

## 1. GENERAL

The goal of this publication is to present an up-to-date picture of education in Israel in its various aspects. To achieve this, the publication contains indicators of the Israeli educational system compared with those of countries belonging to the Organisation for Economic Co-operation and Development (OECD). The data were taken from the OECD publication *Education at a Glance – OECD Indicators 2006*,<sup>1</sup> and the OECD website, and they relate to 2004.

The publication presents data on the output of educational institutions and accessibility of education, allocation of financial and human resources to education, belonging to the educational system, the educational environment and internal school organization, while relating to age, gender and level of education.

In addition, this publication contains data from PISA 2000 (Programme for International Student Assessment), which provides a perspective on the feelings of pupils aged 15 years regarding their school and professional future. These data were taken from the publication *Education at a Glance – OECD Indicators 2004*,<sup>2</sup> and they relate to 2000.

Besides, there are findings from the 2003 TIMSS (Trends in International Mathematics and Science Study) examinations, which examine the extent of success of fourth–eighth Grade pupils in mathematics and science. Data relating to science studies were taken from the publication *TIMSS 2003 International Science Report*<sup>3</sup> and data relating to mathematics studies are taken from *TIMSS 2003 International Mathematics Report*.<sup>4</sup>

Chapter F, of TIMSS, presents only selected indicators, whereas Chapter E, of PISA, presents all the indicators that were reported also in Israel.

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<sup>1</sup> See OECD. *Education at a Glance. OECD Indicators 2006* (Paris, 2006).

<sup>2</sup> See OECD. *Education at a Glance. OECD Indicators 2004* (Paris, 2004).

<sup>3</sup> See Michael O. Martin, Ina V.S. Mullis, Eugenio. J. Gonzales, & Steven.J. Chrostowski. *TIMSS 2003 International Science Report* (Boston, 2004).

<sup>4</sup> See Ina V.S. Mullis, Michael O. Martin, Eugenio. J. Gonzales, & S.J. Chrostowski. *TIMSS 2003 International Mathematics Report* (Boston, 2004).

## 2. MAIN FINDINGS

### The Output of Educational Institutions and the Impact of Education

The indicators in Tables 1–13 describe the achievements of the adult population in formal education, provide an assessment of the knowledge and skills existing in society, and present the influence of changes in the labour market on the state of education.

The rate of those who have at least a secondary education is higher in Israel than the average in the OECD countries, in all age groups (see Table 2). In Israel, as in 23 of the 30 countries in the organization, at least 60% of those aged 25–64 have at least a higher secondary education; the rate is higher in the younger age groups of this population.

The rise in demand for workers who have higher secondary or tertiary education<sup>5</sup> led to a rise in the rate of those who have an education of this type; a process reflected in the differences in education between age groups. If on average 18% of those aged 55–64 have a tertiary education in the OECD countries, then among those aged 25–34 the rate rises to 31%. In Israel the difference is smaller: 42% of those aged 25–64 have a tertiary education, compared with 49% among those aged 25–34. This increase in Israel is mainly due to a rise in tertiary-type A,<sup>6</sup> not in tertiary-type B education<sup>7</sup> (see Table 3).

On average, in the OECD countries the most common level of education is the higher secondary school level (42%); whereas in Israel, the most common level is that of tertiary education (45%). Table 1 shows that Israel is among the countries in which the percentage of those with tertiary-type A education is the highest; and among the OECD countries only Norway and the USA equal her in the rate of people with academic degrees (29% among those aged 25–64; see also Table 3).

The average number of years of schooling in Israel is higher than the average in the OECD countries at every age level, among both women and men. As in most OECD countries, in Israel too, the number of formal years of schooling is higher in the younger

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<sup>5</sup> Post-secondary or higher education.

<sup>6</sup> Higher education.

<sup>7</sup> Post-secondary education.

age groups than in the older ones (among those aged 25–64), a trend that is especially evident among women (see Table 4).

