

Chapter 2

Education and Training in Mauritius



DEVELOPMENT OF EDUCATION: SOME HIGHLIGHTS

“Whether or not expanded educational opportunities will translate into meaningful development – for an individual or for society – depends ultimately on whether people actually learn as a result of those opportunities i.e. whether they incorporate useful knowledge, reasoning ability, skills and values. The focus of basic education must, therefore, be on actual learning acquisition and outcome, rather than exclusively open enrolment, continued participation in organised programmes and completion of certification requirements.”

*World Conference on Education for All
Jomtien, Thailand, March 1990*

The Mauritian education system has been to a large extent shaped by the type of schooling development in the French and British colonial times. It has evolved from a completely private enterprise to a national education system. The growth of education came about with an increase in annual income coupled with a high social demand for education. Government’s impetus for free primary education for all, which started in the 1940’s, resulted in near universal enrolment at primary level, long before primary education was made compulsory in 1991. In 1976, the decision to provide free secondary education caused enrolment at secondary level to rise considerably. In 1978, the Private Secondary Schools Authority (PSSA) was set up to look after the running of the private secondary schools and to maintain its standards. The education wave was thus an inexorable one in developing the Mauritian society.

In 1975, the Mauritius Institute of Education (MIE), was set up to provide training (pre-service and in-service) to teachers at both primary and secondary levels. This institution was also responsible for

curriculum development activities, which were taken over by the Curriculum Development Centre (CDC) under the aegis of the Ministry of Education in 1985. The CDC became the National Centre for Curriculum Research and Development (NCCRD) in 1993. The MIE was also looking into some aspects of assessment and examinations, but these activities were taken over by the Mauritius Examinations Syndicate (MES), which was set up in 1984. The MES has the overall responsibility for conducting all national examinations – the Certificate of Primary Education (CPE), the Cambridge School Certificate (SC), and the Cambridge Higher School Certificate (HSC); technical and vocational examinations; professional examinations for local and foreign examination bodies; and other local examinations. It also carries out examination-based research aimed at improving the assessment system and informing policy decisions.

Various commissions were appointed to look into the education system and make recommendations for its improvement. Most of the reports highlighted the high rate of failures at the end of the primary cycle and the competitive nature of our examinations system. The absence of a proper structure for pre-primary education and provision for remedial education were also stressed.

In the 1990s, Mauritius had two major attempts at reforms as reflected by the Master Plan of Education (Ministry of Education and Scientific Research, 1991) and the Action Plan of Mauritius (Ministry of Education and Scientific Research, 1998). Several projects were implemented by the Mauritius Examinations Syndicate – the main one being the publication of the *Learning Competency for All* document in 1992 and the re-designing of the CPE examination in 1994 in terms of Essential and Desirable Learning Competencies. This led to the revision of all the textbooks for primary level produced by the NCCRD. In the early eighties and in 1996, attempts to develop a continuous assessment scheme were made. Unfortunately, these were not successful because of resistance from teachers due to lack of support and the additional amount of time it required.

With the new millennium, it was felt that it was time for major changes to be brought to the Mauritian educational system in a bid to equip the country to face new challenges in an increasingly technologically and economically competitive and ruthless international environment. Consequently, the education reform plans, Curriculum Renewal in the Primary Sector (2001) and Ending the Rat Race in Primary Education and Breaking the Admission Bottleneck at Secondary level – The Way Forward (2001), were formulated by the Ministry of Education and Scientific Research.

The need for quality Education

What education is needed for the future is the main concern for the government and in this perspective the government wish to give a world class education to the children. The government aims at ensuring that there are enough quality educational institutions in order to prepare the Mauritian children to meet the challenges associated with globalisation. Few measures have already been announced like free transport for students. The country is moving towards the services sector and a global economy. In this context, it is important to review what is being taught in schools/colleges. For instance we need to encourage both students and teachers to choose subjects like Tourism studies at ‘O’ and ‘A’ level.

