Principles and general objectives of education

The education system in the Hashemite Kingdom of Jordan is based on the aspirations to freedom, justice, human and economic development to achieve a significant level of productivity and modernization. The philosophy of education is based upon the Jordanian Constitution, the Islamic Arab civilization, the principles of the Great Arab Revolt and the national experience of the country.

The desired vision of the education system emphasizes the importance of providing all people with lifelong learning experiences relevant to their current and future needs in order to respond to and stimulate sustained economic development through an educated population and a skilled workforce.

Education must be responsive to both current and future needs and link to social and economic development of the country. A quality education system: maintains high ethical values, promotes excellence, and focuses on the needs of the learner; enables universal access to educational opportunity, equality in the provision of services, and to the tools of modern information and communication technology; and provides the best in teaching and learning and promotes high levels of student success as measured by a system of performance indicators based on standards embedded in learning outcomes. (MOE, 2006).

The general objectives of education in the Kingdom emanate from the philosophy of education, and are exemplified in shaping a citizen believer in God, adherent to the homeland and nation, endowed with virtues and human perfections, and mature physically, mentally, spiritually, and socially. (MOE, 2004).

Current educational priorities and concerns

The Hashemite Kingdom of Jordan became fully independent in 1946 and it was founded as a hereditary constitutional monarchy. The national economy achieved remarkable growth rates despite existing obstacles and challenges, such as: scarcity of natural resources, limited cultivated land and high population growth rates.

The 1994 census indicated about one-third of the population involved in some form of education. In the same year, illiteracy rates were 9.8% for males and 20.7% for females while in 1979 the rates were 19.9% and 49.6%, respectively. The literacy rate reached 89.7% in 2003, 94.6% for males and 84.8% for females. In the academic year 2003/04 academic year in the country there were 5,526 schools, the number of teachers was 76,946 (of whom 62.8% were females), and there was an overall total of 1,515,315 students enrolled, of whom 746,840 were females. Early childhood education statistics indicate that enrolment rates for both sexes, although improved, are still low (30% for males and 27.5% for females). The Ministry of Education (MOE) supervises all educational institutions with the exception of higher education.

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
Most schools are administered by the MOE (70.5% of students in 2003/04), some by other governmental institutions (1.4%), some by the United Nations Relief and Works Agency for Palestine Refugees in the Near-East (UNRWA, 8.9%) and others by the private sector (19.2%).

Jordan began a comprehensive review its education system in the mid-1980s with the belief that human beings are the best resource for achieving comprehensive economic and social development. One of the most important outcomes of the First National Conference for Educational Development (1987), was the Provisional Education Act No. 27 in 1988 which, after being passed by the legislative body, became Education Act No. 3 in 1994. This Act included several developments, the most important of which are the following:

- classification and identification of the philosophical bases and principles of education;
- development of the general objectives of education and of the educational cycles;
- extension of free compulsory education from nine to ten years;
- classification of educational cycles into: kindergarten cycle (two-year programme); basic education (ten-year programme); and secondary education (two-year programme), consisting of comprehensive secondary education (academic and vocational) and applied secondary education.

The country completed the implementation of the first phase of the Educational Development Plan (1989-95), which focused on providing the necessary infrastructure for the development of the education system and encompassed the following aspects: philosophy and objectives of the educational policy; restructuring the education system; new curricula and textbooks; educational technologies, buildings and facilities; certification and training; educational planning; research and development; co-operation with universities; pre-school education; literacy and adult education; educational evaluation and administration; computer services; and educational innovations.

The second phase of the Educational Development Plan (1996-2000) aimed at achieving the following:

- Deepening the qualitative impact of educational reform through: staff development; school-based innovations; developing examinations, assessment and diagnostic evaluation; developing technical and vocational education and training (TVET); upgrading educational leaders and providing schools with educational materials.
- Institutional development of: learning resource centres; textbook publishing and distribution; feedback systems for the General Secondary Education Certificate Examination (GSECE); the Educational Management Information System (EMIS); the National Assessment Programme.

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
Improving facilities for teaching and learning through: expansion, rehabilitation and construction of new schools; equipping and furnishing schools to accommodate more students; reducing the number of rented buildings and double-shifting.

The most significant achievements during the period 1996-98 were:

- Introducing appropriate regional and international developmental models and experiences as educational innovations, in order to improve the quality of the education system.
- Designing the methodology and the implementation mechanism for the preparation of the second educational development plan (1999-2005), focusing on the quality of education and social development.
- Preparing the education sector plan for the period 1999-2003, its programmes, objectives and individual projects, in order to include it into the five-year general socio-economic plan of the State.

The principles underlying educational policy can be summarized as follows:

- Gearing the education system towards better adjustment to individual and social needs and keeping a balance between them.
- Providing opportunities to realize lifelong education and utilizing parallel education patterns in co-ordination with the specialized agencies.
- Ensuring the importance of political education in the education system, and promoting participation, justice and democracy.
- Gearing the educational process in a manner which develops the ability to analyze, criticize, initiate, create and dialogue positively; and promoting values derived from Arab, Islamic and human civilization.
- Following the scientific method in educational planning as well as developing research, evaluation and follow-up.
- Expanding educational patterns to include special education programmes, and programmes for the gifted and those with special needs.
- Pursuing and ensuring the concept of comprehensive experience, including vocational and technological experience.
- Gearing the education system in a manner which ensures centralization of general planning and follow-up, and decentralization in administration.
- Enhancing the scientific and social status of teachers.
- Ensuring the importance of military education and environmental culture.
The third phase of the Educational Development Plan (2000-2005) was launched in the year 2000 after the national conference held on September 1999. This phase was based on the following principles: (i) reform of the education system; (ii) integration of and coordination with public and private educational institutions; (iii) consolidation and development of education quality and completion of innovative plans introduced during the previous phases; (iv) achieving comprehensive and integrated general education cycles' structures in consistency with trends towards higher education development; and (v) preparing the education system to respond to the requirements of the twenty-first century in the domains of global knowledge, information and means of communication.

The most recent direction for change comes from the Vision Forum for the Future of Education in Jordan held in September 2002. This important event generated a series of priorities and related intentions for educational change that cover all areas of education and training from early childhood to higher education and advanced vocational and professional training. The Education Reform for the Knowledge Economy Project Proposal (ERKE I), represents a landmark step in the progress of educational change. The Proposal sets out in detail the intentions for overall reform within an extensive and inclusive framework. Four major intersecting and interdependent components of reform have been determined and developed for sustained effort over the next five years (first phase), starting in July 2003. The Project is organized around the following four components:

- **Reorienting the educational policy, objectives, and strategy through governmental and administrative reform**, this includes: redefining the future integrated educational vision and strategy; updating the future educational administration and decision making mechanisms; building an integrated educational decision support system; activating educational research for monitoring, evaluation, policy development, and effective management; and coordinating investment in the field of educational development.

- **Changing the educational programs and practices to achieve learning outputs in harmony with knowledge economy**, this includes: developing curricula and learning measurement methods; developing lifelong professional development programmes and training; and providing sources for supporting effective learning.

- **Providing support for good quality learning environments**, this includes: replacing the unsafe crowded school buildings; upgrading schools to support and improve learning; and providing suitable school buildings to cope with population increase.