Completion of higher secondary school studies has become universal in recent years. The rate of those completing these studies, out of the typical age group, is an average of 81% in the OECD countries, compared with 93% in Israel. The rate of girls completing higher secondary school is higher than the rate of boys in all countries except for Turkey and Korea. In Israel, as in most OECD countries, more girls than boys complete general studies and more boys than girls complete vocational studies. It should be noted that Israel is one of three countries (the others are Finland and Ireland) in which at least 90% of the population of the appropriate age have completed a programme of studies leading towards a tertiary-type A education (see Table 5).

Among the graduates of tertiary education, the rate of graduates from the physical sciences, health and welfare, agriculture and engineering is lower in Israel than the average in the OECD countries. In the humanities and the arts the rate in Israel is similar to the average in these countries; whereas in the fields of education, life sciences, social sciences, business administration and law, the rate of graduates in Israel is higher than the average in these countries, as it is in mathematics, statistics and computer sciences (see Table 7).

The rate of women receiving an academic degree is higher in Israel than the average in the OECD countries in all fields of studies, except for engineering. Similar to the average in those countries, in Israel too, the rate of women receiving an academic degree in the fields of the humanities, the arts, education, and health and welfare is significantly higher than the rate of men receiving degrees in these fields; whereas in the fields of mathematics, computer sciences and engineering, the rate of men receiving academic degrees is higher (see Table 8).

With the rise in the level of education, the rate of employed persons<sup>8</sup> rises and the rate of unemployed<sup>9</sup> drops. The difference between men and women in the rate of employed persons declines in most of the countries presented (see, for example, Tables 10–13). However, the rate of employed persons among men is higher than the rate among women at all levels of education in all countries presented.<sup>10</sup> The difference in the rate of employed persons between the graduates of various levels of education is

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<sup>8</sup> Employed persons aged 25–64, as a percentage of the general population at these ages.

<sup>9</sup> Unemployed persons aged 25–64, as a percentage of the labour force at these ages.

<sup>10</sup> Except for Iceland, at certain levels of education.

particularly great among women: the rate of employed people among women who complete lower secondary schools is an average of 49% in the OECD countries, and reaches up to 35% in Hungary, Poland, Slovakia, Turkey and Chile, as well as in Israel (25%). However, the rate of employed women with a tertiary-type A education is an average of 79% in the OECD countries, and at least 75% among those countries, except for Japan, Korea, Mexico and Turkey. In Israel the rate of those employed at all levels of education is lower than the average in the OECD countries, and only the rate of employed academic women in Israel is identical to the average in those countries (see Table 10).

The difference in the rates of employment between those with a low level and those with a medium level of education is greater than the difference in the rates of employment between those with a medium level of education and those with higher education. These differences, on average, do not lessen with time in the OECD countries nor in Israel. The rate of unemployed in Israel is among the highest in the countries presented at all levels of education, and throughout the years remains higher than the average among all the countries (see Tables 12 and 13).

### **Financial Resources Invested in Education<sup>11</sup>**

The indicators appearing in Tables 14–28 provide data on the resources invested in public and private education, in studies in educational institutions and outside of them, and also on main and supplementary services (meals, transportation, etc.). In addition, they present the ratio between the national expenditure on education and its components, and the Gross Domestic Product (GDP).

A comparison of average expenditures per pupil/student in Israel in terms of Purchasing Power Parity (PPP) indicates that the average national expenditure per pupil/student at all levels of education in Israel is lower than the average expenditure in the OECD countries.

At the pre-primary level of education, the expenditure per pupil in Israel was \$3,718, similar to Japan – \$3,766, but less than the average expenditure in the OECD countries. At the primary level, Israel spent \$5,017 per pupil, similar to Finland and France, and similar to the average in the OECD – \$5,055. In secondary education the expenditure on education per pupil in Israel totalled \$5,959, and was lower than the

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<sup>11</sup> For 2003.

average in the OECD countries – \$6,936. In three countries – Mexico, Slovakia and the Czech Republic – the expenditure at this level was lower than in Israel.

