

# Israel

*Revised version, April 2007.*

## Principles and general objectives of education

For many centuries, the Jewish tradition has placed an extremely strong emphasis on education and study as lifelong obligations—a tradition that continues to this day. The aim of the Israeli education system is to provide a high level of education for all members of society and to promote democratic values.

## Current educational priorities and concerns

The education system has gone through several stages of development since the founding of the State. The 1950s saw a period of mass immigration, during which the education system had to supply basic education to a quickly expanding population, despite the severe limitations of the educational infrastructure: a shortage of schools and classrooms, a shortage of qualified teachers, low educational level among parents and a severe economic crisis. The mass immigration brought a change in the makeup of the pupil population in primary education—the percentage of weaker pupils grew and it became necessary to reform the structure of the education system. The reform instituted pluralism within frameworks of learning and programmes of study while taking into account the needs of the weaker population. With the end of selection in secondary education and the adoption of an equal opportunity approach, each child was given the chance to fully develop his/her potential.

The end of the 1970s and the beginning of the 1980s saw a sharp increase in the secondary education attendance rate. Between the years 1980-90, the number of pupils enrolled in secondary education grew by 55%. From 1990, there was a new large wave of immigration to Israel. During 1990-97, approximately 800,000 immigrants arrived, increasing the population of Israel by more than 18%. The total number of pupils grew by 25% during these years, mostly as a result of this immigration.

Israel's Gross Domestic Product (GDP) per capita and other economic indicators place it among the developed countries in the world. Even though maintenance of national security remains a heavy burden (16% of the government expenditure is in the area of defence), the country has succeeded in absorbing large numbers of immigrants and establishing a modern economic infrastructure, in addition to providing a high level of education and public services. Israel is characterized by a high-quality labour force, while it lacks most basic raw materials. Therefore the country's industry has focused on producing manufactured products whose development requires scientific creativity and technological innovation. The accelerated economic growth, with the highest growth rates in the high-technology sectors, has led to wide recognition that education and training of qualified professional personnel is a major factor in the future development of the country. Israel's commitment to education as a key national priority is reflected by a 30%



increase in real terms in the regular budget of the Ministry of Education, Culture and Sport in 1996 compared with 1994.

Israel is home to a population from diverse ethnic, religious, cultural and social backgrounds. Approximately 81% of the population is Jewish (over half are Israeli-born, mainly first and second generation, while the rest come from some 80 countries around the world); 17% is Arab (mostly Muslim), and the remaining 2% is comprised of Druze, Circassian, and other small communities. Over the years, the education system has successfully absorbed hundreds of thousands of immigrant school children, university students and teachers from many different backgrounds while keeping pace with the requirements of a modern developing society. Beside Hebrew education, the system also includes Arab and Druze educational institutions. The structure of these institutions and the curriculum taught are analogous to those in the Jewish sector, with necessary changes to accommodate the different language and culture of these populations. All the structural and thematic changes introduced in Hebrew education have also been implemented in Arab and Druze schools. The Hebrew State school system consists of two trends: State and State-religious. The State-religious system is geared to a population that seeks greater emphasis on religion in the curriculum. The ratio of enrolment in the two trends is about 75% in the State system to 25% in the State-religious system. There are also recognized schools outside the State school system, most of which provide Orthodox Jewish religious education.

The number of pupils and students in Hebrew education has risen steadily—between 1989/90 and 1998/99 there has been a 26% increase. The number of pupils attending lower and upper secondary schools during this period rose by approximately 32%, and the number of students in post-secondary schools and universities by about 111%. There has been a significant increase in the number of pupils in Arab education, mainly in the secondary level: between 1980 and 1996, the number of pupils in the lower secondary level increased by 177%, and in the upper secondary level by 87%.

A number of key and innovative programmes have begun to operate on a wide scale throughout the education system in recent years. These programmes include: promoting children and youth from weaker populations; developing and accrediting colleges; promoting and improving education in the Arab and Druze sectors; absorbing immigrant pupils and teachers in the education system; implementing the Special Education Law; changing the matriculation exams (implementing the Ben-Peretz Commission report); promoting science and technology studies (implementing the Tomorrow 98 Programme); teaching civics (adopting the Kremnitzer Report); promoting education for democracy, tolerance and peace; promoting Jewish studies in Hebrew State schools (implementing the Shenhar Commission report); revising the language policy of the Ministry; promoting school-based in-service training on a voluntary basis; developing life skills and prevention programmes; implementing the programme *Derekh Eretz—Living in a World of Mutual Respect*; and restructuring school buildings.

## Laws and other basic regulations concerning education

The main education laws are the following:

The **Compulsory Education Law** (1949). According to this law, and to the changes introduced by the reform of the school system in 1968, compulsory education applies to all children between the ages of 5 (compulsory kindergarten) and 15 (grade 10) inclusive. This education is provided free of charge. In addition, the law provides for free education for adolescents aged 16-17, as well as for 18-year-olds who did not complete their schooling in Grade XI in accordance with the curriculum. The state is responsible for provision of free primary education under this law. Maintenance of official educational institutions, however, is the joint responsibility of the State and the local education authority. Parents have the right to choose one of the recognized educational trends for their children. Important additions to the original version of this law include a prohibition against discrimination on the grounds of ethnic origin, a prohibition against discrimination in acceptance, placement, and advancement of pupils as well as a prohibition against punishing pupils for actions or omissions on the part of their parents. According to recent amendments, the Law covers the age group 3–15 years, for a total of 13 years. The Law will be gradually implemented for ages 3 and 4 in communities where the Ministry will implement it.

The **State Education Law** (1953). This law provides for a six-day school week and determines the content and procedures of State education. State education is defined as education provided by the State on the basis of the curriculum approved by the Minister of Education, without attachment to a party, communal body or other non-government organization, and is under the supervision of the Minister of Education. According to the law, State education is to be based on the values of Israel's culture, the achievements of science, love of the homeland, loyalty to the State and people of Israel, remembrance of the Holocaust, practice in agricultural work and handicrafts, and on building a society on the foundations of freedom, equality, tolerance, mutual assistance and love of mankind. This law enables the Minister of Education to approve, at the request of 75% of the parents, an additional institutional curriculum comprising up to 25% of the existing curriculum, or an additional curriculum specifically requested by the parents.

The **Council For Higher Education Law (1958)**. This law defines the tasks of the Council for Higher Education, which is responsible for accrediting and authorizing institutions of higher education to award degrees.

The **School Inspection Law** (1968). This law regulates the conditions under which schools that are not part of the State education system may be opened, and contains provisions for their operation.

The **Special Education Law** (1988). According to this law, the purpose of special education is to advance and develop the abilities and potential of handicapped children, to correct and improve their physical, mental, psychological and behavioural performance, to convey knowledge, skills, and habits and to adapt them to behaviour acceptable to society with the purpose of becoming part of it and being integrated in the world of work. The law provides for special education for individuals between the



ages of 3 and 21 whose capacity for adaptive behaviour is limited and who are in need of such education, including physiotherapy, speech therapy, and occupational therapy, as well as treatment in additional areas.