The aim of reforms in education should be to prepare youngsters to be more competent in the world market and more employable in emerging sectors in the Mauritian economy. Infact, it is important to develop a culture of entrepreneurship. More emphasis should be put on science/technology related subjects to meet the future challenges of our education sector which include the following:

- Providing equal opportunities for all students at all levels of education. Infact, it should be the government's policy to provide equality of opportunities for students whereby when they start schooling, all children have equal chances to achieve
- Provision of excellent quality of education at all levels and ensure that it is rightly delivered to all students. The government should ensure that ICT is taught at all levels of education
- Implementation of proper human resource development strategies in order to face the challenges of globalisation. The objective should be to prepare a qualified and competitive workforce to face future challenges that may arise
- Decrease the number of drop-outs and push-outs of our education system. Further vocational education and training should be developed in order to increase opportunities for students.

Structure of the Mauritian Education and Training Provision System

Mauritius has a 6+5+2 education structure i.e. six years of compulsory primary schooling from Standard I to Standard VI leading to the Certificate of Primary Education (CPE). This is followed by five years of compulsory secondary education from Form I to Form V leading to the Cambridge School Certificate (SC) and a further two years at secondary ending with the Cambridge Higher School Certificate (HSC). Government's commitment to broadening access to secondary education is reflected in its policy to make education compulsory up to the age of 16, with the introduction of 11-year schooling as from January 2005. This measure has involved relevant changes in legislation. Education is free at primary and secondary levels. At tertiary level, all full-time undergraduate programmes are free at the University of Mauritius.

Pre-primary Education Sector

Early development and education (0-5 years) is organised in two separate systems covering two distinct phases, with the infant/toddler period (0-3 years) known as the Early Childhood Development placed under the responsibility of the Ministry of Women's Rights, Child Development and Family Welfare, and the 3-5 years olds attending Pre-Primary schools under the responsibility of the Ministry of Education and Scientific Research.

Nearly all Mauritian children attend pre-primary schools. Around 1070 pre-primary schools are

officially registered with the Ministry of Education. In 2004, there were 178 pre-primary classes running in primary schools. It is the government's policy to give support and assistance to this sector: a pre-primary unit has been established in the Ministry of Education to strengthen the pre-primary sector and monitor its progress. The government has been endeavouring to provide pre-primary classes in most primary schools.

A monthly subsidy of Rs 200 based on a voucher system is given to all children of 4+ who are attending pre-primary schools. Since 2001, six new pre-primary units have been created in the State primary schools and enrolment rate for children aged 4 to 5 has been increased from 95 percent in 2000 to 99 percent in 2003-2004. By the year 2006, eight new units will be available.

In order to ensure a quality education at this level, teachers are encouraged to follow the course leading to the Certificate of Proficiency in Early Childhood Education which is run jointly by the Mauritius Institute of Education (MIE) and the Mauritius College of the Air (MCA). This proficiency-based training programme is a very flexible proposal for practitioners who are currently working in the Early Childhood Development (ECD)/Pre-School sector. To date, 1812 teachers have been fully trained and another group of 616 are presently following the training programme at MIE.

Primary Education Sector

Primary education became compulsory as from 1991. In March 2006, there were 290 primary schools including 13 in Rodrigues. 121 387 pupils were attending the 277 schools in Mauritius and 4700 pupils were attending the 13 primary schools in Rodrigues. Pupils enter Standard I at the age of five and take the Certificate of Primary Education (CPE) examination after 6 years of schooling. Before the year 2002, this examination was used for certification purposes and for ranking pupils for admission to the highly rated secondary schools. Many pupils preferred to resit this examination to secure a better rank and thus, gain access to better secondary schools. However, as from the year 2002, ranking has been abolished; a grading system is used. For those who fail the CPE twice or who have reached the age of 12 but failed the CPE examination, there exists a pre-vocational stream in secondary schools for a period of three years. These students follow a specific skills-based curriculum. 60 to 70 percent of students have passed CPE over the last ten years as shown in Table 2(a).