- **Developing complete readiness for learning through education from the early childhood cycle**, this includes: building the capacity of the institutions working in this field; professional development of kindergarten teachers; expanding in kindergartens to include areas which need them more; and raising awareness and general understanding of the importance of this age cycle. (MOE, 2004).

The Jordan Education Initiative (JEI) was formally launched in June 2003 at the Extraordinary Meeting of the World Economic Forum at the Dead Sea. The JEI aims
at accelerating education reform through a public-private partnership model that

drives innovation and capability. “The JEI supports two existing national programmes

aimed at fundamentally redefining learning outcomes in schools, universities,

community colleges and lifelong learning activities, e.g. the ERKE Programme and

the National Broadband Learning and Research Network set to reach 1.5 million

learners by 2006. Within the framework of the e-Curricula initiative, the goal

undertaken is the development of rich digital content in new, outcomes-based

curricula through building the capacity of the Ministry of Education and the local

information technology industry. Cisco Systems, in partnership with the Ministry of

Education and a Jordanian IT company, has completed the development of a Grade 1-

12 mathematics e-curriculum. In partnership with the Ministry of Education and the

local IT industry, Microsoft is developing a Grade 1-10 ICT e-curriculum, Fastlink is

developing a Grade 1-12 science e-curriculum, France Telecom and Jordan Telecom

are developing a Grade 1-12 Arabic e-curriculum, and MEPI is developing a Grade 7-

12 e-curriculum for teaching English as a foreign language.” (World Economic Forum

and Ministry of ICT, 2004).

Laws and other basic regulations concerning education

The Education Act No. 3 of 1994 regulates kindergarten, basic and secondary

education. It enunciates the philosophy and objectives of education, the educational

policy, the functions of the Ministry of Education, and the tasks of the Boards of

Education; it also contains some elements regulating curricula and textbooks, general

examinations, the structure of the Ministry, as well as the functioning of private and

foreign educational institutions.

 The most significant regulations related to pre-higher education are the following:

- The Regulation No. 1 of 1995 on the organization of the Ministry of

  Education. It defines the administrative structure of the Ministry and its basic

  units and committees at all levels (central level, governorates and districts), as

  well as their main tasks.

- The Regulation No. 41 of 1997 on scientific research for the development of

  the educational process. It establishes the objectives of educational research at

  the Ministry, and it defines the tasks of the Research Committee for

  developing the educational process.

- The Regulation No. 59 of 1993 on educational certification and training. It

  concerns the establishment of the Educational Certification and Training

  Committee at the Ministry and its tasks, as well as the creation of committees

  specialized in training, conditions of those responsible for training courses,

  and the way financial rewards are paid.

- The Regulation No. 42 of 1992 on the equivalence of certificates. It concerns

  the establishment of the Committee on the equivalence of certificates and its

  main tasks and functions.
The **Higher Education Act No. 28** of 1985 regulated higher education. This Act specified the objectives of higher education and how they are achieved. It also established the Higher Education Council, defined its authority and responsibilities, and contained some regulations concerning the functioning of higher education institutions.

The **Jordan Universities Act No. 29** of 1987 determines the objectives of the university as a national organization for higher education and scientific research, and contains several items regulating its financial and administrative affairs.

The **Private Universities Act No. 19** of 1989 specifies the authority and responsibilities of the Higher Education Council in relation with private universities. It also contains some items related to their administrative and financial affairs.

The Parliament approved the **Higher Education Law No. 6** in 1998. The law authorized the Higher Education Council to formulate the general policy related to higher education in the Kingdom, and to co-ordinate university education policies. The law also included criteria for supervising private university education, and provided for the closing down of the Ministry of Higher Education and the establishment of the Higher Education Council. The new **Higher Education Law No. 41** of 2001 re-established the Ministry as the Ministry of Higher Education and Scientific Research.

An amendment to the Jordanian Universities Act was also approved. It aims at establishing the autonomy of these universities through providing them with the necessary financial resources, and creating a trustee council for each university, responsible for designing the university policy and supervising it.

In 1964, the Education Act expanded compulsory education to nine years (six years of primary and three years of preparatory education) and introduced the diversification of secondary education to provide general academic and vocational programmes. The 1994 Education Act expanded basic compulsory education to ten years and introduced comprehensive and applied secondary education streams lasting two years to be provided free of charge.

**Administration and management of the education system**

The **Ministry of Education** (MOE) is responsible for the achievement of the general objectives of education in the Kingdom. The Education Act of 1994 defines the tasks of the Ministry as follows: establishing public education institutions and administering them; supervising private education institutions; providing appropriate school buildings; encouraging students activities and providing them with counselling and health care; encouraging scientific research; strengthening educational links between Jordan and other countries; establishing adult education centres and reinforcing relationships with the community.

In accordance with the Regulation No.1 of 1995, the MOE is constituted of the following units:
• The central level, which is responsible for designing educational policies and plans, their implementation and follow-up. It comprises the office of the Minister, the Secretary-General, general directors, and specialized directors.

• The General Directorates of Education in the governorates. They supervise educational policy and plans as well as their implementation at the governorate level. A committee for co-ordination is formed in each general directorate headed by the general-director. There are six General Directorates.

• The District Directorates of Education in the governorates. They supervise educational policy at the directorate level in the governorate or district, and make efforts to improve education. Each District Directorate is headed by the director of education assisted by directors for technical and administrative affairs. There are twenty-six Directorates at the district level.

The school is considered the central unit of the educational process and it is managed by the principal, assisted by adequate staff to provide the necessary services.

The Minister of Education is assisted by two main advisory bodies, the Council of Education and the Planning Committee. The MOE also administers vocational education, while formal apprenticeship schemes (in-service and pre-service training programmes for adult workers) are implemented by the Vocational Training Corporation (VTC) in co-operation with employers. In 1992, the VTC established the Industrial Counselling Division which provides administrative and technical advisory services to small and medium-sized industries to improve productivity, profitability and quality.

The Ministry of Higher Education (since 2001 the Ministry of Higher Education and Scientific Research) supervises all higher education issues and implements the general policy in this field. The Higher Education Council is entrusted with the following main responsibilities: approving the establishment of new higher education institutions in the Kingdom, evaluating the quality of higher education in terms of sufficiency and efficiency, and determining the basic admission requirements at higher education institutions. The Accreditation Council defines the regulations for the accreditation of higher education institutions and supervises their performance and their commitment to applying the rules of accreditation.

There are institutions, other than the MOE (but under its supervision) which also participate in the delivery of education services. Several institutions under the Ministry of Social Development educate students with special needs and those with learning difficulties. The Directorate of Education and Culture of the Armed Forces administers nineteen specialized schools.

UNRWA is responsible for the administration of 198 schools for Palestinian refugees, in which 143,893 students were enrolled in the academic year 1997/98. As far as private schools are concerned, their number amounted to 1,493 with 229,487 students enrolled. In addition, there are non-governmental organizations (such as the Queen Alia Fund for Social and Voluntary Work and the General Union of Charity Societies) assisting educational institutions at the kindergarten level, and those for

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
pupils with special needs. The Noor Al-Hussein Foundation (NHF) administers the Jubilee School, established in 1989, which caters to gifted students beyond the ninth grade of basic education.

