	2	2	7	3	10
Shenkar - College of Textile Tech. & Fashion	-	-	-	1	-	-	-
Michlala - Jerusalem Col.	-	-	110	120	116	107	114
Wingate Institute	-	-	1	3	-	-	-
David Yellin Col.	-	-	-	-	-	1	-

Source: The Steering Committee for Foreign Students

Graduate Students Receiving Scholarships from the Steering Committee for Foreign Students

	1988/89		1989/90		1990/91		1991/92	
	2nd Deg.	Ph.D.	2nd Deg.	Ph.D.	2nd Deg.	Ph.D.	2nd Deg.	Ph.D.
Total	118	71	169	64	96	74	82	50
Hebrew Univ.*	52	30	89	27	42	21	47	16
Technion	28	8	26	8	9	8	24	13
Tel-Aviv Univ.	16	9	26	9	25	19	-	-
Bar-Ilan Univ.	-	1	-	1	4	6	2	-
Univ. of Haifa	3	1	6	1	-	-	-	-
Ben-Gurion U.	2	1	-	6	3	-	1	-
Weizmann Institute**	17	21	22	19	13	20	8	14

* Each year the Hebrew University awards an additional 10 scholarships for doctoral students.
* Each year the Weizmann Institute awards an additional 44 scholarships for master's degree students and 50 for doctoral students.

Source: The Steering Committee for Foreign Students

9.2
Regional Colleges

The regional colleges, which are centers for cultural and instructional activity in areas far from the center of the country, provide academic programs of study for which universities, including the Open University, are responsible academically. The academic responsibility is extended to these programs in order to make higher education more accessible to broader segments of the population and is expressed in the following ways:

* the teaching staff is appointed by the university according to its regular criteria;
* the program of study and academic obligations are determined by the university;
* requirements for admission are determined by the university;
* study programs are similar to those of the university in the same fields;
* degrees are awarded by the university after students complete their studies there.

Academic programs in regional colleges enable residents of areas that are distant from university campuses to accumulate credit toward an academic degree. The first two years of academic study may be undertaken in a regional college while the third and final year of study leading to a bachelor's degree must be completed at the main university campus. Open University programs enable students to complete all their studies in the regional college.

During 1991/92 the transformation of Bar-Ilan University's branches in Safed and Ashkelon into regional colleges was completed, and the operation of academic programs for which Bar-Ilan University is academically responsible was approved.

A program of study in biology at the Tel-Hai Rodman Regional College, for which the Technion is academically responsible, was also approved. This marks the first time that the Technion has undertaken academic responsibility for a program at a regional college.

The Ministry of Education and Culture, local authorities and other sources finance the operating expenses of the colleges, while the PBC participates in the financing of the academic coordinator's salary and the overhead expenses of the academic programs. The PBC's allocation is transferred directly to the universities concerned, whereas other financing is transferred to the colleges.

The PBC's allocation to academic programs in regional colleges in 1991/92 amounted to NIS 647,000. The apportionment of this allocation is decided upon by the Council for Higher Education's subcommittee for regional colleges.

In accordance with PBC policy, the existing universities are to expand in order to admit new immigrant students and to accommodate the demands of the natural growth of the veteran population. This expansion will last for a few more years, as long as immigration rates remain high.

This policy calls for expansion of the universities to be limited to an additional 22,000 students. Any expansion beyond this number will take place in non-university settings, including regional colleges. The academic activity of the regional colleges should be expanded, subject to the maintenance of a suitable academic standard. For this purpose the PBC drew up a new policy for financing the academic programs in regional colleges:

a. Students in the academic programs in regional colleges will not be counted as regular university students.
b. Students who have transferred to the main university campus will be counted as university students.
c. Graduates will be counted as graduates of the university that granted them their degrees.
d. The income and expenses of the regional colleges will be their responsibility, without university involvement. The agreements that deal with the connection between the college and the university will refer only to academic aspects.
e. The PBC will compensate the universities for the expenses incurred by academic responsibility and supervision.
f. Financing will be based on variable expenses according to the number of FTE students registered in the university and studying in the regional college; the university will receive NIS 1,000 (in 1992/93 prices) per year for each FTE student. This method of compensation replaces previous financial arrangements and covers all costs. The expenses of the academic

coordinator of the college, in which the PBC now participates, will be included in the per-student figure.

g. This new arrangement will be implemented beginning in the 1992/93 academic year.