In tertiary education institutions the expenditure on education per student in Israel reached \$11,945, similar to the expenditure in the United Kingdom, Belgium, Germany and Japan, and slightly higher than the average in the OECD countries (see Table 14).

The ratio between annual expenditure on education per pupil/student and GDP per capita in Israel – at the pre-primary and post-secondary non-tertiary level – was lower than the average in the OECD countries; at the other levels of education it was similar or higher (see Table 16).

A comparison of the data of Israel with those of other countries for 2003 indicates that the total expenditure on education in Israel as a percentage of the GDP is higher than that of all the countries included in the comparison. In Israel the national expenditure on education reached 8.5% of the GDP, compared with 5.9% in the OECD countries. In a number of countries – Iceland (8.0%), Korea (7.5%) and the USA (7.5%) – the expenditure as a percentage of the GDP was close to that of Israel (see Table 17).

When conducting this comparison it must be taken into account that the percentage of young people in Israel is relatively high compared with most OECD countries; so that in Israel, on the one hand, the number of working residents who can finance education is relatively small and, on the other hand, the percentage of pupils/students is relatively large. Therefore, when dividing the expenditure on education by the number of pupils/students, each pupil's/student's share in Israel is relatively smaller than that of other countries. The following table presents the percentage of those aged 0–24, as against the percentage of those aged 25–64 in the general population of Israel, compared with other countries.

### Distribution of Population by Age – 2003 (Percentages)

Country	Persons aged 0–24	Persons aged 25–64
Israel	45.0	45.1
Ireland	37.2	51.7
United Kingdom	31.1	53.0
Denmark	29.9	55.3
Sweden	29.7	53.1
Belgium	29.5	53.5
Germany	26.5	55.9
Italy	25.0	56.0

From the data on the distribution of expenditure in educational institutions by sources of funding (public and private) as a percentage of the GDP, it appears that in Israel the government finances most of the expenditure at all levels of education (public sources), similar to all the countries of the organization. The government (public) expenditure on education in Israel in 2003 (including the expenditure of local authorities), except for scholarships to pupils/students, reached 7.0%, compared with an average of 5.2% in the OECD countries (see Table 17).

The public expenditure on primary, secondary and post-secondary non-tertiary education in Israel in 2003 was among the highest (4.6%), and similar to that of New Zealand, Norway and Sweden (4.5%, 4.6% and 4.5%, respectively). The public expenditure on tertiary education in 2003 reached 1.3% compared with an average of 1.1% in the OECD countries, and was lower than in Norway, Finland, Sweden and Switzerland (see Table 18).

A comparison of the expenditure on educational institutions by level of education indicates that in Israel the expenditure was particularly high in institutions of primary, secondary and post-secondary non-tertiary education – 4.8% of the GDP, compared with 3.9% in the OECD; and in institutions of tertiary education – 2.0% of the GDP in Israel, compared with 1.4% in the OECD (see Table 18).

The public expenditure share of total national expenditure on education in Israel in 2003 totalled 80.2%, similar to that of 1995, and lower than the average in the OECD countries (88%). The government expenditure's share of the national expenditure on education ranges from 60.0% in Korea to 98.4% in Norway (see Table 21).

The share of public expenditure on education out of total public expenditure in Israel was 13.7%, compared with an average of 13.3% in the OECD countries. The share of public expenditure on primary and secondary education out of public expenditure in Israel (8.9%) was similar to the average in the OECD countries (9.0%). The share of expenditure on tertiary education out of total public expenditure in Israel (2.5%) was relatively smaller than the average of countries in the OECD (3.1%, see Table 24).

Public assistance for pupils/students provided as scholarships, loans and grants to households in Israel is less than the average in the OECD countries, at all levels of education (see Tables 25 and 26).