Structure and organization of the education system

Jordan: structure of the education system

Pre-school education

Children at the age of 4 years (or at least 3 years and 8 months) are allowed to enter kindergartens, which are institutions offering non-compulsory pre-school education. Kindergartens are operated by private organizations and non-governmental organizations.

Basic education

All children having attained the age of 6 years are required to attend the compulsory ten-year basic education cycle. Students are evaluated at the end of this cycle according to their academic achievement through Grades VIII-X, for the purpose of their classification and entry into the various types of secondary education.

Secondary education

Secondary education comprises two major streams: the comprehensive secondary (academic and vocational) and the applied secondary. The two-year comprehensive secondary education programme concludes with the Secondary School Certificate

Compiled by UNESCO-IBE (http://www.ib.e.unesco.org/)
examination in the following specializations: academic (scientific, literary and Sharia or Islamic law) and vocational (industrial, commercial, agricultural, nursing, hotel and home economics). The two-year applied secondary education programme provides vocational education and training to create a skilled labour force both at vocational centres and through apprenticeship schemes. Secondary education is free but not compulsory.

Higher education is provided at two levels: a two-year intermediate-level (in some cases three-year) course offered by community colleges and similar institutions—owned either by public or private organizations—; and university-level courses, either in public or private institutions. The Al-Balqa Applied University supervises about forty-five community colleges. At the university level, bachelor’s degrees normally take four years—five years in the case of medicine and engineering. Master’s degree programmes usually last two years. A doctorate is awarded after three to five years of further study and the submission of a dissertation.

In the school year 1997/98, the number of working days at the basic and secondary education levels was 185 days. In 1998/1999, the number of working days was expected to be 191.

The financing of education

Public education is financed mainly through the government’s general budget according to educational objectives and priorities. Part of the budget is allocated annually for educational services and running of the educational process in accordance with the educational development plan, programmes and projects.

Expenditure on education for the fiscal year 1997 represented 12.5% of the government’s general budget. The tables below indicate the distribution of general expenditure on education and the type of expenditure for the fiscal years 1995, 1996 and 1997.

Distribution of general expenditure on education (in Jordanian dinars)

<table>
<thead>
<tr>
<th>Year</th>
<th>Academic basic and secondary</th>
<th>Vocational</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1995/96</td>
<td>125,169,000</td>
<td>5,844,000</td>
<td>158,013,000</td>
</tr>
<tr>
<td>1996/97</td>
<td>168,553,000</td>
<td>5,449,000</td>
<td>174,002,000</td>
</tr>
<tr>
<td>1997/98</td>
<td>178,714,878</td>
<td>4,253,644</td>
<td>182,968,522</td>
</tr>
<tr>
<td>1999/00</td>
<td>191,843,823</td>
<td>2,780,996</td>
<td>194,624,819</td>
</tr>
</tbody>
</table>

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
Education in Jordan, however, is not financed by the government alone. UNRWA finances and administers basic education for Palestinian refugees. Other public institutions and voluntary organizations support educational services for specific groups, such as the disabled, and the private sector plays a significant role especially at the pre-school and higher education levels.

Public universities are financed through: the government’s financial support (covering part of expenditure and granted annually); students’ fees; taxes collected by the Customs Department and the municipalities (University Tax); university private investments; donations; external assistance. The table below indicates the sources of financing of public university education for the year 1997.

### Public university education, sources of financing (1997)

<table>
<thead>
<tr>
<th>Income source</th>
<th>Amount (in JD)</th>
</tr>
</thead>
<tbody>
<tr>
<td>University tuition fees</td>
<td>27,127,477</td>
</tr>
<tr>
<td>Profit of movable real property</td>
<td>5,543,605</td>
</tr>
<tr>
<td>Other income</td>
<td>2,971,125</td>
</tr>
<tr>
<td>Customs taxes</td>
<td>39,493,603</td>
</tr>
<tr>
<td>Additional taxes</td>
<td>2,706,355</td>
</tr>
<tr>
<td>Annual government grants</td>
<td>5,800,000</td>
</tr>
<tr>
<td>Annual &amp; per. donations</td>
<td>112,226</td>
</tr>
<tr>
<td>Other income</td>
<td>1,820,000</td>
</tr>
<tr>
<td>Provisions for C/F engagement</td>
<td>2,677,977</td>
</tr>
<tr>
<td>Government institutions(due fees)</td>
<td>500,000</td>
</tr>
<tr>
<td>Revenues &amp; loans</td>
<td>7,006,624</td>
</tr>
<tr>
<td>Grants and aids for buildings and labs</td>
<td>1,946,000</td>
</tr>
<tr>
<td>Revenues &amp; loans for Hospital projects</td>
<td>1,747,626</td>
</tr>
<tr>
<td>Estimated deficit in the budget</td>
<td>14,702,565</td>
</tr>
</tbody>
</table>

As far as the financing of private universities is concerned, main sources include: student fees, which differ from one university to another and according to the

field of specialization; shareholders (either individuals or institutions interested in education contribute to the establishment of these universities); and donations from institutions or individuals in Jordan or abroad.

Distribution of education expenditure by programmes (in thousands of JD)

<table>
<thead>
<tr>
<th>Year</th>
<th>Admin.</th>
<th>General education</th>
<th>Vocational education</th>
<th>Literacy</th>
<th>Educ. activities</th>
<th>Certification &amp; Training</th>
<th>Examin.</th>
<th>Curricula technol. and educ. technol.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1990</td>
<td>5,790</td>
<td>88,096</td>
<td>3,029</td>
<td>187</td>
<td>1,112</td>
<td>611</td>
<td>1,365</td>
<td>3,149</td>
</tr>
<tr>
<td>1991</td>
<td>5,817</td>
<td>89,096</td>
<td>2,870</td>
<td>180</td>
<td>1,164</td>
<td>481</td>
<td>1,445</td>
<td>3,447</td>
</tr>
<tr>
<td>1992</td>
<td>6,463</td>
<td>98,220</td>
<td>3,014</td>
<td>180</td>
<td>1,119</td>
<td>822</td>
<td>1,638</td>
<td>3,761</td>
</tr>
<tr>
<td>1993</td>
<td>7,733</td>
<td>117,094</td>
<td>3,089</td>
<td>220</td>
<td>1,194</td>
<td>761</td>
<td>2,038</td>
<td>3,809</td>
</tr>
<tr>
<td>1994</td>
<td>12,089</td>
<td>132,335</td>
<td>4,077</td>
<td>265</td>
<td>1,239</td>
<td>2,343</td>
<td>2,541</td>
<td></td>
</tr>
<tr>
<td>1995</td>
<td>15,553</td>
<td>152,169</td>
<td>5,844</td>
<td>264</td>
<td>1,125</td>
<td>2,265</td>
<td>2,526</td>
<td></td>
</tr>
<tr>
<td>1996</td>
<td>17,467</td>
<td>168,582</td>
<td>5,458</td>
<td>273</td>
<td>1,112</td>
<td>2,275</td>
<td>2,883</td>
<td></td>
</tr>
<tr>
<td>1997</td>
<td>16,689</td>
<td>169,947</td>
<td>2,949</td>
<td>218</td>
<td>1,346</td>
<td>1,991</td>
<td>2,913</td>
<td></td>
</tr>
</tbody>
</table>

Source: Educational statistics of the MOE for the years 1990 to 1997.