Table 2(a): Total enrolment by gender in Primary Schools (private* and state), number examined at CPE level and percentage pass at CPE level between 1995-2005 for Rep. of Mauritius

Year	Sex	SCHOOL		PRIVATE		OVERALL	
		Examirec	%Pass	Examirec	%Pass	Examirec	%Pass
1995	B	14222	61.81	851	37.25	15073	60.43
	G	13511	69.05	738	42.55	14249	67.68
	T	27733	65.34	1589	39.71	29322	63.95
1996	B	13129	61.85	864	32.52	13993	60.04
	G	12500	68.94	602	41.20	13102	67.66
	T	25629	65.30	1466	36.08	27095	63.72
1997	B	12926	61.74	952	27.52	13878	59.40
	G	12304	68.85	620	35.65	12924	67.25
	T	25230	65.21	1572	30.73	26802	63.19
1998	B	12528	62.44	1139	32.31	13667	59.93
	G	12276	71.68	723	36.65	12999	69.73
	T	24804	67.01	1862	34.00	26666	64.71
1999	B	13448	59.82	991	26.64	14439	57.54
	G	12940	69.98	647	35.24	13587	67.37
	T	26388	64.31	1638	30.04	28026	62.31
2000	B	14444	61.17	1330	28.87	15774	58.45
	G	13614	71.85	994	43.06	14608	69.89
	T	28058	66.35	2324	34.94	30382	63.95
2001	B	14960	59.80	1478	23.21	16438	56.55
	G	14160	71.07	893	34.27	15053	68.89
	T	29120	65.31	2371	27.27	31491	62.45
2002	B	14486	59.65	1219	34.78	15705	57.72
	G	13356	70.66	762	45.93	14118	69.33
	T	27842	64.93	1981	39.07	29823	63.22
2003	B	14252	56.59	1529	27.34	15781	53.75
	G	13258	69.05	915	35.08	14173	66.85
	T	27510	62.59	2444	30.24	29954	59.95
2004	B	14084	57.88	1616	26.61	15700	54.66
	G	13248	68.43	1082	33.83	14330	65.81
	T	27332	62.99	2698	29.50	30030	59.98
2005	B	13438	59.31	1415	28.76	14853	56.4
	G	12600	71.61	979	39.63	13579	69.31
	T	26038	65.26	2394	33.21	28432	62.56

Source: Mauritius Examinations Syndicate. (1995-2006) and CSO 2006

*Those not attending primary schools. B: boys, G: girls, T: Total (1995-2006)

Table 2(b): Enrolment of Students in Secondary School by grade and gender, Republic of Mauritius, 1994 – 2005

Year \ Form		I	II	III	IV	V	Lower VI	Upper VI	All Grades
1994	Male	7,931	8,279	7,698	7,819	7,008	2,427	2,795	43,753
	Female	8,489	8,830	7,918	8,105	7,182	2,481	2,743	45,828
	Total	16,420	17,208	15,616	15,721	14,190	4,888	5,538	89,581
1995	Male	7,824	7,831	8,050	8,254	7,163	2,456	2,886	44,270
	Female	8,465	8,246	8,594	8,407	7,854	2,479	2,989	46,834
	Total	16,289	16,077	16,650	16,661	14,817	4,935	5,875	91,104
1996	Male	8,030	7,863	7,938	8,817	7,728	2,640	2,950	45,566
	Female	8,456	8,170	8,185	8,950	8,033	2,721	2,978	47,471
	Total	16,486	16,033	16,103	17,767	15,761	5,361	5,928	93,037
1997	Male	7,472	7,900	7,557	8,442	8,319	2,663	3,143	45,706
	Female	7,912	8,158	8,178	9,160	8,305	3,135	3,285	48,133
	Total	15,384	16,058	15,745	17,602	16,624	5,798	6,428	93,839
1998	Male	7,516	7,319	7,837	8,349	8,531	3,071	3,361	45,982
	Female	7,888	7,883	8,155	8,829	9,004	3,133	3,583	48,382
	Total	15,204	15,201	15,992	17,274	17,535	6,204	6,954	94,364
1999	Male	7,480	7,827	7,405	8,753	8,176	3,159	3,683	46,253
	Female	8,072	7,812	7,848	8,863	9,297	3,282	3,780	48,934
	Total	15,522	15,439	15,253	17,616	17,473	6,421	7,463	95,187
2000	Male	7,542	7,641	7,581	8,239	8,558	3,156	3,703	46,399
	Female	8,210	7,979	7,792	8,851	9,180	3,490	3,747	49,049
	Total	15,752	15,620	15,353	16,889	17,738	6,646	7,450	95,448
2001	Male	8,365	7,810	7,648	8,207	8,350	3,364	3,658	47,392
	Female	8,935	8,146	8,053	8,598	8,867	3,749	4,109	50,255
	Total	17,300	15,956	15,701	16,803	17,017	7,103	7,767	97,647
2002	Male	8,356	8,481	7,782	8,174	8,283	3,257	3,656	47,989
	Female	9,321	9,001	8,252	8,583	8,741	3,789	4,011	51,698
	Total	17,677	17,482	16,034	16,757	17,024	7,046	7,667	99,687
2003	Male	9,028	8,430	8,522	8,254	8,398	3,354	3,960	48,946
	Female	9,744	9,303	8,929	8,722	8,914	3,837	4,392	53,901
	Total	18,772	17,733	17,451	16,976	17,312	7,191	8,352	103,847
2004	Male	8,798	8,915	8,511	8,788	8,499	3,533	3,866	50,910
	Female	9,523	9,654	9,305	9,169	9,051	4,201	4,175	55,078
	Total	18,321	18,569	17,816	17,957	17,550	7,734	8,041	105,988
2005	Male	8,680	8,873	9,206	9,089	9,088	4,072	3,994	52,988
	Female	9,300	9,681	9,787	9,762	9,657	4,723	4,389	57,289
	Total	17,988	18,554	18,993	18,851	18,725	8,795	8,383	110,267