Academic staff in the regional colleges:

The regional colleges are expected to continue to develop and expand, and some of them will evolve into independent accredited institutions of higher education. To this end they should strive to recruit full-time academic teaching staff members. The need arose, therefore, to establish a grade scale for staff members of the developing regional colleges that would be based on the academic grade scales in use in the universities, but adapted to the special needs of the regional colleges.

For this purpose, the Ministry of Education and Culture, in cooperation and consultation with the chairman of the PBC and with the participation of a PBC member, set up a special professional team whose function is:

- to make recommendations as to the restructuring of the academic teaching staff in the regional colleges;

- to make recommendations as to the terms of employment of the academic teaching staff in the regional colleges;

- to establish rules for the grading and promotion of academic teaching staff in the colleges, taking into consideration their teaching load and directives for part-time employment;

- to suggest criteria for the advanced training of academic teaching staff members.

The team examined the problem from all possible aspects and prepared recommendations.

A list of the regional colleges monitored by the Council's subcommittee, which offered academic programs in 1991/92, appears in section 2.1.

9.3
Pre-Academic Preparatory Programs

There are three different types of pre-academic preparatory programs: pre-academic programs operated in and by universities; pre-pedagogic programs in teacher training institutions; and programs for the completion of secondary school studies held in regional colleges.

The aim of the pre-academic preparatory programs is to give a "second chance" to young people who lack the matriculation certificate or whose secondary school grades were low, and to prepare them for academic studies.

Students in the pre-academic preparatory programs come from two different population groups: those who are defined by certain socio-economic criteria as "worthy of advancement" and those who need to refresh their knowledge or complete some of their studies.

The "Association for the Advancement of Education", which is connected with the Ministry of Education and Culture, is responsible for running the programs. The Association maintains regular contact with the PBC, the Ministry of Education and Culture, and the Ministry of Defense. The "Demobilized Soldiers Law" of 1984 gave greater impetus to the programs; this was reflected in a large increase in the number of students in the pre-academic preparatory programs, primarily in the regional colleges but also in the universities.

The PBC covers tuition costs in university preparatory programs for students from disadvantaged socio-economic backgrounds who are considered "worthy of advancement", while the Ministry of Education and Culture, through the "Association", and the Ministry of Defense cover their living expenses.

The PBC's allocation in 1991/92 was NIS 6,128,000.

Students who are not in the "worthy of advancement" category - about a third of the students in the university preparatory programs - must pay tuition fees.

The table on the next page shows the number of students in the pre-academic preparatory programs from 1989/90 - 1991/92.

9.4
Peripheral Hospitals

The PBC held discussions on this subject with officials of the Ministry of Health, the directors of peripheral (i.e., distant from schools of medicine) hospitals, and the deans of the schools of medicine in order to strengthen the connections between the peripheral hospitals and the schools of medicine.

In December 1989 an agreement was reached between the Ministry of Health, the General Health Fund and the PBC. This agreement determined the number of positions and the cost outline for this program for the years 1987/88, 1988/89 and 1989/90. The cost of the program is divided evenly between the three signatories to the agreement. The program covers the cost of approximately 25 academic appointments in the schools of medicine for doctors from peripheral hospitals (14.5 at the Technion in Haifa and 9 at Ben-Gurion University of the Negev).

In order to qualify for financing, the schools of medicine must show that they need the instructional capabilities of doctors from the peripheral hospitals and that the level of equipment found in the departments of hospitals that will serve as teaching departments will be raised. In 1991/92 the PBC transferred NIS 481,980 for its share in the financing of this program.