The educational process

Pre-primary education

Preschool education, organized for children in the age group 3 years and 8 months to 5 years and 8 months, aims at providing an adequate educational environment and care for well-balanced growth in order to help them in: acquiring sound health habits; developing positive social relationships; consolidating positive attitudes towards school; and being prepared for a smooth transition from home to school.

Children’s attendance at pre-school classes is not compulsory. Activities and methods at this stage aim to promote the development of the personality of the child. The Ministry of Education (MOE) supervises all pre-school institutions according to its policy, legislation and tasks.

In the academic year 1997/98, the average pupil-teacher ratio at the pre-school level was 20.7:1. The gross enrolment ratio was 26% (30.5% in 2003/04) and the average number of children per class was 23.6.

In order to further develop preschool education, a national team representing public, private and voluntary organizations has prepared a manual for kindergarten teachers. This manual includes practical applications of the basic units to be taken into consideration in educating children at this stage, such as: Who am I?; My family; National and religious events; Water; Animals; Transportation; Our country; Homeland; Seasons; Plants; Occupations. In addition, the manual is accompanied by
a book with songs and anthems which are taught to children in a simple and clear language.

Performance of pupils at this level is evaluated through the follow-up of their participation in the diversified activities and of their growth in the cognitive, social, spiritual, artistic and emotional dimensions. Parents are continuously informed on the progress and growth of their children.

Jordan has developed an ECD Strategy Document where it maps the early childhood phase from birth till eight years of age. It divides this age span into five stages: pregnancy period; from birth to under one year; from one year to under four years (nursery stage); from four years to under six years (preschool stage); from six years to under nine years (early elementary stage). The phase before preschool age is considered under the jurisdiction of Ministry of Social Development, which supervises all nurseries and day-care centres, provides residential care for children deprived of parental care, and implements parenting education programmes for families and centre-based childcare programmes. Furthermore, the Ministry of Health is a strong partner in empowering families in caring for their children during these early stages.

The private sector (private and non-governmental organizations) is the major provider of kindergarten (KG) education. About 77% of all children attending KG are enrolled in private KGs, 5% are enrolled in public KGs, and 18% in the NGO sector. There has been a significant increase in nurseries (children for birth to below four years) supervised by the Ministry of Social Development, as their total number reached 730 by the end of 2002. It is worth noting that 57% of these nurseries are governmental, 38% are private, and 4.6% are affiliates of the NGO sector.

The number of KG teachers is around 5,417 teachers; 17.5% are bachelor’s degree holders, 80% have a diploma degree, 3% have finished high school certificate. Teachers employed by MOE are bachelor’s degree and diploma degrees holders and many of the KG supervisors have master’s degrees. The educational level of caregivers working in nurseries and day-care centres varies: 44.7% of caregivers hold a university or college degrees, 32.3% have only a high school certificate and 23% have lower qualifications. The requirements of the MOE are that teachers must have a university degree in ECE or related field. Furthermore, the Ministry builds the capacity of the existing staff by providing two types of training: the Wisconsin University training programme (160 hours); and the National Curriculum training programme (160 hours).

A Plan of Action to implement the ECD Strategy has been developed. Furthermore, the Jordanian Second Plan of Action for Children (2004-2013) has been developed and endorsed in 2004, where ECD section builds on the ECD strategy and Plan of Action. The Government pledged to allocate sufficient human and financial resource to achieve its objectives and seek extra funds wherever needed. The NPA calls for increasing the percentage of children enrolled in preschool (KG1) from 28% to 35% by the year 2008, and to 50% by the year 2013, and to increase enrolment in KG2 from 47% to 52% by the year 2008, and to 70% by the year 2013.
An Early Years Evaluation (EYE) instrument to measure children school readiness has been implemented. Moreover, the country has already developed its ECD Standards and Indicators to measure the level of knowledge and skills of young children at various stages of their development. The objective of the ECD component in the NPA is to ensure that children have the best start to life through providing a stimulating and a safe environment at home and childhood centres, and to receive quality education that is developmentally appropriate, and encompasses opportunities for self-learning and lifelong learning. Furthermore, this component aims to increase the children’s knowledge of their cultural heritage, and improve their abilities to make informed decisions, and enhance their inter-personal communication skills, develop their creativity and capabilities and enable them to exercise their right to express their views and to participation. A national KG curriculum has been developed in 2003 with these objectives in mind.

**Primary education (basic education)**

Basic education comprises ten years of compulsory schooling starting at the age of 5 years and 8 months. Pupils are offered a basic and well-balanced education in the social, emotional, intellectual, physical and spiritual aspects of their personality growth, in order to create the basis for successful learning at higher forms of education and for lifelong learning.

Basic education aims at preparing the learners to:

- be consciously acquainted with the history, principles, rules and values of Islam, incorporating them into their character and behaviour;
- master the basic skills of Arabic language to be able to use it easily;
- know the basic facts and events related to the history of the Islamic and Arab nation and to the Jordanian people in its Arab and Islamic profundity, in particular, and its humanity in general;
- follow social behaviour rules and take into account commendable social traditions, habits and values;
- love, be proud of, and shoulder the responsibilities towards their homeland;
- love their family and society and shoulder the responsibilities towards them;
- master the basic skills of at least one foreign language;
- deal with numerical systems, basic mathematical processes and geometrical figures, and use them in everyday life;
- absorb basic scientific facts and generalizations and their experimental bases, and use them to explain natural phenomena;

• think scientifically, using the process of observation, data collection, organization, analysis, deduction and making decisions and judgements based on them;

• comprehend the scientific basis of the forms of technology and use them properly;

• be keen on the safety, cleanliness, beauty and wealth of their environment;

• be aware of the importance of their physical fitness and health, and practise suitable sport and health activities;

• have aesthetic taste in the various arts, and express their own artistic interests;

• be able to perform handicraft skills matching their abilities and interests, make an effort to develop them, and have respect for manual work owing to its basic function in social life;

• assimilate diligence, work, persistence and self-dependence values in achievement, realization of self-capability, earning a living and self-sufficiency;

• express their talents, special abilities and creative aspects;

• accept themselves, respect others, consider their feelings and appreciate their merits and achievements;

• appreciate the value of time and made good use of their free time;

• strive for self-instruction and the development of their competencies.

The weekly lesson timetable for basic education is shown in the table below:
Plans are under way in order to introduce the teaching of English from the first year of basic education.

In the academic year 1997/98, the average pupil-teacher ratio at the basic education level was 26:1. The gross enrolment ratio (GER) was 95% and the average number of pupils per class was 30.4. According to the UNESCO Institute for Statistics, in 2003 the GER was 100% in Grades I–VI and 93% in Grades VII-X.

Evaluation of pupils is one of the responsibilities of the teachers. The school gives students certificates at the end of each academic year, from Grade I to first year of secondary education. On the certificates, the results of the first and second terms with the final average are all indicated. In addition, classification of students and their enrolment in the various types of secondary education is carried out according to their marks in Grades VIII-X.

