

RESOURCES

TEACHING STAFF

Teaching qualifications

Kindergarten

Kindergarten teachers are promoted according to three scales: A, B, C. Promotion from scale C to scale B requires two-year service on scale C, while promotion from scale B to scale A requires the completion of six-year service on scale B.

For the initial appointment of kindergarten teachers the following certification is required:

- university level department of pre-school education degree (*ptychion*);
- kindergarten teacher's College degree;
- teachers College department of pre-school education degree;
- any authorised (recognised) foreign university degree awarded on completion of kindergarten teachers training courses.

The person in charge of the one-post-kindergarten is the teacher of the school. The person in charge of two or three post kindergarten is the senior teacher. According to the same scale, the head-teacher is appointed by the local (district) educational authorities. Fulfilment of administration and teaching responsibilities lies with the head of the school.

Elementary school

Elementary school teachers are graded on three scales: A, B, and C. Promotion from scale C to scale B requires two-year service on scale C, while the promotion from scale B to scale A requires six-year service on scale B.

Along with the Lyceum leaving certificate, either of the following certificates is required for the initial appointment of elementary school teachers:

- university level degree (*ptychion*);
- elementary Teachers College degree;

- Vellas Ecclesiastical School ptychion;
- Thessaloniki's Upper Ecclesiastical School ptychion for those before the reform;
- any other equivalent ptychion that has been obtained abroad.

The person in charge of a one-post-elementary school is the teacher of the school. The person in charge of two-or three-post school is the senior teacher. According to the same scale, the head-teacher is appointed by the local education authorities. Article 11 (Law 1566) provides for the appointment of four or more class school heads.

The headmaster of a six-or-more-post school teaches 20 hours a week. The headmaster of a four-or-five-post school teaches 24-hours a week, while headmasters and teachers of the other schools teach 25-hours a week. Administration and teaching responsibilities rest with the head of the school.

Lower secondary education

The teachers teach the subject of their specialisation. They are university graduates and have followed four years of study in the subject concerned. The majority of them are civil servants with permanent posts. However, there are also deputies and teachers on hourly wages who are appointed to cover certain educational needs.

Upper secondary education

Upper secondary school teachers are university graduates; they have followed four years of university studies in their specialised subject.

Graduates from the technological education institutions (TEI), where studies last three years, may also be appointed in technical vocational Lycea (TEL), integrated Lycea (EPL) and technical vocational schools (TES). They teach subjects of a technical nature and have followed a one-year teachers training course in the College of Technical Education (PATES). They are also civil servants.

In-service training

The in-service teacher training was provided until now (1992-94) by 16 PEKs (regional training centres) and two units PATES/SELETE.

PEKs during their two years' operation (four terms of three months' duration each) trained teachers of primary and secondary education. Even teachers expecting a forthcoming appointment were trained for three terms.

Certain problems led to the decision for re-organisation of the PEKs. The major problems were:

- Insufficient teaching at schools where the trained teachers were employed. A class could change three teachers during the school year, one for each of the three sessions of the in-service teacher's training.
- Unwillingness of participation by the teachers, mainly because many of them had to travel long distances to teach from their PEK.
- The curriculum and the process of the training were not what the teachers expected and were far from what the administration aimed.

The reorganisation of the PEKs since March 1995, has included the following actions:

- one PEK for each prefecture;
- administrative and educational autonomy of PEKs;
- multiple training with emphasis on in school training;
- establishment of additional training services.

This practice has already begun with four PEKs as pilots.

Another type of in-service teacher training scheme is a two-year, post initial training course (*Metekpedefsi*), which is given in a separate institution. Attendance is conditional upon examinations. This type of training, which affects a very small part of the teacher population, is now available only for primary school teachers. That for secondary school teachers was abolished a few year ago.

Recruitment-Promotion

All nursery, primary and secondary school teachers are recruited and placed on tenure positions according to lists, which are compiled and maintained by the MoE (*Epetirida*). This list is held according to order of priority.

These lists refer to each category of education. Secondary education teachers in particular, are further separated, in special lists according to the subject of the teacher's specialisation.

The creation of this yearly-list (*Epetirida*) is determined according to certain criteria:

- Special social criteria as:
 - Whether one is an invalid or the off-spring of a war pensioner
 - Families having many children (over four children)
- Ph. D. qualification.

These two categories take priority only for the same year selection and they do not change the priority of all the applicants of the list.