Students in Pre-Academic Preparatory Programs
(At the Beginning of the 1991/92 Academic Year)

	Total Students	Considered "Worthy of Advancement"
1989/90 - Total	5,986	4,309 - 72%
At the universities (Total)	2,773	1,359 - 49%
Hebrew University	378	245
Technion	671	165
Tel-Aviv University	434	222
Bar-Ilan University	322	276
University of Haifa	549	277
Ben-Gurion University	419	174
At regional colleges	2,272	2,200 - 97%
At teacher training colleges	941	750 - 80%
1990/91 - Total	6,612	4,181 - 63%
At the universities (Total)	3,055*	1,558*- 37%
Hebrew University	469	269
Technion-IIT	682	152
Tel-Aviv University	391	204
Bar-Ilan University	629	511
University of Haifa	431	193
Ben-Gurion University	423	208
At regional colleges	2,248	1,521 - 68%
At teacher training colleges	1,309	1,102 - 84%
1991/92 - Total	7,669	5,145 - 67%
At the universities (Total)	2,459	1,010 - 41%
Hebrew University	406	256
Technion-IIT	524	126
Tel-Aviv University	350	156
(Sharon College and TA Univ.)	99	88
Bar-Ilan University	213	80
University of Haifa	486	172
Ben-Gurion University	361	116
At regional colleges	3,880	3,099 - 80%
At teacher training colleges	1,330	1,036 - 78%

* Includes students at Jerusalem College of Technology.

Source: The Association for the Advancement of Education

10
APPENDICES

Appendix 1

Members of the Eighth Council for Higher Education (1991/92)

Mr. Zevulun Hammer	Minister of Education and Culture - Chairman (until July 1992)
Mrs. Shulamit Aloni	Minister of Education and Culture - Chairman (after July 1992)
Justice Shoshana Netanyahu	Deputy Chairman of the Council
Prof. Amos Altshuler	Ben-Gurion University of the Negev
Mr. Eliahu Ben-Lulu	Representative of the Public (Beit-Shemesh Local Authority)
Prof. Gerald L. Blidstein	Ben-Gurion University of the Negev
Mr. Ronen Carraso	Chairman, National Union of Students
Prof. Gavriel Cohen	Tel-Aviv University
Prof. Hanan Frenk	Tel-Aviv University
Prof. Dov Frohman-Bentchkowsky	- Representative of the Public (Director-General of "Intel" Israel)
Prof. Gad Gilbar	University of Haifa
Prof. Eliezer Gileadi	Tel-Aviv University
Prof. Shlomo Grossman	Bar-Ilan University
Prof. Yehuda Gutman	The Hebrew University of Jerusalem
Judge Joseph Haj-Yahia	Representative of the Public
Prof. Hava Lazarus-Yafeh	The Hebrew University of Jerusalem
Prof. Ehud Lenz	The Technion - IIT
Prof. David Mukamel	The Technion - IIT
Prof. Eliahu Nissim	The Technion - IIT
Prof. Amnon Pazy	Chairman of the PBC
Prof. Yaakov Rand	Bar-Ilan University
Prof. Aviezer Ravitzky	The Hebrew University of Jerusalem
Dr. Avraham Rocheli	Representative of the Public (Director of the Levinsky College of Education)
Prof. Arza Ron	The Technion - IIT
Prof. Yecheskel Taler	University of Haifa
Prof. Ada Zamir	Weizmann Institute of Science

Appendix 2

Fields of Study in the Institutions of Higher Education

Fields / Institutions	Human-ities	Social Sci.	Law	Arts	Social Work	Teacher Train.	Math., Nat. Sci.	Eng., Tech-nology	Agri-cult.	Medi-cine	Den-tistry	Para-Med. Profs.
Hebrew University	+	+	+	+	+	+	+		+	+	+	+
Technion-IIT		+				+	+	+	+	+		+
Tel-Aviv University	+	+	+	+	+	+	+	+		+	+	+
Bar-Ilan University	+	+	+	+	+	+	+					
University of Haifa	+	+	+	+	+	+	+					+
Ben-Gurion University	+	+			+	+	+	+		+		+
Weizmann Inst. Science							+					
The Open University	+	+					+					
Bezalel Academy Arts				+				+				
Jerusalem Acad Music				+		+						
Jerusalem Coll Technol						+		+				
Shenkar Text & Fash				+				+				
Ruppin Institute		+										
College of Management		+										
Teacher Training Colleges						+						