The Diagnostic Evaluation Project for the basic cycle—implemented in co-operation with the Scottish General Examination Board—aims at improving the quality of education in the classroom through the application of diagnostic evaluation methods by the teachers, who are required to prepare educational activities and to offer remedial activities to students with learning difficulties or provide higher cognitive activities to those showing very high achievement.
As regards the internal efficiency of the education system, the following table shows the situation in recent years:

### Repetition and drop-out rates by grade and gender (in percentage)

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Repetition</td>
<td>Drop-out</td>
</tr>
<tr>
<td></td>
<td>Male</td>
<td>Female</td>
</tr>
<tr>
<td></td>
<td>0.88</td>
<td>0.74</td>
</tr>
<tr>
<td>Grade I</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Grade II</td>
<td>0.60</td>
<td>0.48</td>
</tr>
<tr>
<td>Grade III</td>
<td>0.46</td>
<td>0.55</td>
</tr>
<tr>
<td>Grade IV</td>
<td>0.94</td>
<td>1.11</td>
</tr>
<tr>
<td>Grade V</td>
<td>1.85</td>
<td>2.38</td>
</tr>
<tr>
<td>Grade VI</td>
<td>1.93</td>
<td>2.37</td>
</tr>
<tr>
<td>Grade VII</td>
<td>1.76</td>
<td>1.87</td>
</tr>
<tr>
<td>Grade VIII</td>
<td>1.84</td>
<td>1.96</td>
</tr>
<tr>
<td>Grade IX</td>
<td>1.65</td>
<td>1.40</td>
</tr>
<tr>
<td>Grade X</td>
<td>0.18</td>
<td>0.22</td>
</tr>
<tr>
<td>Grade XI</td>
<td>1.37</td>
<td>0.59</td>
</tr>
<tr>
<td>Grade XII</td>
<td>3.97</td>
<td>1.44</td>
</tr>
<tr>
<td>Average</td>
<td>1.31</td>
<td>1.33</td>
</tr>
</tbody>
</table>

Source: Educational statistics of the MOE.

### Secondary education

Secondary education consists of two years of study for students aged 16-18 who completed the basic education cycle. As the students were provided with a broad-based, general and undifferentiated education during the ten years of basic education, secondary education is designed to prepare them for higher education or for entry into the labour market.

Students are admitted to secondary education according to their abilities and interests. They are provided with specialized cultural, scientific and vocational experiences which meet the existing and anticipated needs of society. Accordingly, there are two major types of secondary education: (a) comprehensive secondary education which provides a general common cultural base for all students, in addition to specialized academic or vocational education; (b) applied secondary education which provides vocational training and apprenticeship.

Secondary education, in this context, is intended to enhance the cardinal points of basic education, and aims at preparing learners to be able to:
use the Arabic language to increase their ability to communicate, develop their scientific and literary culture, consider the fundamentals of correct language structure, and relish its arts;

adapt to environmental changes in their country in its natural, demographic, social and cultural dimensions, to exploit and maintain them well, and improve their potentials;

derive their culture from their nation’s past and present heritage, and be aware of the necessity of conscious openness to world civilization and contributions to it;

interact with the cultural environment of their society and try to develop it;

be aware of the importance of family, its coherence and role in social life;

consolidate their self-confidence, appreciation of other human beings, and respect for the dignity and freedom of others;

exemplify the principles, rules and values of Islamic ideology, adopt them in their behaviour, and understand the values and convictions in other heavenly religions;

seek the progress, prestige and pride of their country, and be keen to participate in solving its problems and achieving security and stability;

know the conditions and issues of their nation, be proud of belonging to it and seek its unity and progress;

work in a team, know the rules and forms of democracy and practise them in dealing with others, and believe in principles of social justice;

be aware of international issues and problems and of the importance of international understanding and peace built on justice and rightness;

perform their duties and adhere to their rights;

master one foreign language at least;

absorb mathematical and logical concepts and relationships and use them in solving problems;

look for data sources carefully and have command of collecting, storing, processing and means of benefiting from data;

absorb new scientific facts and their applications, be able to verify them experimentally, and know their role in human progress;

protect the environment, keep it clean, and develop its potential and wealth;

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
• absorb health information and rules pertaining to balanced physical and psychological growth, and practise them;

• relish artistic work and express their artistic interests in works according to their capabilities;

• seek professional qualification, economic independence and self-sufficiency;

• use their free time for practising useful hobbies and recreation activities and for developing them;

• reflect Arab, Islamic and humanistic values and perfection in their behaviour;

• use common sense in dialogue, tolerance in dealing with others, and courtesy in listening;

• develop themselves through self-learning and lifelong education.

The study plans for comprehensive academic and vocational secondary education streams are given below (each teaching period lasts forty-five minutes):
Comprehensive academic secondary education: weekly lesson timetable

<table>
<thead>
<tr>
<th>Subject</th>
<th>I Form</th>
<th>II Form</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Scientific</td>
<td>Literary</td>
</tr>
<tr>
<td>Common general education:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Islamic education and culture</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Arabic</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>English</td>
<td>3</td>
<td>3</td>
</tr>
<tr>
<td>Scientific education</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>Civics</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>Basic requirements:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>a. Compulsory</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>4</td>
<td></td>
</tr>
<tr>
<td>Physics</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Chemistry</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>Arabic</td>
<td>–</td>
<td>4</td>
</tr>
<tr>
<td>English</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>History</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>b. Electives</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One subject from biology, geology and environment</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>One subject from literary or vocational streams</td>
<td>3</td>
<td>–</td>
</tr>
<tr>
<td>One subject from Islamic education &amp; culture,</td>
<td>–</td>
<td>3</td>
</tr>
<tr>
<td>geography and mathematics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two subjects from chemistry, physics, biology,</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>geology and environment</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Two elective subjects</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Specialization requirements:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mathematics</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Arabic</td>
<td>–</td>
<td>–</td>
</tr>
<tr>
<td>Optional subjects:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One subject from vocational education and home</td>
<td>2</td>
<td>–</td>
</tr>
<tr>
<td>economics</td>
<td></td>
<td></td>
</tr>
<tr>
<td>One subject from computer studies, music, physical</td>
<td>–</td>
<td>2</td>
</tr>
<tr>
<td>education, foreign languages other than English</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Vocational Education Streams</td>
<td>Number of Periods</td>
<td>Agriculture</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>-------------------</td>
<td>------------</td>
</tr>
<tr>
<td>Subjects &amp; periods</td>
<td>1st 2nd Subject</td>
<td>1st 2nd</td>
</tr>
<tr>
<td>Islamic Education &amp; culture</td>
<td>3 3</td>
<td>3 3</td>
</tr>
<tr>
<td>Arabic (Regular Level)</td>
<td>3 3</td>
<td>3 3</td>
</tr>
<tr>
<td>English (Regular Level)</td>
<td>3 3</td>
<td>3 3</td>
</tr>
<tr>
<td>Scientific Education</td>
<td>3 3</td>
<td>3 3</td>
</tr>
<tr>
<td>Career</td>
<td>3 3</td>
<td>3 3</td>
</tr>
<tr>
<td>Total</td>
<td>12 12</td>
<td>12 12</td>
</tr>
<tr>
<td>Basic</td>
<td>Mathematics 2 2</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Science</td>
<td>Physics 2 2</td>
<td>Biology</td>
</tr>
<tr>
<td>Chemistry</td>
<td>Mathematics 2 2</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Total</td>
<td>6 4</td>
<td>4 4</td>
</tr>
<tr>
<td>Vocational Streams</td>
<td>Special Industrial</td>
<td>4 4</td>
</tr>
<tr>
<td>Industrial Drawing(3, 4)</td>
<td>4 4</td>
<td>Office Work &amp; Communications 4 4</td>
</tr>
<tr>
<td>Administration &amp; Safety</td>
<td>2 2</td>
<td>2 2</td>
</tr>
<tr>
<td>Additional Basic Stream</td>
<td>Math 2 2</td>
<td>Chemistry</td>
</tr>
<tr>
<td>Science</td>
<td>Physics 2 2</td>
<td>Biology</td>
</tr>
</tbody>
</table>