FINANCIAL RESOURCES

Public expenditure for education

In this section the development of the expenditure of the Greek public education system during the recent 25 years (1970-94) is presented.

Total expenditure

As presented in Table 5.1, the total expenditure, current and capital, for the whole public education system, for which the MoE is responsible, presents a gradual increase. In periods of narrow state expenditure, the capital budget is the first expenditure to be reduced. The total current expenditure, shows a regular increase, as compared to the total capital expenditure, which has an increasing

Table 5.1. **Expenditure of the Ministry of Education**

	Current expenditure		Capital expenditure		Total expenditure	
	Current prices	Constant prices 1980	Current prices	Constant prices 1980	Current prices	Constant prices 1980
1970	5 300	20 385	1 100	5 556	6 400	25 940
1971	5 900	21 852	1 130	5 650	7 030	27 502
1972	7 420	26 219	1 870	8 657	9 290	34 876
1973	9 670	29 572	3 200	11 940	12 870	41 512
1974	11 500	27 711	2 240	6 474	13 740	34 185
1975	14 000	29 787	4 100	11 022	18 100	40 809
1976	17 300	32 458	5 400	12 357	22 700	44 815
1977	22 600	37 793	6 140	11 762	28 740	49 555
1978	29 500	43 834	7 800	12 420	37 300	56 254
1979	36 000	44 944	8 100	9 818	44 100	54 762
1980	42 060	42 060	6 660	6 660	48 720	48 720
1981	49 470	39 735	8 425	7 207	57 895	46 942
1982	69 680	46 268	10 370	7 880	80 050	54 148
1983	92 060	50 722	15 205	9 931	107 265	60 653
1984	117 180	54 655	24 185	13 679	141 365	68 334
1985	150 000	58 640	28 600	13 836	178 600	72 476
1986	180 528	57 365	33 600	13 228	214 128	70 593
1987	198 208	54 096	38 000	13 380	236 208	67 476
1988	242 000	58 187	40 300	12 794	282 300	70 981
1989	276 000	57 862	48 000	13 483	324 000	71 345
1990	365 000	64 302	49 000	11 470	414 000	75 772
1991	468 000	68 707	60 000	11 902	528 000	80 609
1992	535 000	68 298	69 000	12 007	604 000	80 305
1993	578 000	64 726	90 000	13 738	668 000	78 464
1994	665 000	66 490	125 000	17 036	790 000	83 526

Source: Ministry of Education.

trend, on the whole, but with irregular periods of increase and decrease, proportionate to the general economic policy.

Share of education in the state budget and GDP

The public education expenditure share of the state budget expenditure has been in last 25 years, 10 per cent, on average. Nevertheless, after 1987 it has steadily decreased, reaching 7 per cent in 1994. The reason for this, is the inproportionate growth of the state budget due to the increase of expenditure for the public debt.

On the contrary, the public education expenditure share in the GDP, has gradually increased, which is explained, on the one hand, to the public education expenditure increase, in constant prices, and, on the other hand, to the low rate of GDP increase (Table 5.2).

Table 5.2. **Share of educational expenditure to state budget and GDP**

	Percentage			
	Current expenditure	Capital expenditure	Total expenditure	GDP
1970	9.64	8.46	9.41	2.14
1971	10.05	7.75	9.59	2.13
1972	10.98	10.01	10.77	2.46
1973	12.45	11.57	12.22	2.66
1974	13.85	11.96	13.50	2.44
1975	9.91	12.54	10.40	2.69
1976	10.08	12.91	10.63	2.75
1977	11.29	13.43	11.69	2.98
1978	11.78	14.00	12.18	3.21
1979	11.11	11.82	11.24	3.09
1980	11.20	10.25	11.06	2.85
1981	10.82	8.96	10.50	2.82
1982	10.17	8.30	9.88	3.11
1983	9.91	8.69	9.72	3.49
1984	10.65	10.99	10.70	3.72
1985	10.61	10.40	10.57	3.87
1986	10.13	10.57	10.20	3.86
1987	9.31	10.44	9.47	3.70
1988	8.64	10.89	8.90	3.69
1989	8.21	11.15	8.54	3.52
1990	7.80	10.65	8.05	3.95
1991	7.93	10.53	8.16	4.22
1992	7.99	9.72	8.16	4.00
1993	7.09	9.23	7.32	3.94
1994	6.45	12.50	6.99	4.16

Source: Ministry of Education.