Appendix 3

Students in Universities[1] by University and Degree Level 1979/80 - 1991/92

	1979/80	1984/85	1989/90	1990/91	1991/1992				
					Total	Bachelor's Degree	Master's Degree	Ph.D.	Certificate[3]
Total[2]	54,480	61,155	67,770	71,190	78,640	53,950	18,860	4,680	1,150
Hebrew University, Jlm.	13,570	14,385	16,780	17,700	18,610	11,420	5,330	1,690	170
Technion-IIT	7,580	8,060	9,080	9,770	10,280	7,440	2,170	610	60
Tel-Aviv University	14,380	18,020	19,270	19,440	21,530	14,290	5,960	1,030	230
Bar-Ilan University	8,070	8,780	9,330	10,200	11,930	8,730	2,410	490	200
University of Haifa	6,140	6,330	6,780	7,030	8,120	6,360	1,470	120	170
Ben-Gurion University of the Negev	4,250	5,080	5,890	6,410	7,490	5,710	1,300	260	220
Weizmann Institute of Science	490	500	640	640	680	-	200	480	-
Percentages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hebrew University, Jlm.	24.9	23.5	24.8	24.9	23.7	21.1	28.2	36.1	14.8
Technion-IIT	13.9	13.2	13.4	13.7	13.1	13.8	11.5	13.0	5.2
Tel-Aviv University	26.4	29.5	28.4	27.3	27.4	26.5	31.7	22.0	20.0
Bar-Ilan University	14.8	14.4	13.8	14.3	15.2	16.2	12.8	10.5	26.1
University of Haifa	11.3	10.3	10.0	9.9	10.3	11.8	7.8	2.6	14.8
Ben-Gurion University of the Negev	7.8	8.3	8.7	9.0	9.5	10.6	6.9	5.5	19.1
Weizmann Institute of Science	0.9	0.8	0.9	0.9	0.9	-	1.1	10.3	-

1 Does not include the Open University. (See Appendix 6)
2 Does not include students in special non-degree courses.
3 Students who study for both a degree and a certificate are counted with the degree students.

Source: Central Bureau of Statistics

Appendix 4

Students in Universities[1] by Field of Study and Degree Level 1979/80 - 1991/92

					1991/1992				
	1979/80	1984/85	1989/90	1990/91	Total	Bachelor's Degree	Master's Degree	Ph.D.	Certificate[3]
Total[2]	54,480	61,155	67,770	71,190	78,640	53,950	18,860	4,680	1,150
Humanities & Jewish Stu.	16,720	18,094	18,776	19,610	22,122	15,313	4,676	1,134	999
Social Sciences	15,270	16,865	20,040	20,870	22,453	14,983	6,843	520	107
Law	2,060	2,599	2,291	2,150	2,706	2,470	196	40	-
Medicine & Para-Medical	3,080	4,223	5,126	5,480	5,749	3,532	1,984	215	18
Math. & Natural Sciences	7,430	9,727	10,494	11,290	13,328	8,544	2,648	2,110	26
Agriculture	1,480	1,199	1,272	1,420	1,336	740	394	202	-
Engineering and Architecture	7,990	8,448	9,771	10,370	10,946	8,468	2,119	459	-
Percentages - Total[2]	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Humanities & Jewish Stu.	30.7	27.4	27.7	27.5	28.1	28.4	24.8	24.2	86.9
Social Sciences	28.9	29.0	29.6	29.3	28.6	27.8	36.3	11.1	9.3
Law	3.8	3.5	3.4	3.0	3.4	4.6	1.0	0.9	
Medicine & Para Medical	5.6	7.5	7.6	7.7	7.3	6.5	10.5	4.6	1.6
Math & Natural Sciences	13.6	15.9	15.5	15.9	16.9	15.8	14.0	45.1	2.3
Agriculture	2.7	1.8	1.9	2.0	1.7	1.4	2.1	4.3	-
Engineering and Architecture	14.7	14.9	14.4	14.6	13.9	15.5	11.2	9.8	

1 Does not include the Open University. (See Appendix 6)
2 Does not include students in special non-degree courses.
3 Students who study for both a degree and a certificate are counted with the degree students.