Compiled by UNESCO-IBE (http://www.ibe.unesco.org)
In the academic year 1996/97, the average student-teacher ratio was 17:1 in academic secondary education and 13.8:1 in vocational secondary education. The gross enrolment ratio (GER) was 70% and the average number of students per class was 26.7. According to the UNESCO Institute for Statistics, in 2003 the GER was 78%.

At the end of the secondary cycle, successful students receive the Secondary School Certificate, which includes the results of the examinations for the first and second terms and their general average.

Starting from the academic year 1996/97, one exam for the secondary certificate at the end of the second term of the academic year has been introduced. In addition, the project related to the development of the Secondary School Examinations—implemented in co-operation with the Scottish General Examination Board—aims at including measurement of several skills in all subjects of study such as: acquiring knowledge, problem-solving and fact-finding. Concerning foreign languages, the MOE plans to include skills related to writing, reading, listening and conversation. Supervisors and teachers will be trained for the new kind of examinations, and the Ministry will issue specifications for students concerning those examinations.

The following table shows the distribution of secondary students according to the different streams:

**Distribution of secondary school students by gender and type of education**

<table>
<thead>
<tr>
<th>Type of education</th>
<th>Male (%)</th>
<th>Female (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Academic education</td>
<td>61.41</td>
<td>68.20</td>
</tr>
<tr>
<td>Vocational education</td>
<td>38.59</td>
<td>31.80</td>
</tr>
</tbody>
</table>

**Assessing learning achievement nationwide**

Since measuring the effect of educational developments depends on the improvement of students’ achievement, the National Centre for Human Resource Development implemented a project for evaluating the effect of educational developments through measuring quality improvement in the teaching process which is reflected in the level of students’ achievement. This project, organized into two phases, focused on the selection of a random stratified sample in 245 schools consisting of two class units (Grades IV and VIII).

Tests for assessing students’ achievement in Arabic language, mathematics and science were applied in two phases: before the educational development (1993) and after it (1995).
In the second phase, the test was applied to students who completed three years of study in accordance with the educational development plan which included new curricula and school textbooks, and teachers trained in the developed teaching methods—enhancing critical thinking, problem-solving skills, self-learning and higher intellectual skills.

In addition, the project included the administration of questionnaires to students, parents, teachers and principals for the purpose of collecting data on their interests, attitudes, beliefs and perceptions concerning schools, classes, and administrative and teaching practices.

This comprehensive study aimed at describing students’ achievement in Grades IV and VIII of basic education according to sex, location and the supervising authority, for the purpose of providing standard averages for students’ achievement in general, and finding differences between the various categories. In addition, the study aimed at identifying points of strength and weakness in students achievement in each grade and field according to the study unit and cognitive skills.

The most significant results related to the measurement of students’ achievement in mathematics were as follows:

Results related to Grade IV pupils:

- there was a substantial improvement in students’ achievement at the level of the Kingdom in the second phase (after development), but there were differences between the governorates;
- pupils’ achievement was classified according to the highest degree of improvement as follows: private schools, schools administered by the Ministry and UNRWA schools;
- there was similarity in the performance of males and females, as well as of students from urban areas and those from villages.

Results related to Grade VIII students:

- the effect of educational development was positive on the achievement of Grade VIII students in the Kingdom, but there were differences between the governorates;
- students’ achievement was classified according to the highest degree of improvement as follows: the private sector, UNRWA and the Ministry;
- the degree of improvement was higher for females than males, and for urban students rather than rural ones.

The most significant results related to the measurement of students’ achievement in sciences were as follows:
the means of performance in Grades IV and VIII in the two phases (before and after the educational development) did not indicate the success or mastery levels;

- the performance of females was better than that of males;
- the performance of urban students was better than that of rural ones;
- the performance level of students attending private schools was the best in general.

In the 2003 Trends in International Mathematics and Science Study (TIMSS) round, Jordan’s 8th grade students ranked first among all Arab countries in science and second in mathematics. (MOE, 2006).

Higher education

Higher education in Jordan comprises two levels: i) a two-year intermediate-level programme provided by community colleges and similar institutions owned either by public or private agencies; these institutions prepare their students for work in middle-level professions and offer more than 100 specializations distributed over eleven programmes, including: academic, administrative, agricultural, applied arts, computer science, educational, hotel management, meteorological, paramedical, social work and engineering; ii) university-level courses, either in public or private institutions, with a duration of at least four years at the undergraduate level.

In 1999/2000, the total number of students enrolled in public and private universities was 112,483, of whom 52,904 were female students. The total number of students enrolled in private establishments was 34,642 (or 30.8%). In 2003, there were about 166,600 students enrolled in universities and some 23,900 students enrolled in polytechnics and communities colleges. In the same year there were eight public universities (9 in 2005) and 12 private universities and university colleges in the country.

Presidents of Jordanian public universities are appointed by a royal decree upon the recommendation of the Council, and deputy-presidents are appointed by a resolution of the Council upon the recommendation of the university president. Every university has a board of trustees approved by the Council. It manages the internal affairs of the university, and it is totally independent of the Ministry. Presidents of private universities are appointed upon the recommendation of the Council. They should hold a Doctorate degree.

Public universities are financed by various sources, such as government support from the general budget, student fees, customs and taxes imposed by the government, grants and university benefit projects. Student fees in private universities are three to four times the fees of public universities.

Public universities self-evaluate their performance through their boards of trustees. Private universities are evaluated for accreditation by specialized committees.

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
which pay repeated visits to universities. The reports issued by the Higher Accreditation Board are studied, discussed and presented to the Higher Education Council for approval.

As mentioned, the Parliament approved the Higher Education Law No. 6 in 1998. The law included criteria for supervising private university education, and provided for the closing down of the Ministry of Higher Education and the establishment of the Higher Education Council. Under the new Higher Education Law No. 41 of 2001 the Ministry was re-established as Ministry of Higher Education and Scientific Research. Under the new Law, the Ministry of Higher Education and Scientific Research supervises all higher education issues. The Higher Education Council approves the establishment of new higher education institutions, evaluates the quality of higher education in terms of sufficiency and efficiency, and determines the basic admission requirements at higher education institutions. The Accreditation Council defines the regulations for the accreditation of higher education institutions and supervises their performance and their commitment to applying the rules of accreditation.