The **Long School Day and Enrichment Studies Law** (1997). The purpose of this law is to add study and instructional hours to the existing hours in educational institutions. The law states that, in all educational institutions and in all sectors, from compulsory kindergarten to Grade XII pupils shall remain in school for forty-one hours per week. The long school day will be applied as follows: (a) four days a week: eight study hours at least; (b) one weekday, except Friday: five study hours at most; (c) Friday: four study hours at most. Gradual implementation of this law started in 1997/98, according to priorities set by the Ministry of Education.

The **Pupils' Rights Law** of 2000 establishes principles regarding student rights in compliance with the UN Charter for Children's Rights. According to this law, a child has a right to education, to participate in matriculation examinations, a right to confidentiality and to realize his or her rights.

## **Administration and management of the education system**

Education at all levels falls under the responsibility of the **Ministry of Education**. The licensing and accrediting authority for higher education is the **Council for Higher Education**, an independent statutory body whose chairman is, *ex-officio*, the Minister of Education.

The ministries other than that of education which have an educational role include:

The **Prime Minister's Office**, to which are attached the Central Bureau of Statistics (educational statistics are included in the Statistical Abstract of Israel and special periodic publications) and the Adviser on the Status of Women, which advances and formulates national policies concerning the status of women in Israel, including educational aspects.

The **Ministry of Labour and Social Affairs**, on which depend the Vocational Training and Manpower Development Department (dealing with vocational education, training, and retraining) and the Youth Development and Correction Services (which include educational facilities and programmes). A pedagogic department designs curricula adapted to specific populations.

The **Ministry of Industry, Trade and Labor** operates and supervises educational institutions for children up to the age of 3.

The **Ministry of Defense**, on which depend the Youth and Nahal Department (which sets up special co-operative programmes for immigrant youth); the Israel Defense Forces (through its Chief Education Officer), and the female soldiers serving as teachers in the IDF (a joint programme with the Ministry of Education, Culture and Sport). Female soldiers provide instruction and guidance for underprivileged youth, and work towards advancement of special populations.

The **Ministry of Religious Affairs**, on which depend the Yeshivot Division (which supports research and study through allocations to institutions and student grants) and Inter-religious Affairs (which supports Islamic and Christian institutions, including educational activities).

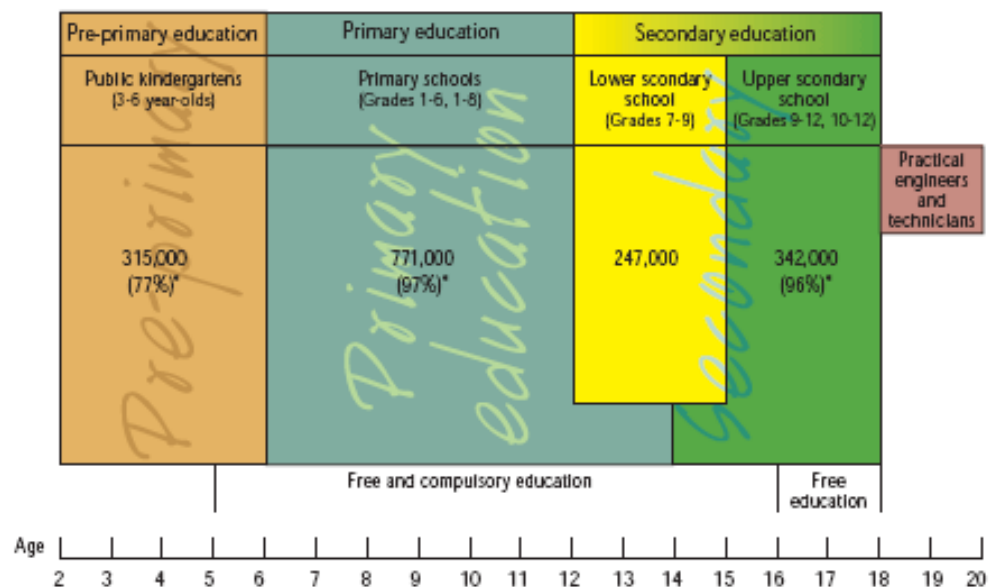
Mechanisms for coordination between these ministries and the Ministry of Education, Culture and Sport include the Forum of Directors-General, joint steering committees, written agreements concerning activities and budgeting, etc.

A variety of public and voluntary non-governmental organizations play an important role in the Israeli education system. The departments of education in local authorities are responsible for constructing (with government assistance where necessary) and maintaining public school buildings and equipment, for acquisition of teaching aids, and for organization of school districts in each locality. Other organizations include the Jewish Agency (Urban Renewal Project), community centres, teachers unions, women's organizations (kindergartens, day care centres, and boarding schools), the National Parents Committee, pupils councils and student unions, major organizations providing vocational and technological education (ORT, AMAL, AMIT), major organizations providing special education, the Association for the Advancement of Education, the Israel Broadcasting Authority, youth movements, Yad Vashem (Holocaust Memorial Institution), museums, Jeunesses Musicales, and many others.

## Structure and organization of the education system

### Israel: structure of the education system

#### STRUCTURE OF THE EDUCATION SYSTEM, 2002/03





## Pre-school education

Pre-primary education encompasses educational and teaching services for children, from birth to age 6. Kindergartens cater to children aged 2-5. Kindergarten is compulsory for 5-year-olds.

## Primary education

Primary education is the first stage of free and compulsory education. It is mainly provided by elementary schools (Grades I-VI, age group 6-12).

## Secondary education

Secondary education is mainly provided by high schools (Grades VII-XII). Attendance at junior high schools (Grades VII-IX) is compulsory for 12-15-year-olds. Upper schools include Grades X-XII for 15-18-year-olds. Education is compulsory up to Grade X.

Success in the matriculation examination at the end of secondary school is required in order to be eligible as a candidate for higher education. The higher education system comprises universities and non-university institutions offering bachelor's and advanced academic degree courses. It also includes general colleges providing a broad spectrum of degree programmes at the undergraduate level.

Information concerning the average length of the school year at the different levels is not available.

## The financing of education

Between 1996 and 1998, the budget of the Ministry of Education, Culture and Sport increased from 16.4 billion New Israeli shekels (NIS) to NIS19.6 billion (NIS10.6 billion in 1994). At fixed prices (1996 prices) the budget remained unchanged. The classification of the budget by subject shows that 92.4% is intended for formal education, 4.5% for informal education and 3.1% for administration and the headquarters units.

Approximately 52% of the national expenditure on education in 1994 was spent on primary (26%) and secondary education (26%). Another 9% was devoted to kindergartens. The share of postsecondary and higher education was 19% of the total national expenditure on education (13% for universities and 6% for post-secondary institutions and colleges).