Source: Central Bureau of Statistics

Appendix 5

Recipients of Degrees from Universities[1] - 1979/80 - 1990/91
By Institution and Degree Level

	79/80	84/85	1989/90	1990/91				
				Total	Bach. Deg.	Mast. Deg. (3)	Ph.D.	Cert. (2)
Total (2)	9,371	11,218	13,915	13,633	9,995	2,726	404	508
Hebrew Univ.	2,396	3,136	3,593	3,358	2,325	764	115	154
Technion-IIT	1,347	1,404	1,816	1,704	1,249	358	75	22
Tel-Aviv Univ.	2,452	3,272	4,035	3,906	2,759	932	93	122
Bar-Ilan Univ.	1,265	1,308	1,621	1,792	1,385	284	39	84
Univ. of Haifa	1,015	1,173	1,400	1,517	1,225	179	5	108
Ben-Gurion Univ.	775	812	1,308	1,233	1,052	142	21	18
Weizmann Inst.	121	113	142	123	-	67	56	-
Percentages (2)	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Hebrew Univ.	25.6	28.	25.8	24.6	23.3	28.0	28.5	30.3
Technion-IIT	14.4	12.5	13.1	12.5	12.5	13.1	18.6	4.3
Tel-Aviv Univ.	26.1	29.2	29.0	28.7	27.6	34.2	23.0	24.0
Bar-Ilan Univ.	13.5	11.7	11.6	13.1	13.9	10.4	9.6	16.5
Univ. of Haifa	10.8	10.4	10.1	11.1	12.2	6.6	1.2	21.3
Ben-Gurion Univ.	8.3	7.2	9.4	9.1	10.5	5.2	5.2	3.6
Weizmann Inst.	1.3	1.0	1.0	0.9	-	2.5	13.9	-

1 Does not include the Open University. (See Appendix 6)
2 Recipients of both a degree and a certificate are counted with recipients of degrees.
3 Recipients of the degree "Doctor of Medicine" are counted with recipients of master's degrees.

Source: Central Bureau of Statistics

ii By Field of Study and Degree Level

	79/80	84/85	1989/90	1990/91 Total	1990/91 Bach. Deg.	1990/91 Mast. Deg. (3)	1990/91 Ph.D.	1990/91 Cert. (2)
Total	9,371	11,218	13,915	13,633	9,995	2,726	404	508
Humanities & Jewish Studies	2,741	3,312	3,532	3,488	2,454	498	70	446
Social Sciences	2,808	2,879	4,110	4,156	3,173	923	30	30
Law	301	505	464	513	496	14	3	-
Medicine & Related Fields	459	822	1,208	1,190	764	401	25	-
Natural Sciences & Mathematics	1,342	1,816	2,256	2,068	1,342	517	205	4
Agriculture	231	399	306	280	185	74	21	-
Engineering & Architecture	1,489	1,485	2,039	1,938	1,581	299	50	8
Percentages	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Humanities & Jewish Studies	29.2	29.5	25.4	25.6	24.6	18.3	17.3	91.7
Social Sciences	30.0	25.7	29.5	30.5	31.8	33.9	7.4	5.9
Law	3.2	4.5	3.3	3.8	5.0	0.5	0.7	-
Medicine & Related Fields	4.9	7.3	8.7	8.7	7.6	14.7	6.2	-
Natural Sciences & Mathematics	14.3	16.2	16.2	15.2	13.4	18.9	50.8	0.8
Agriculture	2.5	3.6	2.2	2.0	1.8	2.7	5.2	-
Engineering & Architecture	15.9	13.2	14.7	14.2	15.8	11.0	12.4	1.6

1 Does not include the Open University. (See Appendix 6)
2 Recipients of both a degree and a certificate are counted with recipients of degrees.
3 Recipients of the degree "Doctor of Medicine" are counted with recipients of master's degrees.