A comparison of types of expenditure indicates that in the group of institutions of primary, secondary and post-secondary non-tertiary education,<sup>12</sup> the distribution in Israel between current expenditure (approximately 92%) and fixed capital formation (approximately 8%) is similar to the average distribution in the OECD countries. However, it also indicates that in Israel the labour costs' share in these institutions (approximately 75%) is smaller than the average in the OECD countries (approximately 80%).<sup>13</sup>

In tertiary education institutions in Israel the current expenditure constitutes approximately 90%, and capital formation approximately 10%, similar to the average in the OECD countries. The share of labour costs in these institutions in Israel reaches approximately 74%, compared with an average of approximately 66% in the OECD countries (see Table 28).

### **Access to Education, Participation and Progression**

Indicators in Tables 29–39 present, among other things, the preferences and employment situation of pupils/students in the educational system during their studies. These tables also help to predict future enrolment in higher levels of education; and the number of years of schooling distributed among the population, from when the children first enter the educational system.

Table 29 presents the number of years of formal schooling foreseen for the pupils/students. The forecast is influenced, among other things, by the dropout rate and from repeated attendance in the same class, as well as the mode of the studies. There

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<sup>12</sup> Pre-academic preparatory programmes.

<sup>13</sup> Data on total wages expenditure also include wages of workers who are not teachers and the estimated value of budgetary pensions of government workers.

are countries such as Australia, Belgium, New Zealand, Sweden and the United Kingdom, in which partial studies in higher secondary school are common, and there a more protracted period of study is expected. In most OECD countries the period of girls' belonging to the educational system is longer than that foreseen for boys – the average difference in these countries is 0.8 years, and in Israel – 0.7 years.

The rate of pupils among children aged 5–14 in Israel is similar to the average in the OECD countries. The rate of pupils/students among those aged 15–19 in Israel is significantly lower than the average in these countries (64.6% and 80.5%, respectively, see Table 30). Table 31 indicates that until age 17 the rate of belonging to the educational system in Israel is higher than the average in those countries, but it drops in the 18–20 age group, which can be attributed to compulsory military service in Israel.

58% of the population in Israel enrolled in tertiary-type A education in 2004, as against 53% on average in the OECD countries. Compared with 2000 it is evident that the rate grew in Israel and in the OECD countries by approximately 20% on average. The enrollment rate in Israel is higher than in most of the countries. This also can be explained by compulsory military service in Israel (see Table 32).

Most of those participating in tertiary education studies in Israel study in government-dependent private institutions,<sup>14</sup> whereas in the OECD countries most of the students in these levels of education belong to public institutions (except for Belgium, Japan, Korea, Holland and the United Kingdom; see Table 33).

It is evident that in secondary school there is a preference for programmes that lead to tertiary-type A education – an average of 67.7% in the OECD countries, and in countries such as Finland, Poland, Portugal, Sweden, Turkey, the USA and Israel this rate is over 90%. In the OECD countries 50.7% on average study in the general programmes and 45.4% in the vocational ones; in Israel 64.8% study in the general programmes, and 35.2% – in the vocational ones (see Table 34).

On average, it is expected that the division of time among those aged 15 in 2004 in Israel in the coming 15 years will be as follows: 6 years will be invested in studies (in the OECD countries an average of 6.9 years will be invested), 4.4 years in work (in the OECD countries – an average of 6 years). Compulsory military service in Israel also influences the length of time spent outside the labour market (since the soldiers neither work, nor seek work nor study) – 3.7 years, compared with an average of 1.3 years in the OECD countries.

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<sup>14</sup> See Chapter 3: "Definitions and Explanations," Para. 7–8.

Relative to men, women in all OECD countries and in Israel are expected to have a shorter period of employment during the ages of 15–29; this is partially explained by the time invested in studying (it is expected that women in this age range will invest an average of 7 years in acquiring an education, compared with 6.7 years spent by men), but it can also be related to additional factors, such as taking care of children (see Table 35).