The breakdown of the Ministry's budget for 1998 by type of expenditure shows that 90.5% of the budget is allocated for salaries, while only 9.5% is allocated for purchases and other expenses. An amount corresponding to 72% of the budget is allocated for teachers' salaries; this allocation finances over 2.6 million weekly hours of instruction in the education system, from kindergartens through post-secondary education in all sectors (State, State-religious, non-official recognized education, Arab and Druze education). Another 18.5% is allocated for other salaries and 9.5% of the



budget is allocated for the purchase of services and goods. Most of the expenditure in this segment is allocated for the purchase of services for formal education (financing school transportation, maintenance and service expenses in educational institutions).

The Ministry of Education, Culture and Sport also contributes to the budgets of other bodies: 20.8% of the Ministry's budget for 1998 is allocated for contributions to local authority budgets in the fields of formal and informal education (21.3% in 1996). The percentage of government expenditure on education rose from 6.4% in 1990 to 9.8% in 1996. In 1994, the national expenditure on education reached 9.2% of the Gross National Product (GNP) and increased to 10.1% of the GNP in 1998. Public expenditure on education (being part of the national expenditure) was estimated at 8.5% in 1998, compared to 8.3% in 1996 and 6.5% in 1990.

In 1998, the Ministry participated with over NIS 3.9 billion in various budgetary items of the local authorities (3.5 billion in 1996). This amount represented 20.8% of the Ministry's total budget in 1998 (21.3% in 1996). In particular, 21.3% of the formal education budget, 21.4% of the informal education budget and 5.1% of the administration and headquarters budget are allocated for the Ministry contribution to the local authorities' budgets.

Public (government and local authorities) expenditure on education as a portion of the total national expenditure on education fell from 84% in 1978-80 to 76% in 1984-89. From 1990, government and local authority expenditure on education as a percentage of the total expenditure on education rose, reaching 80% in 1996-98. The remainder of the national expenditure, approximately 20%, is financed by households, i.e. families (tuition fees for kindergartens and universities, private teachers, materials and various educational services), and by donations from abroad.

## The educational process

In recent years, the Ministry of Education, Culture and Sport has undertaken investigations into the organization of studies and the class schedule in pre-primary, primary and secondary education (lower and upper). The discussions concerned various aspects of the relationship between compulsory and elective elements in studies, the single discipline approach as opposed to the inter-disciplinary approach, the number of subjects studied in the course of a school year, the school's autonomy in the organization of studies, etc. The outlined programme is already operating in pre-primary education (kindergartens). At the secondary education level (lower and upper), directives concerning the organization of studies and the class schedule have been officially published; the implementation of this reorganization began in Grade X in the 2000 school year.

### Pre-primary education

Educational services at the pre-primary level are aimed at:

- Promoting cognitive skills, teaching tools for dealing with information, and exposure to knowledge in various fields based on a specific curriculum.



- Instilling life skills, social skills, social and national values, and encouraging personal relationships.
- Encouraging an independent personality, the capacity for treating others with respect and tolerance, and accepting similarities and differences.
- Encouraging linguistic and symbolic literacy, becoming acquainted with technology and means of communication, instilling sensitivity to esthetics and recognition of the arts and various means of artistic expression.
- Instilling skills that will turn children into life-long learners (LLL).

Educational activities have been implemented according to three framework programmes: (a) the programme for State and State-religious kindergartens (as of 1995); (b) the programme for special education and integration of children with special needs into regular education (as of 1997); (c) the programme for 2-year-olds (published in 1996). Activities are now implemented according to the basic curriculum of the pre-primary education system (in use since March 2000). This curriculum is based on the above-mentioned framework programmes.

The following subjects are included in the basic curriculum: (i) linguistic skills and general literacy (spoken and written language, symbolic language, the language of mathematics, artistic expression); (ii) learning skills (cognitive skills, inquiry and problem-solving at developmentally appropriate levels of complexity); (iii) social-emotional skills: self-awareness and assertiveness, cooperation and peer relationship, solving social conflicts, rules of discourse, recognizing and accepting differences between people (mutual respect, aid and tolerance), recognizing the importance and significance of laws and social rules, familiarity with different cultures, maintaining personal hygiene and health, protecting the environment, safety and security, cultural consumption and the media; (iv) physical-movement skills (daily experience with movement and the use of outdoor play equipment, physical training and ball games); and (v) educational contents for formulating a common cultural-social-civil foundation (the state, its institutions and symbols, Israeli heritage, cultural heritage and traditions as appropriate for each sector, folk literature and music). (Ministry of Education, 2001).

In 2001/02, some 371,000 children ranging in age from 2 to 6 years attended municipal, public, and private kindergartens and day care institutions. Of these, 307,000 children attended public kindergartens. In 2002/03, the number of children attending public kindergartens totaled 315,000. (Ministry of Education, Culture and Sport, 2004).

Professional training of kindergarten teachers is carried out at Teacher Training Colleges as a four-year programme leading to a B.Ed. degree. The fourth year is internship. The Ministry of Education operates in-service training in pedagogical centers (PISGAH Centers) for kindergarten teachers. Aides are hired without professional training. The Ministry, together with the local government centre operates a certification course of 270 study hours for them, spread over two years.





Day care centers and pre-nursery play groups are under the supervision of the Ministry of Industry, Trade and Labor and operate under the Day Care Center Inspection Law, 1965. They are intended primarily for children under the age of 3, but they are also attended by children under the age of 5. Within the Day Care Center System approximately 2,000 centers and approximately 2,000 pre-nursery play groups operate, distributed nationally in all population sectors. The demand for this service is continually increasing. The increase in the number of children fluctuates between 3-4% annually. There are approximately 80,000 children in the system.

## Primary education

Primary education is being reorganized. The main feature of the change is a balance between single-discipline teaching of subjects according to a predetermined schedule of hours, and interdisciplinary teaching, in which the schedule of hours is organized around focal points on the basis of a time dimension and a content dimension. Thus, 'focus learning' enables educators and pupils to group, unite and concentrate different subjects around major, integrating focal points.

The Ministry of Education is also encouraging school autonomy, in order to improve the quality of education provided by the school. The basic assumption is that the school staff is capable of developing and formalizing an educational approach, and can then formulate a school-based curriculum by adapting teaching and learning methods to local conditions. The pupils themselves should be allowed a great deal of initiative and involvement in planning their studies, while maintaining dialogue with their peers, teachers, parents and experts.