Source: Central Bureau of Statistics

Appendix 6

The Open University
Registration in Academic Courses and Graduates
By Year and Field of Study - 1984/85 - 1991/92

	Registration in Academic Courses		
	Total	Humanities & Social Sciences	Natural Sciences & Mathematics
1984/85	12,034	8,166	3,868
1985/86	11,914	8,139	3,775
1986/87	13,506	7,969	5,535
1987/88	10,853	7,507	3,346
1988/89	11,872	8,560	3,312
1989/90	13,007	9,645	3,362
1990/91	15,761	12,334	3,427
1991/92	17,929	14,045	3,884

	Graduates		
	Total	Humanities & Social Sciences	Natural Sciences & Mathematics
1984/85	101	73	28
1985/86	132	102	30
1986/87	227	180	47
1987/88	194	168	26
1988/89	281	243	38
1989/90	304	270	34
1990/91	339	296	43
1991/92	-	-	-

Source: Central Bureau of Statistics

Appendix 7

Students in Non-University Institutions of Higher Education [1] - 1984/85 - 1991/92

	84/85	87/88	88/89	89/90	90/91	91/92
Total	1,848	1,945	1,915	1,876	1,904	2,049
Bezalel - Academy of Arts and Design, Jerusalem	633	628	654	640	644	663
Jerusalem Rubin Academy of Music and Dance	392	390	388	386	422	480
Jerusalem College of Technology	280	343	311	287	305	360
Shenkar - College of Textile Technology and Fashion	324	359	359	350	344	333
Ruppin Institute - Academic course	219	225	203	213	189	213

1 Does not include institutions of higher educaticn that are not funded by the PBC - such as teacher training colleges and the College of Management - Academic Course, Tel-Aviv

Source: Central Bureau of Statistics

Appendix 8

Recipients of Degrees From Non-University Institutions[1] of Higher Education - 1894/85 - 1991/92

	84/85	87/88	88/89	89/90	90/91	91/92
Total	318	334	372	345	366	379
Bezalel - Academy of Arts & Design, Jerusalem	104	105	135	99	127	117
Jerusalem Rubin Academy of Music and Dance	37	46	64	57	46	60
Jerusalem College of Technology	65	51	68	84	61	61
Shenkar - College of Textile Technology and Fashion	62	66	44	56	78	85
Ruppin Insitute - academic course	50	66	61	49	54	56

1 Does not include students in institutions that are not funded by the PBC (teacher training colleges and the College of Management - Academic Course, Tel Aviv).

Source: Central Bureau of Statistics

Appendix 9

Active University Staffs[1]
I Annual Averages 1984/85 - 1991/92, By Budgetary Source

		All Budgets				Total Employees Financed from Ordinary Budget	Total Employees Financed from Other Budgets
		Total Employees	Total Teaching & Research Staff	Total Technical Staff	Total Administrative Staff		
All Universities	1984/85	17,792	7,912	3,321	6,559	14,210	3,582
	1989/90	16,555	7,179	3,527	5,839	13,178	3,377
	1990/91	16,892	7,502	3,512	5,818	13,275	3,557
	1991/92	17,539	8,110	3,576	5,853	13,482	4,057
Hebrew University	1984/85	5,359	2,289	731	2,339	3,931	1,428
	1989/90	4,628	2,010	651	1,967	3,260	1,368
	1990/91	4,720	2,087	662	1,971	3,297	1,426
	1991/92	4,863	2,189	680	1,993	3,368	1,500
Technion [2]	1984/85	2,979	1,304	832	843	2,374	605
	1989/90	2,617	970	874	773	2,024	593
	1990/91	2,674	1,008	886	778	2,026	545
	1991/92	2,800	1,129	890	781	2,030	647
Tel Aviv University	1984/85	3,978	2,176	436	1,366	3,352	626
	1989/90	3,891	1,989	668	1,234	3,389	503
	1990/91	3,929	2,040	608	1,221	3,384	545
	1991/92	4,097	2,147	708	1,242	3,450	647
Bar-Ilan University	1984/85	1,418	689	104	625	1,275	143
	1989/90	1,439	729	146	565	1,296	144
	1990/91	1,526	796	141	589	1,318	208
	1991/92	1,556	815	159	582	1,354	202
University of Haifa	1984/85	829	419	36	354	769	60
	1989/90	898	501	46	351	791	107
	1990/91	922	516	44	362	791	131
	1991/92	1,012	596	47	369	858	154
Ben-Gurion University of the Negev	1984/85	1,508	626	326	556	1,162	246
	1989/90	1,490	650	324	516	1,189	301
	1990/91	1,504	692	315	497	1,265	239
	1991/92	1,663	855	315	493	1,245	418
Weizmann Institute of Science	1984/85	1,721	389	856	476	1,347	374
	1989/90	1,592	340	819	433	1,231	362
	1990/91	1,557	363	794	400	1,198	359
	1991/92	1,548	379	777	392	1,182	366