If this period is divided into thirds, the effect of the compulsory military service common in Israel is evident: whereas in the OECD countries an average of 4.9% among those aged 15–19 do not belong to the labour force and do not study, in Israel this rate is 24% (the rates for men and women are similar). Whereas among those aged 20–24, an average of 8.8% are neither in the labour force nor studying in the OECD countries, in Israel the rate is 32.6% (27.2% of women and 37.8% of men). Among those aged 25–29, the rate of those neither in the labour force nor studying in the OECD countries is higher – 11.7% (19.5% of women and 4% of men), and the rate of all those studying is lower – 15.8%. In Israel the rate of those neither in the labour force nor studying is lower – 18.1% (23.4% of women and 13% of men), and the rate of all those studying is higher – 20.9% (see Tables 36, 37 and 38). These trends have been constant throughout the years (see Table 39).

In the OECD countries the rate of women studying is higher than the rate of men studying in all age groups, and the rate of men working is higher than that of women. In contrast, in Israel the rate of women aged 15–24 working or studying is higher than the rate among men of the same age group; and in the 25–29 age group the opposite holds – the rate of those studying and working among men is higher than the rate among women (see Tables 37 and 38).

### **Educational Environment and School Organization**

The indicators in Tables 40–45 describe the teaching staff and study conditions. The number of work hours required from teachers, together with teachers' wages and class size,<sup>15</sup> reflect the employment conditions of the teaching staff, the allocated resources and the quality of teaching.

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<sup>15</sup> The indicator of class size relates to primary education and lower secondary schools only, because it is difficult to estimate and compare class size at higher levels of education, in which pupils/students usually belong to several classes, depending on the field of study.

The average number of pupils in a class in primary education in the OECD countries is approximately 22, but that changes greatly from country to country: from 34 pupils in a class in Korea to approximately 16 pupils in a class in Luxembourg and Portugal. In Israel an average of approximately 27 pupils study in a class.

In lower secondary schools the average number of pupils in a class is higher than in primary education, and ranges from approximately 36 in Korea to approximately 19 in Denmark, Iceland, Luxembourg and Switzerland. In lower secondary schools in Israel an average of approximately 32 pupils study in a class, which is only less than that in Japan and Korea (see Table 40).

The ratio between the number of pupils and teaching staff in primary education (approximately 17 pupils to a teacher) is greater on average than that in secondary education (approximately 13 pupils to a teacher), both in Israel and in the OECD countries, (see Table 41).

Teachers' wages after 15 years of experience, relative to GDP per capita, is low in Hungary (0.91), Norway (0.87), Poland (0.83) and Iceland (0.69), as well as in Israel (0.73).<sup>16</sup> It should be noted that in countries such as Hungary, Poland, Turkey, Chile and Israel both GDP per capita and teachers' wages are low compared to the rest of the OECD countries; this is in contrast to countries such as Korea, Portugal and Spain, in which the GDP per capita is small but teachers' wages are equal to the wages in countries where the GDP per capita is higher. In Germany, Luxembourg and Switzerland the GDP per capita is large and teachers' wages are high.

The wages of the teaching staff at the beginning of their career in primary and secondary education in Israel, is approximately one-half of the average in the OECD countries, and remains so after 15 years of experience as well (see Table 42).

In the OECD countries teachers in primary schools teach 805 hours a year on average. Israel (where the number of hours is 1,025) is second only to the USA (in which the number of hours is 1,080) in net teaching time at this level of education.

In lower secondary schools the average number of teaching hours ranges from 534 in Japan to more than 1,000 hours in Mexico and the USA, while in the OECD countries it is 704. In lower secondary schools in Israel there are 788 teaching hours invested a

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<sup>16</sup> The ratio for these teachers in higher secondary school is 1.12 in Hungary, and 0.94 in Iceland.

year. Teaching time invested in higher secondary schools in Israel (665 hours) is similar to the average in the OECD countries (663 hours).

The number of teaching days in Israel (183 in primary education and 175 in secondary education) is lower than the average in the OECD countries (see Table 43).