Expenditure by level of education

Current expenditure

As presented in Table 5.3, it is obvious that the pre-school and primary education expenditure, in constant prices, is gradually and steadily reducing (e.g. in 1970 47 per cent while in 1994 29 per cent), to the advantage of the secondary education (e.g. in 1970 23 per cent, and in 1994 37 per cent).

Table 5.3. **Share of current expenditure to the total of current expenditure**

	Percentage							Total
	Presc. + Prim.	Secondary	General	Technol.	Univers.	Tertiary	Other	
1970	47.14	23.04	70.18	2.79	13.02	15.80	14.02	100.00
1971	49.02	24.92	73.94	0.47	12.39	12.87	13.19	100.00
1972	47.38	24.36	71.75	0.58	14.22	14.80	13.45	100.00
1973	42.98	24.60	67.58	0.83	17.06	17.89	14.53	100.00
1974	38.94	24.27	63.21	1.18	13.79	14.98	21.81	100.00
1975	41.44	25.47	66.91	1.34	16.72	18.06	15.04	100.00
1976	40.00	28.23	68.23	1.77	15.91	17.68	14.09	100.00
1977	36.43	27.93	64.36	1.66	15.35	17.01	18.63	100.00
1978	37.62	27.39	65.02	1.86	14.51	16.37	18.61	100.00
1979	38.64	32.02	70.65	1.73	14.00	15.73	13.61	100.00
1980	37.71	32.73	70.44	2.30	14.48	16.78	12.78	100.00
1981	36.46	33.06	69.52	2.89	15.22	18.11	12.37	100.00
1982	35.90	34.30	70.20	2.75	15.12	17.87	11.93	100.00
1983	35.33	35.83	71.17	2.65	14.35	17.00	11.83	100.00
1984	34.40	35.69	70.09	2.93	14.85	17.78	12.13	100.00
1985	35.25	35.06	70.30	3.76	14.60	18.36	11.34	100.00
1986	33.50	35.77	69.27	4.11	15.08	19.19	11.55	100.00
1987	33.19	36.10	69.30	4.58	15.10	19.68	11.03	100.00
1988	32.46	39.10	71.56	4.01	14.48	18.49	9.95	100.00
1989	32.05	38.56	70.60	4.77	15.16	19.93	9.46	100.00
1990	29.99	36.46	66.44	6.24	16.66	22.90	10.65	100.00
1991	31.40	36.68	68.08	5.71	16.73	22.45	9.47	100.00
1992	30.68	37.10	67.78	4.96	16.46	21.42	10.79	100.00
1993	30.21	38.09	68.30	5.02	15.76	20.77	10.93	100.00
1994	29.60	37.68	67.28	5.34	16.23	21.57	11.15	100.00

Source: Ministry of Education.

The tertiary education expenditure increases but at a relatively slow rate, in comparison with the secondary education expenditure. On the whole, though, the share of tertiary education grows considerably, at the cost of the general education.

Capital expenditure

As presented in Table 5.4, the pre-school and primary education expenditure, in constant prices, presents an increasing trend, while the secondary education decreases.

Table 5.4. **Share of capital expenditure to the total of capital expenditure**

	Percentage							Total
	Presc. + Prim.	Secondary	General	Technol.	Univers.	Tertiary	Other	
1970	33.33	47.62	80.95	0.00	16.19	16.19	2.86	100.00
1971	38.83	38.83	77.67	0.00	19.42	19.42	2.91	100.00
1972	35.98	39.68	75.66	0.00	22.75	22.75	1.59	100.00
1973	35.60	38.80	74.40	0.00	24.80	24.80	0.80	100.00
1974	35.42	33.75	69.17	8.83	19.08	27.92	2.92	100.00
1975	30.43	39.13	69.57	12.85	15.41	28.26	2.17	100.00
1976	34.55	34.55	69.09	6.96	20.67	27.64	3.27	100.00
1977	33.87	32.26	66.13	9.05	22.24	31.29	2.58	100.00
1978	41.25	30.00	71.25	4.98	22.03	27.00	1.75	100.00
1979	35.89	30.32	66.21	6.99	23.95	30.94	2.85	100.00
1980	35.94	37.50	73.44	4.69	21.88	26.56	0.00	100.00
1981	38.10	29.76	67.86	4.31	23.79	28.10	4.05	100.00
1982	36.85	31.11	67.96	4.33	17.89	22.22	9.81	100.00
1983	37.09	37.74	74.82	4.57	18.72	23.29	1.89	100.00
1984	30.96	40.04	71.00	10.35	15.89	26.23	2.76	100.00
1985	32.26	35.84	68.10	8.24	21.15	29.39	2.51	100.00
1986	34.88	33.16	68.03	7.23	24.05	31.29	0.68	100.00
1987	36.33	23.74	60.08	10.23	28.79	39.02	0.90	100.00
1988	38.39	23.13	61.52	7.34	29.73	37.07	1.41	100.00
1989	32.97	20.81	53.78	6.20	38.21	44.41	1.81	100.00
1990	34.29	20.89	55.17	6.95	36.14	43.10	1.73	100.00
1991	39.14	19.04	58.18	7.24	33.31	40.54	1.28	100.00
1992	41.88	21.68	63.57	4.60	30.13	34.73	1.70	100.00
1993	37.95	22.88	60.83	3.99	30.47	34.46	4.72	100.00
1994	39.20	24.00	63.20	3.60	29.60	33.20	3.60	100.00