Source: Mauritius Examinations Syndicate, (1994-2006)

The pre-vocational education system has been able to capture many CPE failures as shown in Table 2(c). After three years of Pre-Vocational Education (PVE), pupils of this stream have started to follow as from 2003 a bridging module that enables them to follow the NTC foundation course run by the Industrial Vocational Training Board (IVTB).

A training programme for teachers working in pre-vocational schools is run by the MIE. The National Inspectorate has a unit of pre-vocational Inspectors who provide advice and run in-service courses to harmonise teaching strategies around the new curriculum introduced.

Table 2(c): Number of children 12 years and above who joined pre-vocational schools

Age in years Form	Total				Year of study - 1999 Male				Female			
	I	II	III	Total	I	II	III	Total	I	II	III	Total
12	1023	36	-	1059	696	15	-	711	327	21	-	348
13	528	995	64	1587	330	688	40	1038	198	327	24	549
14	127	568	262	957	82	400	189	671	45	188	73	286
15	116	183	215	514	84	132	176	392	32	51	39	122
16 & over	174	152	46	372	172	129	36	337	2	23	10	35
Total	1968	1934	587	4489	1364	1344	441	3149	604	590	146	1340
Age in years Form	Total				Year of study - 2000 Male				Female			
	I	II	III	Total	I	II	III	Total	I	II	III	Total
12	925	16	50	991	614	14	50	678	311	2	-	313
13	615	589	24	1228	406	389	11	806	209	200	13	422
14	59	612	432	1103	45	479	242	766	14	133	190	337
15	39	87	531	657	34	31	426	491	5	56	105	166
16 & over	184	157	242	583	183	154	169	506	1	3	73	77
Total	1822	1461	1279	4562	1282	1067	898	3247	540	394	381	1315
Age in years Form	Total				Year of study - 2001 Male				Female			
	I	II	III	Total	I	II	III	Total	I	II	III	Total
11	25	-	1	26	12	-	-	12	13	-	1	14
12	1441	101	3	1545	918	74	-	992	523	27	3	553
13	811	691	44	1546	542	493	28	1063	269	198	16	483
14	152	305	517	974	103	213	351	667	49	92	166	307
15	55	67	297	419	47	53	190	290	8	14	107	129
16	60	47	23	130	52	46	11	109	8	1	12	21
17 & over	139	132	8	279	97	132	8	237	42	-	-	42
Total	2683	1343	893	4919	1771	1011	588	3370	912	332	305	1549
Age in years Form	Total				Year of study - 2002 Male				Female			
	I	II	III	Total	I	II	III	Total	I	II	III	Total
11	8	-	-	8	4	-	-	4	4	-	-	4
12	1700	50	-	1750	1062	34	-	1096	638	16	-	654
13	951	970	8	1929	622	609	3	1234	329	361	5	695
14	72	998	320	1390	62	654	236	952	10	344	84	438
15	40	137	505	682	36	82	351	469	4	55	154	213
16	16	54	48	118	16	38	32	86	-	16	16	32
17 & over	34	55	-	89	34	51	-	85	-	4	-	4
Total	2821	2264	881	5966	1836	1468	622	3926	796	796	259	2040
Age in years Form	Total				Year of study - 2003 Male				Female			
	I	II	III	Total	I	II	III	Total	I	II	III	Total
12	2332	47	-	2379	1514	29	-	1543	818	18	-	836
13	880	1594	26	2500	514	1064	7	1585	366	530	19	915
14	52	558	1109	1719	31	320	750	1101	21	238	359	618
15	23	23	452	498	21	11	285	317	2	12	167	181
16	17	28	94	139	17	27	41	85	-	1	53	54
17 & over	9	59	23	91	9	24	9	42	-	35	14	49
Total	3313	2309	1704	7326	2106	1475	1092	4673	1207	834	612	2653
Age in years Form	Total				Year of study - 2004 Male				Female			
	I	II	III	Total	I	II	III	Total	I	II	III	Total
Under 13	2410	-	-	2410	1458	-	-	1458	952	-	-	952
13	1610	2046	99	3215	726	1269	52	2047	344	777	47	1168
14	121	719	1403	2243	86	482	926	1494	35	237	477	749
15	31	48	465	544	25	34	340	399	6	14	125	145
16	8	32	13	53	7	27	4	38	1	5	9	15
17 & over	1	21	1	23	-	21	-	21	1	-	1	2
Total	3641	2866	1981	8488	2302	1833	1322	5457	1339	1033	659	3031
Age in years Form	Total				Year of study - 2005 Male				Female			
	I	II	III	Total	I	II	III	Total	I	II	III	Total
Under 13	2991	-	-	2991	1768	-	-	1768	1223	-	-	1223
13	910	2164	23	3097	642	1393	6	2041	268	771	17	1056
14	59	844	1679	2482	37	509	984	1530	22	335	695	1052
15	11	35	621	667	7	20	436	463	4	15	185	204
16	-	1	26	27	-	-	18	18	-	1	8	9
17 & over	-	1	1	2	-	-	-	-	-	1	1	2
Total	3971	3045	2350	9366	2454	1922	1444	5820	1517	1123	906	3546