The school schedule is largely based on allocating units of flexible time, where different pupils will be occupied with different subjects or fields. The school is free to structure these units in accordance with the various characteristics of pupils. The only constraint on the school's autonomy in organizing class schedule is that for each pupil, the time during six school years is allocated on the basis of disciplines, where each one has a relative proportion. This proportion can be expressed by teaching each discipline separately and/or by interdisciplinary teaching, which combines the methods of different approaches. Nevertheless, the school must ensure that over the course of the six years of study, 75% of the hours are allocated to teaching the basic curriculum using various approaches to knowledge, while the remaining 25% of the hours may be utilized freely as the school sees fit. Discipline-based teaching is a resource for the development of abilities and skills, and serves as a basis for designing multi-disciplinary and interdisciplinary subject areas. Fields of knowledge are organized into clusters, which are aimed at highlighting shared operational characteristics in related fields of knowledge (such as the Jewish studies cluster, the cluster of Arab culture and heritage, the arts cluster, the science and technology cluster) and focus teaching on these. Furthermore, organization in clusters enables educators to make teaching and learning more efficient- by reducing the number of fields the pupil has to cope with in a particular unit of time.

As far as state schools in the Jewish sector are concerned, the study schedule and the proportion for each discipline is the following: 20% to languages; 15% to the logical-symbolic field (mathematics); 10% to the pupil's cultural heritage; 10% to the social-humanistic field; 10% to the science-technology; 10% to the artistic field; 5%



to the kinaesthetic-physical education field. In addition, 20% of study hours are left for free use by the school for the purpose of reinforcing subjects related to one or more disciplines of the above fields. The Arab sector follow the same study schedule, while in the Druze sector there are minor variations, in particular concerning the proportion allocated to languages (30%). With regard to the study schedule for State-religious schools in the Jewish sector, the proportion for each cluster is the following: 40% to Judaic studies (Torah, Prophets, Talmud, Traditional Law, Biblical studies, Jewish thought, Rabbinic teachings, study and prayer); 30% to languages (Hebrew language, foreign language, mathematics); 10% to social studies (local and social studies, history and civics); 10% to skills (sport, art, music); and 10% to sciences (nature, computers).

In addition to school-based assessment programmes, i.e. exams administered within and by schools, the National Assessment Test (NAT) has been introduced in primary and lower secondary schools in order to provide information on the extent to which educational goals set by the Ministry are being attained. The test is given only to a representative sample of the pupil population. The exam is administered at different grade levels in accordance with the need for feedback expressed by the national co-ordinators for each subject. A major change introduced in the NAT is the attempt at performance assessment. Open-ended questions and items that require higher-order thinking are used in a greater proportion than ever before.

At the primary level (including Grades VII and VIII), 95% of the entire age group attended school in 1997/98, i.e. 694,000 pupils. In 2002/03, there were 770,900 pupils enrolled in primary education (including special education) and the number of teachers (full-time equivalent) was 45,920. The average number of pupils per class (including special education) was 25.5.

## Secondary education

The main features of the new structure of secondary education (implemented starting from Grade X during the 2000 school year) are the following:

- *A comprehensive concept of secondary school*, which presents an educational continuum from Grade VII to Grade XII and enables schools to employ flexible solutions over time.
- *Increased school autonomy*, by significantly expanding the freedom of choice offered to schools and students regarding the subjects taught and learning methods.
- *Increased independent work*, by developing independent learning skills, motivation for learning and intellectual curiosity among students, while giving them an opportunity for more extensive study in their own fields of interest.
- *Clusters and interdisciplinary subjects*, by encouraging secondary schools to reorganize their studies and schedules.

- *Alternative means of evaluation*, in different fields such as critical thinking, creativity, originality, ethical consideration and taking a stand with reference to others and the society.
- *Teamwork by the school teaching staff*, within frameworks that combine different fields of knowledge and when applying alternative methods of evaluation.

The organization of studies and schedule of hours in lower secondary education is as follows:

**Lower secondary school, Hebrew education: overall weekly hours in Grades VII–IX (curricular guidelines)**

Field	Overall weekly hours in Grades VII–IX	
	State education	State-religious education
Hebrew literature, language and expression	12	11
English language	11	11
Arabic/French language	9	9
Mathematics	14	14
Natural sciences and technology	18	15
Bible and Jewish studies	14	24–26
History, geography, humanities and social studies	16	12
Arts	4	3
Social education and civics	7	7
Physical education	6	3–5
<b>Total weekly hours in Grades VII–IX</b>	<b>111</b>	<b>111</b>
<i>Yeshiva</i> and <i>ulpana</i> track (intensive religious schools for girls): advanced oral law as part of elective programmes		12

*Source:* Ministry of Education, 2001.

The organization of studies and schedule of hours in upper secondary school is as follows:

**Upper secondary education (Hebrew education): overall weekly hours in Grades X–XII (curricular guidelines)**

Field	Overall weekly hours in Grades X–XII			
	State education		State-religious education	
	General	Technol.	General	Technol.
Hebrew literature, language and expression	12		11	
English language	9–11		9–11	
Arabic language	3		3	
Mathematics	9		9	
Natural sciences and technology	8		8	
Bible and Jewish studies	9		20–26	
History, geography, humanities and social studies	8		8	
Elective subject	6		6	
Social education and civics	7		7	
Essay-writing workshop	2		2	
Physical education	6		6	
Basket of hours for intensive and expanded study	26–28	32–34	16–24	24–32
<b>Total weekly hours in Grades X–XII</b>	<b>107</b>	<b>113</b>	<b>113</b>	<b>121</b>

Source: *Ibid.*

French may be substituted for English as the first foreign language or for Arabic as a second foreign language. Pupils from abroad may substitute their mother tongue as the second foreign language. In rural schools, the study of life and agricultural science is compulsory. In the technological track, the hours allotted for the essay-writing workshop may be used for the study of technological subjects. The total number of hours appearing in the table above is the maximum allocation of standard hours for the subjects listed.

In the technological track, the hours allocated to the essay-writing workshop may be used for study of the technological subjects. The total number of hours appearing in the table above is the maximum allocation of standard hours for the subjects listed.

Study hours have recently been added to the school day in order to improve the level of learning achievement in the education system (especially in scientific and technological studies), to enrich cultural and social activities (art, communication, physical education, and social education) and to broaden Jewish studies. Extension of the school day is being carried out in stages. An experimental stage was implemented in 1990, with the participation of a limited number of localities and neighbourhoods.

In recent years special programmes have been implemented, among which the promotion of education in the Arab and Druze sectors. The objective of this plan,

which has been updated over the years, is to bring the educational institutions in these sectors to a position where they can operate properly, by bringing them up to educational and budgetary standards equal to those of the Jewish education sector. Programmes were prepared which reflected the various activities of the education system: the construction of classrooms; adding classroom hours; teacher training and in-service teacher training; pedagogic assistance for teachers, teacher-trainers and pedagogic centres; developing curricula and textbooks, and producing programmes for educational television; promoting science and technology education; nurturing gifted pupils; expanding the truant officers scheme and the psychological counselling and guidance services; expanding activities to prevent dropping out of school; significant expansion of special education; expanding informal education; and increasing budgets for culture and sports.