At the higher levels of education the age of teachers on the teaching staff is high. Teachers in Israel are younger than those in the OECD countries on average, significantly more so in primary education: in the OECD countries an average of approximately 28.4% of the teachers are aged over 50, and in Israel only approximately 17.5% are at these ages (see Table 44).

Most of the teachers in primary education are women – an average of 78.3% in the OECD countries and 85.3% in Israel. In the higher levels of education the rate of women in the teaching staff is small, but they still constitute a majority up to the level of higher secondary school (see Table 45).

### **PISA Programme**

The Programme for International Student Assessment – PISA – is a research project conducted by the OECD to measure the success of youths aged 15 in coping with the challenges of the contemporary information society.<sup>17</sup> The indicators presented relate to the year 2000.

The employment aspirations of pupils influence their choices of programmes of studies, their general attitude to studying, and their sense of involvement in the framework of studies. The assumption is that the more the pupils arrive at their studies with a greater feeling of involvement, the better their educational achievements. The concept of “involvement” among pupils in school has two aspects: a sense of belonging and actual participation.<sup>18</sup>

The average of the two aspects was determined as 500 points, and the standard deviation – as 100 points.

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<sup>17</sup> The sample approved by the PISA team requires the participation of at least 95% of the appropriate population. That is the reason that Holland was not included in the relevant tables.

<sup>18</sup> Participation was estimated by checking the frequency of absences, lateness and non-entry into classes during the two weeks prior to the survey.

The sense of belonging of pupils aged 15 years in Israel is greater than that of pupils in any other country: an average of 544 points (and a standard deviation of 115). However, their actual participation is the least – an average of 428 points (a standard deviation of 5.3; see Table 46).

The rate of those aged 15 in Israel who anticipate white collar employment is slightly lower than the average in the OECD countries (69.3% in Israel, compared with 76.1% on average in the OECD countries), but the rate of those anticipating blue collar employment in Israel (30.8%) is higher than the average (23.9%) in the OECD countries. In contrast with most OECD countries, in Israel the rate of those anticipating white collar employment (highly skilled) is higher among boys than among girls (see Table 48).

### **TIMSS Research**

Trends in International Mathematics and Science Study (TIMSS) tests measure achievements in mathematics and science of fourth and eighth Grade pupils. The research is conducted by the International Association for the Evaluation of Educational Achievement (IEA). The tables regarding the TIMSS tests refer to 1995, 1999 and 2003. The international average in these tables includes all the countries that participated in the research.

In Israel these tests were conducted in the eighth Grade in those three specified years, and in the fourth Grade only in 1995. Due to a change in the survey population the data on Israel for 1995 are not presented.<sup>19</sup> Therefore, this publication only relates to 1999 and 2003 in the relevant tables, and to the eighth Grade only.

According to Ruth Zuzovsky's research: "The desired target population in Israel was designated as Grade 8 pupils in the regular, formal, recognized educational system; except for ultra-Orthodox pupils (Other Supervision) and Arab pupils from East Jerusalem. The total deductions of pupils from the desired target population at the school level was 15.2%, of which a large group was ultra-Orthodox pupils. This rate is higher than the upper limit defined by the researchers, and therefore Israel was designated by a special mark in presentations appearing in the international report.

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<sup>19</sup> This is also the case with Italy and South Africa, and in 1999 – with Australia and Slovenia.

In addition, for recognized reasons, pupils were deducted from the sample at a total rate of 8.6%; here too, there was a deviation from the limit set by the researchers.”<sup>20</sup>

Tables 49 and 50 present comparative data of achievements of eighth Grade pupils in mathematics and science in 1995, 1999 and 2003. In 2003 the average grade in mathematics of pupils in Israel (496) was similar to the correspondent in Sweden (499), Scotland (498), New Zealand (494) and Slovenia (493). The achievements of pupils in Israel in science (488) were similar to those of pupils in Norway (494), Italy (491) and Bulgaria (479). Israel is among the countries in which grades improved between 1999 and 2003, both in mathematics (by 29 points) and in science (by 20 points). This improvement is greater than that of every OECD country, and of most of the other countries that participated in the tests. However, even after this improvement, the achievements of pupils in Israel are lower than those of pupils in most of the OECD countries that participated.