Source: Digest of Educational Statistics, CSO (2005)

Formerly, the curriculum comprised the following subjects: English, French, Mathematics, Environmental Studies (EVS), Creative Arts, Physical Education and Asian Languages/Arabic. EVS has now been split into Science, History & Geography, and new subjects have been introduced namely Citizenship Education, Arts and ICT.

The Numeracy and Literacy Strategy was launched in all schools in June 2003 on an experimental basis. The aim of this strategy is to ensure that all children leaving primary school have acquired the basic literacy and numeracy skills. Since 2002, the School Information Technology Project (SITP) was introduced in all primary schools in order to allow children to understand the basic aspects of Information and Communication Technology.

30 primary schools, have had a pass rate of less than 40 percent over the last five years at the CPE examination, form part of the Education Action Zones. These ZEP schools, as they are called, are given special support by the government in terms pedagogical materials, food and incentives for teachers.

Currently, the annual expenditure per pupil at primary level is about Rs10 952 (US\$ 365) and the teacher to pupil ratio is 1:23.

Secondary Education Sector

The total number of students in the secondary schools has increased and it was around 110 000 in 2005 as shown in Table 2(b) on page 27. Presently there are 70 state schools and 109 private schools providing secondary education. The private schools are also allocated government funds through the Private Secondary Schools Authority (PSSA) which further provides technical advice and guidance. Currently, the annual expenditure per student at secondary level is about Rs 21 500 (US\$ 717) and the teacher to pupil ratio is 1:14.

With the introduction of the 11-year compulsory education, children joining Form I in the mainstream and pre-vocational stream have to stay on until they are at least 16 years old. This stage of education establishes a link between primary education, vocational education, higher education and labour market. The lower secondary curriculum is being reviewed in the context of a National Curriculum of 11 years of schooling. More attention is being focused on the need to diversify the type of secondary education that has to be offered. While traditional emphasis has been on the provision of an education that emphasized the academic component, a new system of post 'O' level polytechnic education is being planned for those students who, after the completion of 11 years of schooling, would rather opt for a different type of education that is closer to the world of work. The overall percentage of children, including both pre-vocational and mainstream, in the 12 to 15 age group enrolled in the secondary sector has increased from 80.7 percent in 2000 to 89.6 percent in 2005.