Source: Ministry of Education.

Nevertheless, the tertiary education expenditure is continually growing at an intense rate, considerably higher than that of the increase in general education capital expenditure. Finally, the share of the general education expenditure, is decreasing, while the corresponding share of the tertiary education is increasing.

Total expenditure (current and capital)

As presented in Table 5.5, the total (current and capital) expenditure for pre-school and primary education is increasing, but at a slow pace, while their share in the total expenditure is slowly decreasing.

The total expenditure for the secondary education is increasing (as compared to the primary and pre-school expenditure), while the total expenditure share is also increasing.

Table 5.5. **Current and capital expenditure**

Constant prices 1980

	Total expenditure	Pre-school and primary	Secondary (general and vocational)	Tertiary education	Common expenditure
1970	25 940	10 591	7 534	4 611	3 204
1971	27 502	12 278	7 362	4 085	3 776
1972	34 876	14 088	11 189	4 743	4 856
1973	41 512	14 392	13 930	8 904	4 286
1974	34 202	12 384	9 088	6 716	6 013
1975	40 809	14 880	12 110	9 477	4 342
1976	44 815	16 320	12 520	10 204	5 771
1977	49 555	17 040	12 693	11 416	8 406
1978	56 254	19 582	15 711	11 973	8 988
1979	58 070	21 610	18 205	11 645	6 610
1980	48 720	16 721	16 616	9 565	5 818
1981	46 942	16 443	15 884	9 131	5 484
1982	54 148	18 800	18 839	10 396	6 113
1983	60 653	20 251	21 744	11 830	6 829
1984	65 620	21 768	25 341	14 743	3 768
1985	72 476	22 883	26 880	15 688	7 026
1986	70 593	23 289	24 807	16 264	6 234
1987	67 477	22 142	23 282	16 086	5 966
1988	70 973	25 083	22 715	16 693	6 482
1989	71 389	21 612	25 842	17 891	6 044
1990	74 878	22 947	25 511	19 466	6 953
1991	75 998	24 791	25 765	19 222	6 220
1992	80 357	26 003	27 957	18 819	7 578
1993	78 391	24 742	27 777	18 157	7 716
1994	83 577	26 374	29 162	20 011	8 030

Source: Ministry of Education.

On the whole, the general education (total of the two above categories) expenditure share is decreasing.

With regard to tertiary education, the total expenditure is growing more intensely than the two categories above, while – not surprisingly – their total share is also increasing to the disadvantage of general education.

Conclusion

From what has been discussed so far, it is evident that there is a gradual transition of the public expenditure priority from the general education to tertiary education. This is related to national priorities. For instance, the political intervention is shown by the increase of tertiary education funding, as compared to the primary and secondary education.

Expenditure per pupil/student

The indicator "Expenditure per pupil" has no other significance but to emphasise the annual state-expenditure per "pupil", and yearly trend of this expenditure. What is important is the comparison of the "pupil-student expenditure" between levels of education, as well as the analysis of the state expenditure, in order to produce a graduate from each level. Thus, the former is presented in Table 5.6, and the latter is beyond the scope of this review.

As presented in the table, the emerging general picture is a growth, in constant prices, of the expenditure per pupil/student.

In the pre-school and primary education there is a gradual increase, which is due to the drop in birth-rates, during the last five years.