**Special education**

Special education programmes are provided to students with special needs, to enable them to adapt themselves in accordance with their abilities and potential. Special education programmes cater to the following categories: students with learning difficulties, the handicapped and talented students. According to the Law for the Welfare of Disabled Persons of 1993, educational and teaching services are offered to disabled persons for the purpose of fulfilling their needs, developing their capabilities and helping them to integrate into society.

In 1997/98, the Ministry of Education, and in particular the Division of Special Education, has provided educational services to students with special needs and to slow learners through 121 learning resource rooms (205 in the year 2000) distributed throughout the various education directorates. The Ministry is also working on integrating students with special needs by accepting mild- to medium-handicapped cases in public schools. To this end, the MOE, in co-operation with the Ministry of Social Development, selected nine schools to integrate deaf students (Grades VII-IX).

Queen Alia Fund for Voluntary Social Work holds workshops and training courses for teachers and supervisors in this field. It contributes to the provision of ten to fifteen resource rooms annually. It also supports the development of diagnostic tests in reading, writing and arithmetic in the first three grades of basic education, organizes training courses for teachers of learning resource rooms, as well as educational supervisors aiming at developing their skills and capabilities in dealing with students with special needs. In addition, there are several organizations and institutions in Jordan which provide such students with special education services.

The University of Jordan takes part in preparing cadres qualified to deal with students with special needs. The General Union of Charity Societies offers programmes oriented to those with mild and medium handicaps. The UNRWA Care

Programme offers services to students with learning difficulties in some of its educational areas through learning resource rooms. Princess Sarvat College offers training programmes for educational directors, supervisors, principals and heads of divisions through the Learning Difficulties Centre, founded in 1995, to introduce them to learning difficulties and teaching methods in the resource rooms. Private agencies and individuals provide support in the field of learning difficulties by establishing centres and schools.

The MOE, through the Division of Special Education supports the gifted student. Through a special process, a gifted student is promoted to a higher class suitable to his/her mental age; however, this unusual promotion is not allowed more than twice for the same student during the basic cycle. The MOE also established three pioneer centres for the gifted (in Irbed, Zarqa and Kerak) to enable them to develop their talents, in addition to the pioneer centre in Balqa, which belongs to the Foundation of Salt Development.

The Noor Al-Hussein Foundation cares for the gifted through the Jubilee School, which is a coeducational secondary school where gifted students are grouped at the ninth, tenth, eleventh and twelfth class levels, and offered special programmes. In UNRWA schools, gifted students are grouped and taught enrichment material in full or partial periods, but, due to financial problems, enrichment material is offered inside the regular classroom itself instead of in special classes. The members of the Science and Technology Club, which is a voluntary club established in 1986 by a group of engineers, scientists and businessmen, try to identify the gifted through the media, school visits and contact with different parties in order to support their creativity.

These educational institutions offer developmental programmes for the gifted in science, mathematics, languages and computer as well as developmental activities to suit the needs and abilities of those students. Curricula are approved by the MOE.

**Private education**

The Ministry of Education makes efforts to encourage the private sector to invest in education through the establishment of educational institutions at the different educational levels.

In 1997/98, the percentage of students enrolled in private institutions, in comparison with the total number students enrolled, was as follows:

**Percentage of students enrolled in private establishments, 1997/98**

<table>
<thead>
<tr>
<th>Level</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-school</td>
<td>99.54%</td>
</tr>
<tr>
<td>General education</td>
<td>12.56%</td>
</tr>
<tr>
<td>Higher education</td>
<td>34.78%</td>
</tr>
</tbody>
</table>

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
School plans in private education institutions are established in accordance with the MOE regulations, and under its supervision.

Schools at the basic and secondary education levels are usually established by individuals, companies and charitable societies. They apply curricula approved by the Board of Education and abide by admission rules and holiday instructions.

In the academic year 1997/98, the number of kindergartens was 930; the total number of children enrolled was 69,108 and the number of teachers 3,335. The number of private schools (basic and secondary) was 563, the total number of students enrolled was 160,379 and number of teachers 8,240. In 2000/01 there were 1,164 preschools, 592 basic schools and 137 secondary schools in the private sector.

A number of community colleges were established by the private sector based on general and special accreditation criteria elaborated by the Ministry of Higher Education, according to the Higher Education Act No. 28 of 1985. The Ministry approves the curricula, study plans, holidays, fees and admission conditions determined by the Council of Higher Education. Community colleges offer vocational and educational programmes at the end of which students sit for a comprehensive exam held by the Ministry annually. Successful students are given a diploma which qualifies them for work in the public and private sectors.

In 1997/98, the number of community colleges (public and private) amounted to forty-five. Currently, Al-Balqa Applied University is responsible for their supervision.

Private universities offer programmes leading to the B.A. degree in a variety of specializations, in accordance with rules and conditions set down by the Council of Higher Education, and according to which these universities are accredited. In 1997/98, there were nine private universities and three university colleges with 32,285 students enrolled.

**Means of instruction, equipment and infrastructure**

In light of the efforts to efficiently utilize educational technologies as an element of the curriculum, the Ministry of Education developed facilities to cope with technological development. During the implementation of the Educational Development Plan, through the school year 1997/98, the following accomplishments in the field of educational technologies have been achieved:

- provision of educational computer laboratories to 68% of the targeted schools;
- provision of specialized scientific laboratories to 52% of schools;
- a total of 17,064 instructional equipment (audio and video) and 6,400 computers provided to Ministry schools;
- production of 125, 400, and twenty-four television, broadcast and computer programmes respectively;

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
• production of 52,500 laboratory equipment and fifteen teaching kits;
• provision of special halls to about 40% of school libraries;
• establishment of ten learning resource centres distributed across the governorates, which offer services to teachers, students and the community utilizing new educational technologies in the educational process.

In order to develop curricula and school textbooks, about 236 titles, in addition to numerous additional copies, have been prepared for basic education with the aim to meet the needs of the students. In addition, the estimated number of computers in schools run by the Ministry of Education amounts to 7,189. The estimated budget for preparing curricula and textbooks for the school year 1998 was about JD320,000.

In 1999/2000, the total number of students enrolled in schools operated by the MOE was 973,490. Out of these, 119,582 students (or 12%) were in owned double-shift schools, 107,188 (11%) were in rented schools, and 4,261 (0.4%) in annexes to owned schools. Evidence shows that many of the problems associated with rented and double-shift schools (small rooms, insufficient spaces for essential facilities, unsafe physical conditions, etc.) have proven to have negative effects on the quality of education. Studies conducted by the MOE in 2002 indicate that a considerable number of public schools are unsafe, overcrowded and lack appropriate and adequate learning resources. Overcrowding is a problem in 39% of MOE owned single-shift schools, over 75% of rented schools, 52% of rented annexes to owned schools, and close to 70% of double-shift schools. In 2002, a total of 308 schools were reported by the various directorates as schools that need heavy maintenance and rehabilitation. An additional 32 double-shift schools also need maintenance.