The *Derekh Eretz* Programme aims to encourage norms of positive behaviour, with the goal of creating an attitude of mutual respect in schools and in society as a whole. The programme is accompanied by an information campaign in the media to encourage public awareness. Schools are a significant arena of social interaction, and thus they must create an atmosphere that fosters fair play and promotes mutual respect. Teachers are trained to establish a framework of clear rules and procedures, based on proper relations among pupils, with themselves serving as role models for exemplary personal behaviour. The approach is a comprehensive one, comprising all the school's cultural components, in integration with, and with support from, the framework of general society. Schools are developing distinctive programmes for improving modes of behaviour, in accordance with their needs. The programme's planning and implementation embraces teachers, parents, local officials, inspectors, children and the community in order to create involvement, commitment to action and positive change. The programme, which was implemented in all schools in 1996, is carried out by civics teachers with the help of all the elements in the school and the community. An instructional booklet for teachers has been published on the subject.

The language policy of the Ministry aims at encouraging language study (mother tongue and foreign languages). It involves: increasing the number of compulsory years of study of Arabic (or, in some cases, French) for Hebrew speakers to Grade X; encouraging the study of the Russian language and other immigrant languages also among native Hebrew speakers; and encouraging schools to specialize in language studies. The programme began in 1997.

The teaching of civics and education for democracy, tolerance and peace has been developed. The objective is to introduce a comprehensive reform in the teaching of civics in schools and create a uniform civics curriculum for all sectors—state schools, state-religious schools, Hebrew education and Arab education. Teaching civics includes theoretical studies as well as inculcation of civic values, the most important of which are the commitment to a democratic way of life, and learning skills and abilities necessary for active citizenship. In addition to civics being studied as a subject in the classroom, civics education will be incorporated into every aspect of the curriculum and school life. The amount of time allotted to civics education and study in the schools in all sectors of the education system will be increased significantly. Obligatory study of civics will be expanded to all schools, in addition to lessons by the classroom teacher, part of which must be devoted to topics related to civics.



In 2002/03 there were 247,400 students in lower secondary and 342,100 students in upper secondary education, and the total number of teaching staff (full-time equivalent) was 18,110 and 31,700, respectively. The average number of students per class was 31.0 at the lower secondary level and 26.2 students at the upper secondary level. In the same year, about 72% of students in Grades VII-IX were enrolled in lower secondary schools. In 1999, the annual drop-out rate in upper secondary education (Grades IX-XII) was 4.8% in Hebrew education (4.6% in 2002) and 11.8% in Arab education (9.1% in 2002). The annual drop-out rate refers to students who have left school between Grade IX and the end of Grade XII in the schools under the supervision of the Ministry of Education, whether the students were transferred to schools that are not under the Ministry's supervision or whether they discontinued their education.

Success in the matriculation examinations at the end of secondary school is required in order to be eligible as a candidate for higher education. The format of the matriculation examinations has changed in recent years. The task of evaluating the matriculation achievements concerning six out of the nine exams has also been transferred to the schools.

### Assessing learning achievement nationwide

The Ministry of Education is involved in three types of assessment at the national level: (a) matriculation (*Bagrut*) examinations at the end of secondary school; (b) National Assessment Test (at the primary and lower secondary levels); (c) school-based assessments (using national test-item banks). The Ministry is currently reforming its assessment policies and procedures. This reform is taking place at various levels of assessment and is based on current worldwide trends. It involves moving from centralized regulation to a more autonomous form of assessment. It also involves: moving towards exams that are a more integral part of learning and teaching; moving from assessing basic skills to higher-order skills such as reasoning and exploratory thought; moving from pencil-and-paper assessment towards a wide range of assessment techniques; reducing the proportion of test items that assess limited and restricted knowledge while enlarging the proportion of items stressing contextual understanding; and using criteria rather than norm tests for the matriculation examinations. Based on these trends, the matriculation exam format has changed, a national assessment test has been introduced, and performance assessment is being promoted and supported within the smaller unit of the school.

In the past, the matriculation examinations included Hebrew (or Arabic for Arab pupils), a second language (usually English), Bible studies (for Jewish pupils), mathematics, history, and civics as obligatory examination subjects. In addition, pupils had to choose from a large pool of electives in science and the arts. Success in these exams is required in order to be eligible as a candidate for higher education. Today, the matriculation exams are undergoing a reform which is intended to reduce the number of governmentally-conducted exams in favour of school-based assessments. Three subjects are chosen randomly every year from among the pool of compulsory national exams (with certain restrictions), and made voluntary. The remaining exams are compulsory. In the subjects deemed voluntary, pupils can choose whether to take the state exam or to receive the grade in that subject based on the school's assessment. If the pupil passes all the above exams, he/she is entitled to a



matriculation certificate. This is the most important certificate awarded in the school system. It makes continuation of studies possible, and is also important in the search for employment and in other fields. Another certificate awarded is the secondary school graduation certificate.

The National Assessment Test (NAT) has been introduced in primary and lower secondary schools in order to provide information on the extent to which educational goals set by the Ministry are being attained. The test is given only to a representative sample of the pupil population. Neither pupil nor school name is disclosed, in order to avoid their becoming a focus of interest, and to reduce test anxiety experienced by pupils, teachers, schools, and parents. The stated purpose of the NAT is to provide information on a national scale regarding the extent to which the mandatory curriculum is being taught and how well the pupils have understood, retained, and absorbed it; to provide such information to the Ministry's executives, to the Knesset Education Committee, to school districts, the schools themselves, and to the general public; and to focus public attention on the national curriculum. The NAT is scheduled to be administered in a four-year cycle. Each year different subjects from the curriculum are chosen. The subjects covered in the process of implementation are Hebrew, mathematics, English, social sciences, and Biblical studies. The exam is administered at different grade levels in accordance with the need for feedback expressed by the national coordinators for each subject. For example, mathematics and Hebrew language are assessed at the end of the fourth and eighth grades, while the sciences exam is administered at the beginning of the seventh grade (which is also the beginning of lower secondary school). A major change introduced in the NAT is the attempt at performance assessment. Open-ended questions and items that require higher-order thinking are used in a greater proportion than ever before.

National Assessment Tests were conducted in June 1996, and a synopsis of the summary reports was published in 1998. The summary reports refer to Grades IV and VIII in the subjects of mother language (Hebrew and Arabic) and mathematics. These NAT findings have already provided valuable information for the purpose of planning necessary changes in the curriculum and in teaching methods for these subjects.

The school-based assessment programme deals with exams administered within and by schools. Schools are encouraged to use exams constructively in order to facilitate change within classroom instruction. Experience shows that changing the method of assessment leads to changes in teaching and learning. The programme is based on the use of test item banks. The banks have been developed and are maintained by teams of experts in assessment and in the specific subject matter. The actual use, in the classroom, of items from the banks is at the teacher's discretion. The test item banks consist of performance assessment items, similar in style to the assignments teachers set in class. The standard testing methods used in the past, such as multiple-choice testing, have led to many undesirable effects, such as impoverished thinking and the alienation of teachers from the assessment process. The new performance assignments attempt to introduce an alternative method of assessment which is better adapted to teaching goals, being more flexible, wide-ranging and relevant. These assignments were created with the intention of stimulating the mind, to urge pupils to confront complex tasks, to cultivate open expression of views, and to encourage integration of different pieces of information. In short, they promote the use of higher mental functions. So far, test item banks have been developed for the



primary schools in Hebrew, mathematics, science, Jewish studies and social studies. Each test item is accompanied by information concerning content (what the item tests) and certain psychometric values, such as empirically-based item difficulty. The programme was implemented with guidance on an experimental basis in 1996 in about 100 schools.