1 Only active staff employed on a monthly basis. (Excluding fellowships, pensioners, daily or contractual basis, etc.)

2 Includes the Technion Research and Development Authority.

Source: PBC Administration

Appendix 9

II FTE Employees in the Universities 1990/91 - 1991/92 By Type of Staff and Rank, From All Budgetary Sources

	1990/91	1991/92	Difference (Posts)	Difference (%)
Grand Total	16,832.2	17,539.1	706.9	4.2%
A. Teaching & Research Staff - Total	7,501.5	8,110.0	608.5	8.1%
1. Senior Academic Staff - Total	4,474.0	4,590.9	116.9	2.6%
Full Professor	1,181.6	1,219.1	37.5	3.2%
Associate Professor	1,126.9	1,161.1	34.2	3.0%
Senior Lecturer	1,300.1	1,350.3	50.2	3.9%
Lecturer	865.4	860.4	-5.0	-0.6%
2. Junior Academic Staff - Total	899.0	894.8	-4.2	-0.5%
Senior Instructor	105.6	94.9	-10.7	-10.1%
Instructor	375.2	340.1	-35.1	-9.4%
Assistant "B"	120.4	128.9	8.5	7.1%
Assistant "A"	297.8	330.9	33.1	11.1%
3. Research and Teaching Assistants	643.9	664.4	20.5	3.2%
4. Other Teaching and Research Staff	1,484.6	1,959.9	475.3	32.0%
Clinical Teachers	92.1	88.1	-4.0	-4.3%
Teachers	174.6	178.6	4.0	2.3%
External Teachers	946.8	1,050.4	103.6	10.9%
Others	271.1	642.8	371.7	137.1%
B. Technical Staff - Total	3,512.2	3,575.7	63.5	1.8%
1. Engineers	732.6	767.2	34.6	4.7%
2. Technicians	1,668.8	1,678.5	9.7	0.6%
3. Microbiologists & Laboratory Assistants	813.4	791.3	-22.1	-2.7%
4. Special Contract	235.3	281.5	46.2	19.6%
5. Others	62.1	57.2	-4.9	-7.9%
C. Administrative Staff - Total	5,818.5	5,853.4	34.9	0.6%
1. General Administation	3,928.8	3,928.3	0.5	0.0%
2. Humanities & Social Science Graduates	1,671.8	1,733.8	62.0	3.7%
3. Special Contract	109.0	103.1	-5.9	-5.4%
4. Other	35.8	30.6	-5.2	-14.5%
5. Apprentices	73.1	57.6	-15.5	-21.2%

Source: PBC Administration

Appendix 10

Staff in Non-University Institutions of Higher Education - 1984/85 - 1991/92
(Full-Time Positions)

		Total	Academic Staff	Administrative and Technical Staff
Bezalel, Academy of Arts & Design, Jerusalem	1984/85	150	72	78
	1985/86	147	71	76
	1986/87	148	76	72
	1987/88	136	66	70
	1988/89	145	73	72
	1989/90	148	76	72
	1990/91	141	68	73
	1991/92	143	70	73
Jerusalem Rubin Academy of Music and Dance	1984/85	84	67	17
	1985/86	84	67	17
	1986/87	85	68	17
	1987/88	84	65	19
	1988/89	86	65	21
	1989/90	90	69	21
	1990/91	91	70	21
	1991/92	97	73	24
Jerusalem College of Technology	1984/85	86	46	40
	1985/86	91	45	46
	1986/87	102	49	53
	1987/88	99	46	53
	1988/89	92	44	48
	1989/90	90	44	46
	1990/91	91	44	47
	1991/92	91	47	44
Shenkar - College of Textile Technology and Fashion	1984/85	93	41	52
	1985/86	90	41	49
	1986/87	90	43	47
	1987/88	74	36	38
	1988/89	74	37	37
	1989/90	75	39	36
	1990/91	84	40	44
	1991/92	84	42	42

Source: PBC Administration