Table 5.6. **Expenditure per pupil**

Constant prices 1980

	Primary	Secondary	STVE	University	TEI	Total
1970	11 121	19 127	27 623	50 436	101 643	18 834
1971	13 245	16 859	18 007	52 838	17 824	19 337
1972	15 412	24 264	20 355	76 270	21 172	22 303
1973	15 589	29 074	13 676	85 648	28 620	22 846
1974	13 181	18 205	13 155	70 606	118 874	25 082
1975	15 679	23 181	21 027	73 726	251 515	26 670
1976	17 067	22 414	20 637	81 250	122 865	27 706
1977	17 662	21 450	25 983	92 921	93 929	31 236
1978	20 087	25 614	32 969	96 613	80 961	33 909
1979	22 008	28 985	31 660	88 625	71 123	31 124
1980	17 070	24 859	34 384	90 578	57 888	28 390
1981	16 856	22 865	35 489	100 515	70 934	29 550
1982	19 199	25 598	33 708	104 107	74 799	32 163
1983	20 721	29 381	42 123	94 799	66 643	32 422
1984	22 091	33 446	54 022	101 582	89 946	36 034
1985	23 181	34 952	50 393	106 958	86 824	39 636
1986	23 514	31 977	42 084	101 734	59 523	35 396
1987	22 853	28 560	43 754	101 999	63 810	34 098
1988	25 940	29 345	47 238	107 086	49 705	37 727
1989	22 861	33 312	53 258	125 051	52 725	40 257
1990	24 849	33 606	46 572	121 904	51 481	41 861
1991	22 629	32 853	42 929	112 704	46 153	40 491
1992	24 324	35 350	46 189	110 360	42 255	40 884
1993	22 889	33 594	35 913	128 742	43 208	41 780
1994	24 053	35 337	34 913	132 769	41 961	43 377

STVE = Secondary Technical and Vocational Education.

Source: Ministry of Education.

In the secondary education there is a gradual and real increase of expenditure per pupil.

With regard to university education expenditure, there is a gradual and regular increase of the expenditure per student – as compared to the non-university one (*i.e.* technological education) where there is a gradual decrease which is caused by a certain restriction of expenditure, as well as by a considerable growth of the corresponding enrolments.

Public expenditure for tertiary education provisions for accommodation, meals and textbooks

This expenditure falls mostly under the current budget category and, according to the type of establishments.

University establishments (AEIs)

Rent-accommodation of students was estimated in 1994 to be Dr. 295 million and in 1995, Dr. 344 million. This expenditure covers mostly rented accommodation, while a certain amount of this expenditure may be allocated (according to the University administration's decisions) for the renting also of teaching premises. It has to be noted that the expenditure for the running of university owned student halls of residence is included in a general expenditure item for the operation of the universities, *i.e.* a total of Dr. 25.5 billion for 1994, and 25 billion for 1995.

Concerning the expenditure for the meals of students this was Dr. 4.9 billion for 1994 and Dr. 5.05 billion for 1995. These costs comprise all meals produced in the refectories of universities and their halls of residence.

Finally, concerning the textbooks expenditure, this was Dr. 3.4 billion in 1994, and Dr. 3.1 billion in 1995 and covers the cost of the textbooks that the students are provided with, free of charge, in the context of the free provision of education. A certain overall amount of Dr. 700 million may be attributed to the cost of university publications and this is derived from the aforementioned several operational expenditure. The stock of the library provisions either in books or periodicals, was estimated for 1994 (Kafetzopoulos, 1994) only for 11 universities (out of 18) respectively to Dr. 205 million and 508 million.

This expenditure is derived, either from the Capital budget (from the item of university general equipment provision) and/or from the current budget (item of general operational expenditure).

Technological Education Institutions (TEIs)

A more or less similar situation is the case in TEIs. Thus, for 1994 the cost of textbooks provided free of charge to students was about Dr. 264 million while the

expenditure for rented accommodations by the universities for students was Dr. 300 million.

In spite of the inconclusive data and the lack of a systematic survey, it can be concluded that the above expenditure is considerably high, and in certain cases, more efficient financial management may be needed. For instance, the high expenditure on rents may be reduced by more building of public halls of residence, and the expenditure of subscriptions for universities library periodicals may be reduced through better co-ordination not only within a university itself – but within all universities by inter-library new technology networking.