## Higher education

The higher education system is comprised of universities and non-university institutions of higher education which provide instruction in specific fields, such as business administration, technology, arts and crafts, and teacher training, at the bachelor's degree level only. It also includes regional colleges which offer academic courses under the auspices and academic responsibility of the universities. A recent feature of the higher education system in Israel is the establishment of general colleges providing a broad spectrum of degree programmes at the undergraduate level. These colleges are being established to meet the increasing demand for higher education that is expected to continue into the first decade of the twenty-first century. There were about 76,000 students in colleges and universities in 1989/90 (8,300 in colleges and 67,700 in universities), and the number increased to about 150,000 in 1997/98 (41,100 in colleges and 108,900 in universities). There were about 120,900 students enrolled in universities in 2002/03.

By law the institutions of higher education are autonomous in the conduct of their academic and administrative affairs within the framework of their approved budgets and their terms of accreditation. The licensing and accrediting authority for higher education is the Council for Higher Education, an independent statutory body whose chairman is, *ex-officio*, the Minister of Education. In addition to the chairman, the council is composed of nineteen to twenty-four members personally appointed by the President of the State of Israel on the recommendation of the government. At least two-thirds of the members must be academics of standing. The Council has the sole power to accredit institutions of higher education and to authorize them to award academic degrees. The Council is empowered by law to advise the government on the development and financing of higher education and scientific research. To this end, it has established a permanent subcommittee, the Planning and Budgeting Committee (PBC), which is based on the model of the former University Grants Committee in United Kingdom.

The main functions of the PBC are: to submit to the government the ordinary and development budgets for higher education, taking into account the needs of society and the State, while safeguarding the academic freedom and viability of the institutions of higher education; to have exclusive authority to allocate to the institutions of higher education the approved ordinary and development global budgets provided by the government; to propose to the government and the Council for Higher Education plans for the development of higher education, including its financing; to express its opinion on all matters concerning higher education; to encourage efficiency in the institutions of higher education and to co-ordinate between them; and to ensure that the budgets of the institutions are balanced. Through its global and earmarked funding programmes, the PBC funds about 60% of the total ordinary budgets of the institutions of higher education that it supports. Tuition and student fees cover about 20% and the remainder is derived from contributions and





other sources. The PBC funds all institutions of higher education, except for teacher training colleges, which are funded and supervised by the Ministry of Education, and the academic programmes of certain colleges, which are financed entirely from non-public funds.

The Council for Higher Education Law (1958) includes basic provisions for the recognition of academic studies, diplomas, and degrees in the Israeli higher education system. Each institution of higher education has its own procedures for accreditation of studies and recognition of diplomas and degrees of foreign students. In addition, a committee of the Ministry of Education, Culture and Sport is responsible for the evaluation and recognition of diplomas and degrees from abroad for purposes of employment in the public sector.

The performance of the higher education system is evaluated on different levels. It is evaluated by the Council for Higher Education, in particular through its Planning and Budgeting Committee (PBC). The PBC Annual Report provides relevant information and evaluation on planning, budgets, performance and development of higher education. The various institutions of higher education are evaluated internally through periodic and special reports, which are regularly submitted to the governing and advisory boards and committees of each institution. The evaluation of the teaching staff and courses by the students has also become common practice.

In order to meet the growing demand for higher education graduates, the higher education system has rapidly expanded in recent years, in particular through the establishment of new colleges which offer a great variety of study programmes. The objectives for developing the accreditation process of regional, technological, and teacher training colleges are to take up the bulk of the increase in applicants and to guarantee the quality of the academic degree received at these colleges. Bachelor's degrees awarded by the colleges shall be equivalent to a Bachelor's degree awarded by the universities.

Various mechanisms also exist to better match the demand for specialized education and training with the needs of the employment market, such as funding, licensing and accrediting procedures applied by the Council for Higher Education and its Planning and Budgeting Committee, academic achievement and professional qualification demanded by individual institutions, license-granting authorities and professional associations, special incentives (such as grants and scholarships for students of science and engineering), in-service training and retraining activities, assistance granted for new immigrants and Israelis who return to the country after living abroad, etc.

Unemployment among higher education graduates is relatively low in comparison to segments of the population with less education, and in comparison with the situation in many other countries. In 1994, 10.5% of the population had post-secondary education, but only 4.6% of job seekers had this educational level. While university graduates are 18.5% of the population, they constituted only 1.2% of job seekers.



## Special education

Special education frameworks are designed to help those children that cannot integrate into the regular education system. These include children with mental disabilities, children who are emotionally disturbed, disabled children, and children with severe learning disabilities.

In essence, children whose disabilities are relatively mild are also referred to special education frameworks. These children can learn in the regular education system under certain conditions: if they are treated with tolerance, if others are aware of their particular type of problem, and if the school system can develop special programmes for them within the regular classroom framework. Today, many examples of the successful application of these principles already exist. At the same time, there is awareness of the fact that many pupils do not receive appropriate treatment because the school lacks the knowledge and the ability to develop special programmes for them.

In order to help schools implement programmes for pupils with special needs and to integrate those pupils as fully as possible into the regular school framework, a programme was introduced in primary and lower secondary schools. In 1995 the programme operated in 180 schools, and in 1996 the number of schools reached 280. The objectives of the programme are: to reinforce teachers' efforts as they cope with various exceptional problems in their classrooms, and to provide them with the tools to deal with these children on a professional basis; to inculcate in pupils an attitude of tolerance towards the different and the exceptional in general, and towards fellow pupils with difficulties in particular; and to reduce the number of pupils being referred to a special education framework in cases where, with proper treatment, they can be integrated into regular education. In order to implement this programme, educators are trained to work with special needs pupils within the regular classroom.

In 1995, 180 teachers were trained through an intensive fifty-six-hour programme. In 1996, approximately 280 teachers were participating in this in-service programme, as well as via the Ofek satellite communications system for distance learning. The programme includes a network of regional and national guidance. Each teacher was also given didactic diagnostic tools. Each educator received a kit entitled *This child is mine*. This kit includes updated training, diagnostic, and didactic materials. In addition, educational television has produced training videos, where the main focus is the various stages of educational encounters between a teacher and pupils who have reading and writing difficulties. These cassettes are sent to every teacher involved in the programme. In addition, differential curricula are being adapted to meet the needs of these pupils.