With most learning geared towards examinations and the scoring of high marks, there has been a tendency to neglect non-examinable subjects, with little consideration for the emotional, psychological and aesthetic development of children. Rote learning and memorisation of facts combined with private tuition are dominant features at both primary and secondary levels.

Tables 2(d) and 2(e) show the pass rate at SC and HSC levels respectively since 1990, they also show the pass rate according to gender.

Presently, around 72 percent of a cohort completes the CPE examinations successfully every year after their first or second attempt. 55 percent of the cohort successfully complete the School Certificate but only 35 percent access the Upper Secondary (i.e. the HSC/GCE 'A' Level). The remaining 65 percent, representing about 13 000 children (made up of 5000 children who are successful at SC/GCE 'O' Level examinations, but, their results do not allow them to proceed to the Upper Secondary; 4000 children who are unsuccessful at SC/GCE 'O' Level examinations; and 4000 children following pre-vocational courses) are not sufficiently catered for. These children either follow various vocational courses or join the world of work. Only about 28 percent of every cohort are successful at HSC level.

Table 2(d): Number of students examined and percentage pass at School Certificate between 1990 - 2005

Year	Number Examined at School Certificate (SC) level			Percentage Passed at School Certificate (SC) level		
	Both Sexes	Male	Female	Both Sexes	Male	Female
1990	9,695	5,059	4,636	62.0	58.1	66.3
1991	11,079	5,507	5,572	65.4	63.6	67.2
1992	11,091	5,348	5,743	62.9	60.7	65.0
1993	11,772	5,708	6,064	63.9	63.6	64.1
1994	11,480	5,561	5,919	65.9	63.9	67.8
1995	12,089	5,683	6,406	70.3	69.0	71.4
1996	12,846	6,126	6,720	74.9	72.6	77.1
1997	13,661	6,665	6,996	75.5	73.7	77.2
1998	14,376	6,737	7,639	77.4	77.1	77.7
1999	14,700	6,705	7,995	76.9	75.6	78.1
2000	14,468	6,862	7,786	76.6	74.7	78.3
2001	14,247	6,563	7,684	76.6	74.4	78.5
2002	14,527	6,697	7,830	74.6	72.3	76.6
2003	14,579	6,765	7,814	75.5	73.0	77.7
2004	14,809	6,878	7,933	77.5	75.4	79.4
2005	14,951	7,069	7,882	79.02	75.8	81.91

Source: *Digest of Educational Statistics (1994 – 2006) & Mauritius Examination Syndicate Examinations Statistics (2003 - 2006)*

Table 2(e): Number of students examined and percentage pass at Higher School Certificate between 1990 – 2005

Year	Number Examined at Higher School Certificate level			Percentage Passed at Higher School Certificate level		
	Total	Male	Female	Total	Male	Female
1990	3,980	2,097	1,883	56.1	54.7	57.5
1991	4,150	2,069	2,061	59.8	58.8	60.8
1992	4,306	2,210	2,096	53.7	54.3	53.1
1993	4,770	2,399	2,371	63.3	60.8	65.8
1994	5,009	2,462	2,527	63.3	62.3	64.3
1995	5,319	2,554	2,765	66.3	64.8	67.7
1996	5,257	2,515	2,742	68.8	68.7	68.9
1997	5,793	2,711	3,082	73.1	71.6	74.3
1998	6,129	2,844	3,285	72.4	72.7	72.1
1999	6,416	2,954	3,462	74.5	72.6	76.1
2000	6,502	3,152	3,350	72.3	67.4	76.9
2001	6,796	3,181	3,615	73.2	70.0	76.0
2002	6,845	3,163	3,682	75.8	73.8	77.4
2003	7,205	3,307	3,898	75.1	70.9	78.6
2004	6,883	3,209	3,674	76.2	72.5	79.4
2005	7,106	3,225	3,881	78.17	73.64	81.94

Source: *Digest of Educational Statistics, CSO (1994 – 2006) and Mauritius Examination Syndicate Examinations Statistics 2003 - 2006)*

Tertiary Education

The University of Mauritius (UOM) and the University of Technology Mauritius (UTM) are the only two degree awarding institutions in the country. Overall, the range of programmes is quite diversified and includes agriculture, engineering, law and management, science, and social studies & humanities. These courses are offered at certificate, diploma, degree, masters and doctoral levels on a part-time, full-time basis as well as through flexible distance modes.