Private expenditure for education

As shown in Table 5.7 all private expenditure for the education of all levels, including informal public education and training, expenditure for formal private

Table 5.7. **Total expenditure for public and private education**

Percentage of GDP

	MoE expenditure	Non-MoE expenditure	Total expenditure
1970	2.22	1.46	3.69
1971	2.17	1.52	3.69
1972	2.27	1.58	3.86
1973	2.18	1.53	3.71
1974	2.73	1.70	4.43
1975	2.75	1.66	4.41
1976	2.76	1.59	4.35
1977	3.14	1.81	4.95
1978	3.30	1.75	5.05
1979	3.03	1.68	4.71
1980	2.91	1.76	4.67
1981	3.17	1.85	5.01
1982	3.38	1.91	5.28
1983	3.42	1.95	5.37
1984	3.68	1.91	5.58
1985	4.05	1.92	5.96
1986	2.68	1.97	4.65
1987	3.67	1.98	5.65
1988	3.77	1.96	5.73
1989	3.83	1.91	5.74
1990	4.13	2.44	6.57
1991	3.97	2.51	6.47
1992	3.76	2.39	6.15
1993	3.95	2.61	6.55
1994	4.02	2.33	6.34

Source: Ministry of Education.

education, expenditure for private informal education, expenditure for studies abroad, etc., is a very important percentage of the public expenditure, *i.e.* 60 per cent. Thus, the total public and private expenditure percentage of the GDP is estimated for 1994 as 6.3 per cent, broken down to 4 per cent for public expenditure and 2.3 per cent for private.

INFRASTRUCTURE

Historical perspectives the organisation of school buildings (OSK)

Up until 1965, the entire process of planning, funding, building design, construction and administration of school buildings was centralised and carried out nationally by the Ministry of National Education and Religious Affairs (MoE).

In 1962, the Organisation of School Buildings (OSK) was established in response to the increased requirements for new school buildings and the tremendous increase in urban population during the 1950s and early 1960s. The activities of OSK were supposed to last for only the following five years (until 1967).

However, the performance figures of OSK during this period were very significant and it was decided that OSK would continue to exist as a permanent organisation responsible for the construction of school buildings.

OSK's initial activities were to develop new building programs, to design new standardised school buildings, to find sites for new buildings and to provide the necessary equipment for the new schools as well as for the existing ones.

In 1984, it was decided that OSK would only be responsible for the Attica prefecture while the Directorates of Technical Services in all other prefectures in Greece, would be responsible for school buildings in their respective territory. However, OSK provides the necessary support services concerning the building programs, the technical requirements, the standardised design of school buildings, the construction details and the tender specifications and regulations.

In 1990, the municipal authorities took the responsibility for all repair and maintenance required in the school buildings of their territory. The financial support of these activities is decided by OSK every calendar year, after examination of requests from the municipal authorities.

School buildings

With regard the prefecture of Attica (for which OSK has responsibility), during recent decades, the significant increase in population of the greater Athens area, has created the need for designing and constructing new school buildings. There was no provision for sites required for such buildings. Sites are acquired after a study, by OSK, of the respective school catchment area, and collaboration with the

local authorities (*i.e.* municipalities/communities). After agreement regarding price is reached, these sites are purchased from their owners. In all other cases, land is expropriated following a judicial decision and the specific financial compensation is deposited at the State Fund of Deposits and Loans.

After obtaining the necessary sites, the next step is the design of the school building according to the level of education to be offered. Standardised designs are used and specifications adjusted accordingly. (OSK is responsible for the specifications of Nursery schools, Primary schools, Gymnasiums and Lyceums; and the MoE-DIPEE for Technical and Vocational schools.) Therefore, there is a correspondence of architectural designs with school-building specification programs by level of education and category of school.

These plans have been developed by OSK, according to the educational curriculum, the number of pupils, teachers and other staff involved.

The size of each school building varies according to the area where its construction is planned. For all urban areas, buildings with six to 24 classrooms are designed according to the expected number of pupils, buildings with one to six classrooms are designed for all other areas according to the expected number of pupils.

It is also a responsibility of OSK to design and construct special types of Lyceums such as the Integrated Lyceum, the Technical and Vocational Lyceum, the Technical and Vocational schools. Furthermore, to a small extent, special school buildings are designed for handicapped pupils (since there has been an effort to enrol these students in the existing schools).

Construction of buildings, equipment provisions

The construction of a school building is commissioned to an engineering construction company following a specific tender process which is organised and performed by OSK or the Prefecture Technical Services. Their engineering staff controls all the various construction phases, construction time-table, financial phases, etc.

When the construction of a school building has been finished, the school is delivered to the respective school committee and the municipal authority which are responsible for its operation and maintenance in the following years.