An important objective of the Ministry of Education has been to complete the implementation of the Special Education Law (1988). To accomplish this, the Ministry has prepared a master plan for its implementation, defined a new policy for placing pupils in special education frameworks, increased allocated resources for special education, accelerated the development of special education facilities, and emphasized the integration of pupils with special needs into regular classrooms.



The percentage of pupils in special education compared with the total number of pupils has steadily decreased from 3.5% in 1989/90 to 2.3% in 2002/03. There were about 31,060 pupils enrolled in special education schools and in special classes located in regular schools in 1995/96.

## **Private education**

The School Inspection Law (1968) regulates the conditions under which schools that are not part of the state education system may be opened, and contains provisions for their operation. Most of the schools operating outside the state school system provide Orthodox Jewish religious education.

Most of primary and lower secondary schools are state-owned. About 90% of the students study in state schools. The other schools (upper secondary schools, Jewish orthodox or church schools) are also either fully or partly supported by the state. In this sense, there are almost no private schools in Israel.

## **Means of instruction, equipment and infrastructure**

Innovation processes are taking place in Israel in the planning of new schools, as well as in the adaptation of existing schools to the physical changes required by new curricula and hours of instruction. The trend of restructuring schools is known and recognized as a policy of encouraging schools' growth by means of internal initiatives along the lines of the school-based management approach.

In recent years, the Ministry of Education has allocated special budgets for renovating school buildings and adapting the physical structures to new teaching methods. The objectives are: to integrate changes in pedagogy and teaching methods with reorganization and renewal of the physical structure; to apply a comprehensive approach to school organization while taking into consideration the location of new and existing functions, in accordance with the school's pedagogic programme; to grant priority to central functions (library, resource centre, teachers area for assemblies) in the framework of reorganization; to encourage the school to develop new initiatives in its organization; to expand the authority of the school (principal, teachers, pupils) in setting its own educational patterns and modes of instruction; and to involve the school, the local authority, academic institutions and school inspectors in the decision-making process regarding building renewal.

The Ministry's development budget for 1998 amounted to NIS947 million. A total of NIS733 million was allocated for the construction of 1,475 new classrooms in 1998 (of which 357 for the Arab, Bedouin and Druze sectors). Other allocations include renovation of buildings (NIS112 million), construction of sports gymnasias (NIS8 million), equipment of new classrooms (NIS22 million), and comprehensive infrastructure (NIS20 million).



## Adult and non-formal education

The Ministry of Education provides a wide range of informal educational programmes and services for youth and society. Major fields of activity include:

- *Social education*, which covers values education, education for democracy and tolerance, promoting moral judgement, preparation for life in a normative society, preparation for active citizenship, preparation for military service, Jewish and Zionist education, Israeli education, cultural heritage, teaching the heritage of the Holocaust, services and programmes of informal education for Arab youth. In 1996, such activities were held in all classes in Grades VII-XII.
- *Field study, national service, social education, and knowledge of the country*, which covers nature studies and familiarization with sites of Israel, trips, task-oriented field days, history of the communities in Israel and of the Zionist settlement, knowledge of field and camping skills. This activity was undertaken in 671 secondary schools during 1996.
- *Youth and community*. In 1996, 16,400 young activists and guides in youth and community centres were trained and involved in these activities; eighty-two secondary schools operated as community schools; Pupil and Youth Councils existed in ninety-five localities in conjunction with seven regional councils and a national council; a personal commitment programme, encouraging pupils to assist others within the community, included 65,000 youngsters in 100 localities.
- *Advancement of youth at risk*, which integrates youth into study frameworks and vocational training, aims to prevent delinquency, substance abuse and alcoholism. This activity encourages familiarity with Israeli society and culture, prepares the youth for responsible citizenship, nurtures individual potential and cultivates proper and normative patterns of behaviour. In 1996 approximately 6,000 alienated youths were treated, as well as about 2,500 immigrant youths at risk.
- *Youth movements and youth leadership training*, which supports youth movements in their educational activities, provides assistance in youth leaders education and in-service training, support of field trips, hikes and summer camps, incentives for local activities in development towns, guidance and supervision.
- *Heritage of Oriental and Sephardi Jewry*, which encourages and develops activities linked to the heritage of Oriental and Sephardi Jews. The purpose is to integrate this rich heritage within the educational system as a whole and to further its recognition and appreciation by encouraging research, publications, creativity, in-service training and study activities, conferences and meetings, and assistance to academic institutions and specialized institutes.

The promotion of children and youth from weaker populations is one of the intervention programmes implemented in recent years. It assists and nurtures two

groups in particular, namely pupils with a chance (i.e. pupils completing twelve years of study without a matriculation certificate, including those who lack some of their exams but who have a chance of completing the matriculation certificate), and pupils at risk (i.e. pupils in the process of dropping out, dropouts, and new immigrant youth at risk). Most of these activities are implemented in both the Hebrew and the Arab education sectors. The 'Pupils with a Chance' programme is intended to locate pupils with a chance of completing matriculation certificates and increase the proportion of matriculation certificate holders. Various programmes are aimed at increasing the proportion of matriculation certificate holders.

Activities for children and youth at risk include: operating drop-out prevention programmes in schools (for example, Increasing the Power of Persistence in the Secondary Schools, an experimental programme of preventive intervention and assistance implemented in twenty schools in 1996, and the Mena Programme, operating in ninety schools); truant officers working with drop-outs (in 1996, these programmes reached approximately 11,000 drop-outs); reintegrating drop-outs in the schools; operating after-school Children's Home programmes providing a second home for children and youth, who attend from the end of the school day until the evening (in 1996, approximately 500 of these programmes were in operation, serving about 8,000 children); and day-care centres under the responsibility of the school principal in co-operation with the truant officer. Their goal is to provide assistance for school children within the school framework, after school hours (up to four hours after the end of class).

Adult education also plays an important role in the educational process, based on the concept of lifelong education. Adult education not only reflects all the challenges of the education system, but of Israeli society as a whole. Activities in this area are targeted to all population sectors. In Israel, however, adult education has a special dimension due to the fact that it is a country absorbing immigrants from all parts of the world.

These activities are carried out by the Ministry of Education as well as a wide range of non-governmental organizations and institutions. The objectives of the Ministry in the area of adult education are: to inculcate the Hebrew language and its culture in new immigrants; to reduce educational gaps among the adult population; to expand the knowledge and horizons of the adult learner, and to provide him or her with opportunities to enrich the areas of his or her interest, *inter alia*, through the development of hobbies and creative talents; and to provide tools for developing skills that will improve adults functioning in their various roles within the family and community.

During the years of large-scale immigration (1991 and 1992) more than 100,000 adults were enrolled in preliminary Hebrew language (*ulpan*) programmes. In later years there was a reduction in this number (63,000 in 1996/97). In 1997/98, the number of students enrolled in pre-academic preparatory programmes was close to 11,000 (12,900 in 2001/02). There were about 9,500 students enrolled in primary education programmes and 11,000 students enrolled in secondary education programme. The number of students in the popular universities exceeded 33,000 (54,300 in 2002/03).