The tertiary education system is characterised by a wide range of providers, provision and levels of programmes. Within the public sector, tertiary education revolves around nine institutions: UOM, UTM, the Mauritius Institute of Education (MIE), the Mahatma Gandhi Institute (MGI), the Mauritius College of the Air (MCA) (which has recently been set up as the Open University of Mauritius), the Swami Dayanand Institute of Management (SDIM) and “l’Institut Supérieur de Technologie” (IST). The Industrial and Vocational Training Board (IVTB) and the Mauritius Institute of Health (MIH) also dispense tertiary level programmes in selected areas. Table 2(f) shows an indication of the number of students enrolled at UOM by faculties between 1994 to 2006.

In addition to the publicly-funded institutions (PFIs), an estimated 30 private institutions and 50 overseas institutions/bodies deliver tertiary-level programmes, mostly in niche areas like Information Technology, Law, Management, Accountancy and Finance. The local tertiary education scene also

comprises two tertiary education institutions with a regional vocation, namely the University of the Indian Ocean (UIO) and the “Institut de la Francophonie pour l’Entrepreneuriat (IFE)” and two private colleges, namely the Sir Seewoosagur Ramgoolam Medical College (SSRMC) and a Dental College.

A majority of these private institutions operate on a part-time basis, in the evenings, weekends and on some weekdays with relatively small student cohorts. Most, if not all, of the programmes they offer are those from overseas institutions. These are being delivered through franchise agreements whereby the overseas institutions provide programme materials and/or tutorial support. Apart from playing an administrative role, the local partners also provide tutorial support and in certain cases using exclusively their own resources.

The publicly-funded institutions accounted for nearly 60 percent of total tertiary enrolment in 2000; the remaining 40 percent was distributed between private institutions/distance education providers (27 percent) and universities overseas (13 percent). The corresponding figures for 2005 were 46 percent, 28 percent and 25 percent respectively.

Table 2(f): Enrolment at the University of Mauritius 1993/94 - 2005/06 by Faculties

Year	1993/ 94	1994/ 95	1995/ 96	1996/ 97	1997/ 98	1998/ 99	1999/ 00	2000/ 01	2001/ 02	2002/ 03	2003/ 04	2004/ 05	2005/ 06
Agriculture	143	135	137	155	233	323	482	468	256	214	123	212	278
Engineering	561	545	570	688	860	1174	1349	1411	1586	1705	1711	1967	1999
Law & Management	823	669	732	649	772	808	1065	1300	1374	1523	1773	2118	2232
Science	233	242	303	337	467	610	781	860	877	882	880	856	780
Social Studies & Humanities	448	542	603	642	754	816	898	942	1003	986	946	1241	1334
MIE *		139	259	244	225	103	173	94	172	184	160	158	150
MGI *	-	-	-	-	83	109	307	346	342	210	155	224	283
C-DAC *	-	-	-	-	-	-	-	-	-	-	312	280	254
Total	2208	2272	2604	2725	3414	3843	5055	5421	5590	5704	6060	6777	7083

* Courses are run jointly with the University of Mauritius. Certificates are issued by the University of Mauritius

Source: University of Mauritius (2006)

Between 1997 and 2003, there has been a remarkable improvement in the provision of degree programmes from 27 to 93 and of masters level programmes from 6 to 34 in publicly-funded institutions. A total of 208 different programmes were being run in 2003 as compared to 91 in 1997. The Sir Seewoosagur Ramgoolam Medical College (SSRMC) and a Dental College have been set up to enable our students to follow courses leading to degrees in medicine and dentistry. The University of Mauritius also offers courses leading to the award of degrees in the biomedical sciences.

To address the shortfall of some 4000 seats at tertiary level, the need is felt to encourage both domestic and foreign private investment in tertiary education. The government intends to provide incentives to brand name institutions from overseas for the setting of up local branches to service local needs as well as the region. At the same time there is a need for a coherent and conducive regulatory framework to govern the setting up of private universities.