An additional responsibility of OSK is to provide for all Greek schools all the necessary equipment for their operation such as desks for pupils and teachers, blackboards, seats and the special educational material for nursery schools. The additional equipment required (equipment and materials for chemistry and physics, radio and television sets, computers, telephones, facsimiles, photocopiers, etc.) are provided by the MoE but very soon, OSK will also be responsible for supplying them.

Quality and sufficiency of school buildings

During the last two decades there has been an enormous effort to satisfy the demand for school buildings. However, this is a problem that can not be fully accomplished and, for this reason, a number of school buildings are used in alternate morning and evening shifts, while additional buildings are hired from private owners and converted into school buildings.

During the 1994 survey organised by OSK, information was collected on school buildings regarding their construction characteristics and quality, correspondence to the technical requirements and regulations, etc.

The statistical analysis of all data collected has not been finished yet, but it is expected that its results will be very helpful during the development process of a new program for all school buildings in Greece. Furthermore, they will be used for checking the ability of the buildings' capacity to satisfy the new regulations concerning the ability of buildings to withstand earthquakes. A Ministry of Education Program is being prepared in which all the relevant repair and maintenance actions and the construction of additional rooms will be included in order to achieve the complete upgrading of school buildings.

Existing situation: classroom needs and planning process

During the last decade, various figures have been estimated concerning the number of classrooms required to satisfy fully the respective demand. However, these figures have not shown a rate of decrease, even though the number of pupils has decreased by a rate of 1-2 per cent annually due to a decline of births, and OSK continues to construct about 450-900 classrooms every year.

All the figures estimated are based on the existing legislation which sets the number of pupils per classroom at 30 in primary and 35 in secondary schools.

Only for the Attika Prefecture (*i.e.* mostly Greater Athens), from the recent survey organised by OSK, the following average figures have been estimated as to the number of pupils per class according to the different types of schools.

Number of pupils per class

Nursery school	21
<i>Dimotikon</i> (primary school)	22
Gymnasium (secondary school)	29
Lyceum	28
Integrated Lyceum	28
Technical and vocational Lyceum and schools	23
Evening Gymnasium and Lyceum	24
Special schools	7

These figures are considerably lower than those prescribed by the existing legislation. A special study will be conducted by OSK, using the data of the recent survey for estimating new and more accurate figures, for the requirements in school buildings and classrooms. The overall general situation, is as follows:

Existing

Total number of schools in Greece	15 772
Total number of school buildings	11 223
Total number of classrooms in schools	62 298
Total number of public classrooms in Attica	13 240
Total number of public classrooms in Greece	42 896
Total number of pupils in Attica	459 339
Total number of pupils in Greece	995 877

Required

Number of classrooms in Attica prefecture ¹	8 927
Number of classrooms in all other prefectures	13 219
Total number of classrooms in Greece	22 146

1. Laboratories and other rooms will be estimated according to the school size.

The above survey findings will be used for improving the planning process in OSK. The new OSK program for the next period of five years concerning the Attica prefecture predicts that a significant part of the needs in school buildings will be satisfied. This program has the following basic targets:

- all schools will operate only in morning shifts, especially nursery schools and Lyceum (since their pupils must prepare themselves for taking part in for the Panhellenic examinations for admission in the AEIs and TEIs);
- the school buildings will be used for additional occupation of pupils (drawing, dancing, sports, training, etc.) in the evening.

Repairs and maintenance

This issue is universally acknowledged to be of a major importance and, in Greece, it deserves better financial management given the high expenditure of repair and maintenance. Since the recent decentralisation reform funding comes from three sources:

- Ministry of Education to the Prefectures – Municipalities (or in the case of Attica from the Ministry of Education to OSK and then to Prefectures and Municipalities);
- from the Council of Europe loan funding to the Prefectures as described above;

– from the Ministry of Interior to the Prefectures and then as described above.

Because all this multiplicity of sources, and the occasional funding either from the Current Budget or the Capital Budget, it is not easy to estimate the total expenditure on repair and maintenance.

A possible indicator is the OSK accounts for the 1994 year where, from a total of roughly 2 955 schools in Attika, actual payments until October 1994 were Dr. 10 363 million for major repairs and maintenance (roof insulation, heating, paints, etc.) and it is estimated that at the end of December 1994 the amount totalled Dr. 12 billion.

Premises and facilities of higher education

The recent expansion of higher education had its natural implications on the demand for the required premises and facilities.

From a rough estimate of the existing facilities for universities in 1982, it can be concluded that the used built surfaces were then about 365 000 m² which by the then attendant students of 92 174 makes a gross ratio of 3.9 m² by student.