Indications of the results of these activities can be seen in the growing rate of persons with higher education (13 years of study or more). These trends are present in both the Jewish population and the non-Jewish population. The number of persons with higher education among the Jewish population grew between 1980 and 1997 by more than 80% (from 20.8% to 38.2%); among the non-Jewish population, the number of persons with higher education more than doubled (from 7.7% to 18%). The number of persons with little or no formal education (up to four years of schooling) decreased among the non-Jewish population from 28.9% in 1980 to 12.5% in 1994. Among the Jewish population, the numbers fell from 10.3% to 4.3%. Along with an increase in the percentage of persons with higher education, there has been a reduction in all population groups of the percentage of those with little formal education.

The community centre (centre for culture, youth, and sports) seeks to promote social processes in developing communities and weaker populations. The community centres' essential goal is to improve the quality of life in the community. Main areas of activity of the 170 community centres include the social absorption of immigrants, community communications (cable television, local radio, local newspapers and computer-based communication), study centres, art and culture, healthy lifestyle and sports, national heritage, education for science and technology, active recreation for the disabled and international cooperation with institutions around the world connected with community education. The Israel Association of Community Centres Ltd. (IACC) provides the organizational framework on the national level. The IACC board of directors includes public representatives, representatives of governmental and municipal authorities, and of institutions such as JDC-Israel and the Jewish Agency. The Ministry of Education, Culture and Sport contributes the major share of the IACC budget.

## Teaching staff

Based on a decision by the Ministry of Education, a format of four years of consecutive study has been introduced in all training programmes at teacher training colleges. This four-year course of study was implemented in 1996 in training programmes for lower and upper secondary school teachers.

In addition, it was decided to add a year of professional specialization as part of the compulsory training programme. This specialization, in the form of a half-time position, will be conducted during the fourth year of studies. In 1996 this was launched on an experimental basis in three academic colleges and is currently being expanded to seven academic colleges. There were fifteen recognized or licensed academic colleges in 1996. The number of students enrolled in teacher training institutions (academic and non-academic, Hebrew and Arab education) totaled 31,000 in 1999/2000 (over 34,900 in 2002/03). About two-thirds of these students were enrolled in courses leading to a bachelor's degree.

Teacher training is organized around three main frameworks:

- Teacher seminars that offer three-year courses and grant teaching certification.



- Teacher colleges that offer four-year courses and grant a first academic degree (B.Ed.) which includes teaching certification. Studies in a particular discipline and pedagogics are taught simultaneously during the full four-year period;
- University programmes in education that grant a first degree, with special programmes in education in a separate framework which grant teaching certification. These programmes prepare high school teachers and are not under the supervision of the Ministry of Education.

The seminars and colleges maintain two-way ties with the Ministry of Education, which finances their activities. The Ministry sets registration quotas for the various general and specialized courses, and guidelines for the administration of students, staff and finances. It also designs the educational framework and supervises the execution of its directives related to the functioning of the institutions.

The Council for Higher Education formulates standards and directives, and the colleges adjust themselves to those standards as a condition for gaining authority to grant academic degrees. The Council is responsible for maintaining academic procedures in the institutions, and its decisions are binding.

In order to succeed in carrying out their tasks, teacher training institutions must be in close contact with the administration of the regional educational authorities, who operate the schools in the region. Training institutions are directly linked to the schools that provide practice teaching opportunities for their students, so that work can be planned carefully and appropriate classes and teacher-trainers selected.

Almost 80% of teaching personnel teach in schools which are under the supervision of the Ministry of Education, Culture and Sport. About 10% teach in kindergartens and about 10% teach in other frameworks (adult education, teacher training colleges, Talmud-Torah institutions, and schools under the supervision of other ministries).

The percentage of academics among teachers at all educational levels has increased continuously. In 1997/98, the rate was more than 30% in regular primary schools and over 65% in lower secondary schools. The increase in the percentage of academics is related to the policy of the Ministry of Education regarding pre- and in-service training.

Teachers' workload is dependent on school level. The workload and the salary are determined through negotiation between the Ministry and the two teachers' associations. Salaries are a function of the teacher's formal education, length of service, the amount of in-service training accumulated over the years, and special school functions fulfilled. The salary structure encourages promotion within school to professional administrative positions and promotes in-service training.

School-based in-service training (56 or 112 study hours on a voluntary basis) aims at: improving the professional status of teachers; enhancing professional knowledge; improving teaching methods; increasing the ability to cope with educational subjects; and fostering an autonomous teaching staff. The topics studied



include formulating teaching methods and planning studies, computer applications in teaching, school staff development, education and psychology, general enrichment, and inter-personal communication. In 1995, school-based in-service training was provided on a voluntary basis, and 2,430 teams participated in this activity—a total of approximately 72,300 education workers. Almost 10,000 additional informal workers participated in these programmes in 1995. In 1996, the training programmes encompassed approximately 3,500 teams representing some 78,000 education workers and 13,000 additional informal education workers.

## Educational research and information

All universities in Israel are actively engaged in educational research. Further research is done in a number of public and private research institutions. The main topics of Israeli research in education between 1975 and 1995 were teaching methods, curriculum issues, students' achievement, religious education and disadvantaged students.

Research is generally sponsored by the Ministry of Education. The Chief Scientist's Office and various Ministry departments initiate and commission, and, in certain cases, conduct research to provide information on educational issues to policy-makers and executives. To obtain this goal, four basic types of research are conducted:

- *Evaluation research*: the implementation of government's policy, programmes and reforms is continually evaluated in order to provide up-to-date data on the extent of success in obtaining policy goals. Long-term evaluation is especially necessary when changes and new programmes are introduced.
- *Pupils' attitudes surveys*: the Ministry of Education is interested in collecting information on pupils' attitudes on a yearly basis. The apparatus for collecting such information is currently being developed. The intent of such a survey is to examine pupils' attitudes towards a wide range of issues such as personal and social values, identity, civil institutions, schooling, leisure activities, sexual behaviour, substance abuse, etc. Compiling this information on a yearly basis will enable policy-makers to perceive trends in these important areas of interest.
- *Assessment research*: the National Assessment Test (NAT), introduced in primary and lower secondary schools, provides information on the extent to which educational goals set by the Ministry are being achieved.
- *Basic research*: although basic research into educational issues is traditionally conducted by academic institutions, the Ministry of Education views supporting and learning from such research as one of its objectives. In order to achieve this goal, grants are awarded on a yearly basis to researchers in the field of education. Criteria for judging research proposals are academic in nature.





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## Web resources

Ministry of Education, Culture and Sport:  
<http://cms.education.gov.il/EducationCMS/UNITS/Owl/Hebrew> [In Hebrew; some information in English. Last checked: April 2007.]

For updated links, consult the Web page of the International Bureau of Education of UNESCO: <http://www.ibe.unesco.org/links.htm>