A comparison of achievements between the genders indicates that in most countries the achievements of the boys are greater than the achievements of the girls, in mathematics and science. In the international average the boys have the advantage in science at an average of 6 points, and in Israel – of 20 points. In the international average the boys have the advantage in mathematics at an average of 1 point, and in Israel – of 8 points (see Tables 51 and 52).

An average of 22% of eighth Grade pupils in all the participating countries, and 15% in Israel, study in schools that have a low rate<sup>21</sup> (less than 10%) of economically disadvantaged pupils. An average of 31% of eighth Grade pupils in these countries, and 25% in Israel, study in schools where most of the pupils (more than 50%) are economically disadvantaged. In schools where up to 10% of the pupils have a low economic status, the grades are higher than in schools where more than 50% of the pupils have such status, in all OECD countries and in most of the countries which participated in TIMSS – 2003, as well as in Israel (see Table 54).

The rate of pupils with low attendance in schools in Israel decreased in 2003 to 16%, compared with 36% in 1999. The rate of pupils in Israel with high attendance discipline

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<sup>20</sup> See Ruth Zuzovsky. *Achievements of Eight Grade Pupils in Mathematics and Science, and the Educational Context of Teaching these Subjects in Israeli Schools. Findings of the Third International Research Project in Mathematics and Science TIMSS-2003*. (Tel Aviv, 2005), p. 12 (Hebrew only).

<sup>21</sup> According to the principals' reports.

was 13% in 2003, compared with 7% in 1999; and lower than the international average (23%, see Table 55).

### 3. DEFINITIONS AND EXPLANATIONS

Definitions of the indicators, explanations of the method of their calculation, comments on the differences between educational systems in various countries, and other explanations connected with the OECD tables, are presented at the beginning of each chapter and in Appendix 3 of the publication *Education at a Glance: OECD Indicators 2006*.<sup>22</sup>

Definitions of indicators and the method of their calculation, and other explanations related to TIMSS tables, can be found in *TIMSS 2003 International Science Report*, and in its appendices.<sup>23</sup>

The numbers in parentheses in the table titles relate to the numbers of the tables in these publications.

The following definitions should be added to the ones appearing in those volumes:

- (1) The “public” sector includes the units: government ministries, National Insurance Institute, local authorities, national institutions and non-profit institutions whose main expenditures are financed by the above bodies.
- (2) “Direct public expenditure” includes direct expenditures by the government and local authorities as well as (net) transfers to non-profit institutions.
- (3) In contrast to other publications on national accounts, the term “subsidies” indicates transfers to households and private entities.
- (4) “Purchasing Power Parity” (PPP) is the rate of currency conversion that equalizes the purchasing power of different currencies by eliminating the differences in price levels between countries. This means that a given sum of money, when converted into different currencies at PPP rates, will buy the same basket of goods and services in all countries.
- (5) Partner countries – refers to countries that participated in the survey, even though they are not members of the OECD. In this publication, Israel is included in this category, despite its special status as an observer.

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<sup>22</sup> See OECD. *Education at a Glance. OECD Indicators 2006* (Paris, 2006).

<sup>23</sup> See Martin et al. *TIMSS 2003 International Science Report* (Boston, 2004).

- (6) Public institutions are institutions that are supervised and administered directly by a public or government educational authority, or a government ministry/body (such as a committee or council).
- (7) Supported private institutions are institutions that receive more than 50% of their basic budget from government ministries.
- (8) Independent private institutions are institutions that receive less than 50% of their basic budget from government ministries.

#### 4. SOURCES

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#### Websites

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[www.oecd.org/edu/eag2006](http://www.oecd.org/edu/eag2006)

TIMSS and PIRLS International Study Center:  
<http://timss.bc.edu>