### Adult and non-formal education

Various non-formal education programmes are offered in Jordan, such as literacy programmes, evening classes and home studies which provide education for adults to continue self-learning and sit for school and general examinations. Non-formal vocational training (short courses) and cultural centre programmes are also offered to adults.

Special attention is paid to literacy and adult education programmes, in particular, and to non-formal education programmes, in general. A plan for this purpose was established aiming at: reducing the rate of illiteracy from 11% in 1997 to 8% by the year 2000; reinforcing literacy programmes by introducing agricultural, health and cultural education skills to meet the needs of the labour market; improving compulsory education conditions in order to reduce failure and drop-out in the basic cycle; developing the quality of non-formal education programmes; diversifying teaching methods and content; and developing trainers and supervisors capabilities in illiteracy eradication and adult education programmes.

Within the framework of implementation of the previous plan, the following indicators reflect the progress achieved in the field of non-formal education for the school year 1997/98:

• establishment of 635 literacy centres in various areas of the Kingdom, fifty-three centres for males and 582 for females, comprising a total of 11,226 learners;

• the number of those enrolled in evening classes amounted to 3,447, and that of learners in the home studies programme was 567;

• the number of those enrolled in the summer centres amounted to 5,010.

Cultural centres provide non-formal education and training through vocational and academic training courses, at the end of which the student obtain a certificate recognized by the MOE. The number of these centres, in 1999/2000, was 464—distributed across various directorates of education in the governorates and districts. The programmes of these centres are diversified and the duration of courses ranges between one month to one year. These programmes provide more than 115 academic and specialized training courses, with some 42,784 students enrolled and 3,500 teachers in 1999/2000.

Teaching staff

One of the Ministry of Education’s main fields of interest has always been the upgrading of teachers qualifications, and the improvement of the teaching and learning process. Conforming to this principle, the Education Act No. 3 of 1994 stipulates that every teacher in any stage, from kindergarten to secondary cycle, must have a university degree (at least a bachelor’s degree), whereas the supervisor must be holder of a postgraduate degree. Basic education teachers must hold a bachelor’s degree and secondary school teachers must hold a bachelor’s degree and a one-year postgraduate diploma.

Plans have been implemented for achieving these requirements. There are two types of certification—pre-service and in-service—according to which the following three categories have been qualified through the school year 1997/98:

• basic education teachers who hold community college diplomas to the first university degree: 46% of this group have been certified;

• secondary education teachers with university degrees to the one-year postgraduate Higher Diploma in Education: 76% of this group have been certified;

• educational leaders and supervisors to the M.A. degree: 62% of this group have been certified.

In addition to the above-mentioned programmes, there are comprehensive in-service training courses on modern teaching methods, new curricula and textbooks. As of the school year 1997/98, the following staff had been trained: about 95% of teachers; 92% of school principals; 85% of support technical cadres; and 82% of educational supervisors.
The General Directorate of Training in the MOE is responsible for planning these programmes in co-operation with educational experts as well as with international and regional organizations for the purpose of training, certification and supervision of teaching staff and for upgrading the competence of administrative staff at the central and field (directorate) levels.

Pre-service training programmes focus on effective teaching methods, skills related to work, co-operative teaching, skills for applying knowledge to practical life, and critical thinking.

Teachers are selected for the job through competitive measures and on the basis of existing needs, specialization, year of graduation, experience and educational qualification. Although there are general criteria for employment, a quota is given to some categories, such as orphans of fathers who served in the Jordanian army, poor families and the handicapped who hold an academic qualification, provided that their percentage does not exceed 5%. Generally speaking, promotion takes place after passing five years in a grade, class or category. It is possible to be promoted earlier if the teacher gets a higher academic degree, or if his/her performance is distinctive.

Teachers’ workload (average number of weekly periods dedicated to classroom teaching) depends upon the educational cycle as shown below:

<table>
<thead>
<tr>
<th>Cycle</th>
<th>Average no. of weekly periods of teaching</th>
</tr>
</thead>
<tbody>
<tr>
<td>Class teacher (Grades I-III)</td>
<td>27</td>
</tr>
<tr>
<td>Basic education teacher (Grades IV-X)</td>
<td>24-26</td>
</tr>
<tr>
<td>Secondary education teacher (academic and vocational)</td>
<td>22-24</td>
</tr>
<tr>
<td>Practical training teachers at vocational schools</td>
<td>32-36</td>
</tr>
<tr>
<td>School principal-assistant and principal teacher</td>
<td>12</td>
</tr>
</tbody>
</table>


Salaries are determined according to the Civil Service Regulation No. 1 of 1988 and the Unified Allowance Regulation No. 23 of 1998. Salaries and allowances are classified according to academic qualifications, category, grade and nature of work. The Civil Service Regulation applies to all employees, including teachers.

Educational research and information

The Ministry of Education has established the General Directorate of Educational Research and Studies and one of its basic units is the Directorate of Educational Research and Studies whose tasks are: to identify problems concerning the teaching-learning process; to select researchers to conduct studies and follow-up their implementation; to conduct studies and research related to the education system; and to utilize the results of studies and research to improve the teaching-learning process.

In the academic year 1996/97, studies were conducted on the following main issues: evaluation of school gardens and of the role of agricultural coordinators in
their development; kindergartens; evaluation of the activities of educational supervisors; analysis of the preliminary sources related to the Teacher Institute and the Arab College in Jerusalem; evaluation the work of educational research members in the general directorates of education; analysis of the reports of the co-ordination and education committees in the field; evaluation of the twinning programme between public and private schools; features characterizing the weakness of Grade III pupils in Arabic language; reasons which hinder students from using the standard Arabic language.

The research budget of the Ministry for the academic year 1998 is estimated at JD26,000 distributed as follows: conducting of research; stationery and publications; and rewards for researchers, co-ordinators and evaluators of educational research.

In addition, there are other institutions and organizations concerned with educational research in Jordan, such as: the National Centre for Human Resource Development, the universities, the Educational Research and Development Centre of UNRWA, etc.

Educational information is mainly used by: those responsible for the educational policy and decision-makers; general directors, directors of education, specialized directors, heads of divisions, staff at the Ministry (central level) and in the field; researchers from universities, ministries, and other concerned organizations; school principals, educational supervisors and teachers; students and parents.

Educational data needed are provided by the Computer Centre, the Data and Statistics Division, or Unit of Information in the Ministry. Information can be classified into: technical educational data related to computer utilization in the teaching process, and mastery of this skill by students; information related to the administrative and financial affairs, mainly utilized by educational decision-makers; professional information on how to effectively use computers in the educational process.

A project for computerizing the Ministry has been prepared, which includes the establishment of an administrative educational information network for the purpose of linking the Ministry (central level) to the general directorates and field directorates of education; utilizing computers as a teaching aid; and activating the role of learning resource centres and pioneer centres.

The MOE has prepared a plan which is expected to be achieved within the next five years, if the financing obstacles are overcome. This plan aims at linking the computer centre, three field directorates of education, 100 schools, and the learning resource centres to the Web.

Compiled by UNESCO-IBE (http://www.ibe.unesco.org/)
References


Web resources