From another survey of 1990, it was estimated that the used built surface had risen to 1 729 000 m² corresponding to a gross ratio of 14.7 m² per student given the 117 769 number of students. Thus, it may be claimed that in about a decade there was an increase of 1 364 000 m² or 370 per cent for university facilities.

The above increase may be analysed *a)* in extension of existing facilities; *b)* in construction of completely new ones; and *c)* in refurbishment of existing buildings of architectural and/or historical interest. Concerning the TEI's facilities it may be noted that, on the whole, their premises (which consist of large complexes in the outskirts of urban centres) were constructed during the 1970s and, in the following years they were suitably extended or, in the case of newly founded ones, new complexes were constructed.

With regard the universities, it must be noted that the establishment of such new institutions all over the country involved a host of critical decisions and challenges, some of which may be described in brief as the following:

- Decisions about the location of the institutions, either to be established completely in one area (in the form of campus or individual buildings integrated within the urban fabric) or allocated in different locations (e.g. islands, towns of a specific region) by separating groups of Departments or Faculties. Such examples may be found in the University of the Aegean which has located its departments in various islands of the North East Aegean (e.g. in Lesbos the Faculty of Social Sciences, in Khios the Department of Business Administration, in Samos the Department of Mathematics, and in Rhodes the Department of Primary Education) or in the case of the

Democritus University of Thrace which has established the Faculty of Law in the town of Komotini (Nomos Rodopi), the Faculty of Engineering in the town of Xanthi (Nomos Xanthi), the Faculty of Medicine and the Department of Education in Alexandroupoli (Nomos Evros), and in between Komotini and Xanthi the Departments of Physical Education and Athletics.

- The conservation of "heritage" buildings, through their acquisition, refurbishment and adjustment to modern space-norms for the university functions. Many new universities have re-used such unique (in their architectural or historical value) buildings in Crete, Thrace, the Aegean Islands, etc. Occasionally, the character of the "heritage" building may suit the kind of discipline that is to be housed there: in the case of the Ionian University in Corfu it was suggested that the Department of History would be accommodated in the former English Hospital built in 1836, during the English rule of the island, while the student library and offices for the teaching staff of the History Department would be housed in the former English barracks for officers. An interesting case is the University of Thessaly which adapted industrial buildings (out of use after the industrial decline of the town of Volos) for its Faculty of Production Sciences.
- The relation of the higher education institution with the general development of the urban centre or region in which it is to be located. Theoretically, there are socio-economic advantages in such location plans – but often the reality proves more complex. For example, if the student population faces unsatisfactory socio-cultural provisions in the local area, and if the university rules allow its non-regular attendance (as is often the case in Humanities), then the students tend to stay in the university town only during the exam seasons.
- The problem of starting these huge enterprises in a climate of financial limitations (as the recent decades of universal economic crisis). Such constraints have been considerably removed by assistance from EU funds and/or the new possibilities provided by recent legislation, of allowing higher education to start their own enterprises by utilising their expertise and new technologies in connection with local industries and firms in Greece or internationally.
- The need to employ flexibility and adaptability to make better use of the existing resources or of the future facilities in process of construction.

Other facilities

On the whole, student accommodation¹² is considerably undeveloped in Greece. The universities are gradually starting to construct their own halls of residence, but perhaps, the most organised provision comes from the National Founda-

tion of Youth (EIN), which since its establishment in 1960, has set-up 13 student halls (AEIs+TEIs), numbering approximately 6 000 beds. Furthermore, EIN plans accommodation for roughly 700 students.

Only universities have constructed accommodation for 4 683 students with halls of residence built from 1922 onwards. Further accommodation is anticipated for 1 114 students. In addition, the universities rent accommodation for 1 659 students. It is estimated that the construction cost per bed is Dr. 450 000.

Another kind of facility in development is the Prefecture Centres for the Support of Education (NKSEs) which will be located in the Prefecture capital towns and will accommodate a library for teachers, a computer centre, an office of school counsellors, and possibly a health care unit. The buildings which are to be used will be mostly existing buildings of historical or architectural interest with the necessary refurbishment.

Finally, it should be mentioned that 16 Regional Education Centres (PEKs) for the training of teachers and 60 School Laboratory Centres (SEKs) for the better management of laboratory provisions and teaching for most Technical and Vocational Education, already exist in Greece. The former are housed in school buildings and the latter either in existing buildings in the proximity of schools, or in rented and adjusted buildings or, of course, in school buildings themselves.