The Gross Tertiary Enrolment Rate¹, including those studying overseas has consequently increased from 11.7 percent in 1999 to 28.4 percent in 2005. The demand for tertiary education is mainly from fresh HSC graduates, unemployed, meeting the requirements for tertiary enrolment and those who are already working but want to further their career prospects by mainly enrolling for part-time courses locally or with foreign institutions. Table 2(g) shows the number of students who enrolled for distance learning by levels and fields of study as at December 2005.

**Table 2(g): Enrolment through Private Providers/Distance Education
by Field and Level of Study as at December 2005**

Accountancy		2747	12	5			2,764
Admin./Management	505	258	121	40	148	14	1,086
Arts		249					249
Business/Commerce/Mktg		379	289	2	28	108	806
Communication			108		27		135
Dentistry			158				158
Design			58				58
Economics			122	9			131
Education	4		35				39
Engineering		2					2
Finance		35		13			48
Health Related		1				11	12
Humanities			30				30
Information Technology		21	495	385	297	63	1,261
Languages			138	45			183
Law	3		78	189		9	279
Mathematics			66	22			88
Medicine			547				547
Pharmacy			2				2
Religious Studies			15				15
Science			12				12
Social Science			114				114
Transport			11				11
Travel/Hotel/Tourism	11		27		12		50
Not Available			30				30
Total	5 2 3	3, 6 9 2	2, 4 6 8	7 1 0	5 1 2	2 0 5	8, 1 1 0

Note: Above statistics exclude 1887 candidates enrolled through Distance Mode (MIE - 1533 & MCA - 354)

Source: *Digest of Educational Statistics, CSO (2006)*

¹ Gross Tertiary Enrolment Rate – refers to the number of students enrolled at the tertiary level, both locally and overseas, as a percentage of the population in the age group 19-24 years

In line with the global trend, tertiary education in Mauritius is also witnessing growing demand as the number of students enrolling is increasing year by year. As an indication, the number of local enrolment in the publicly funded institutions and private institutions including Distance Education has increased significantly from 12 000 in 1999 to 21 000 in 2005 (representing an increase of nearly 75 percent).

Expected Output From The Education System

In Mauritius, expenditure on education and enrolment at all levels is continuously increasing especially at secondary and tertiary levels. Consequently, the number of passes at all level of the education system is continuously increasing, which, will leave the country with a more educated workforce. The following Tables 2(h) and 2(i) give us an indication of the number of HSC holders and university graduates that our education system will produce in the next three years and more.

Table 2(h): Projected HSC Population and HSC Graduates, 2004 – 2015

Year	Higher School Certificate Student Population	Number Examined At Higher School Certificate	Estimated Number Of Passes (76%) at Higher School Certificate
2004	7,660	6,894	5,240
2005	8,893	7,825	5,947
2006	9,311	8,380	6,369
2007	10,400	9,360	7,114
2008	11,425	10,280	7,813
2009	12,550	11,295	8,584
2010	12,800	11,520	8,755
2011	13,150	11,835	8,995
2012	13,225	11,900	9,045
2013	13,150	11,835	8,995
2014	12,900	11,610	8,824
2015	12,550	11,295	8,584

Source: Tertiary Education Commission quoted in *Developing Mauritius into a Knowledge Hub and a Centre of Higher Learning* (2005)

Table 2(i) shows the evolution of the tertiary education enrolment from 1999 to 2005. The Table comprises the number enrolled in publicly funded institutions, Distance Learning and those studying abroad. These figures can be considered as the number of graduates that the tertiary sector will produce as the level of failure at tertiary level is minimal as compared to SC and HSC. The figures also show the Gross Tertiary Enrolment rate for the six years.

Table 2(i): Evolution of Tertiary Education Enrolment by Source, 1999 – 2004

SOURCE	1999	2000	2001	2002	2003	2004	2005
Publicly Funded Institutions	7,877	9,081	11,035	9,918	12,710	11,713	13,399
Distance Education / Private Providers	4,650	5,255	6,100	7,242	7,507	7,515	8,110
Subtotal (Local)	12,527	14,336	17,135	17,158	20,217	19,228	21,507
Overseas	2,424	2,423	3,019	4,791	5,468	6,846	7,357
Total Enrolment	14,951	16,759	20,154	21,949	25,685	26,074	28,864
Gross Tertiary Enrolment Rate	11.7	12.9	15.4	16.4	19.7	20.7	28.8

Source: Tertiary Education Commission quoted in *Developing Mauritius into a Knowledge Hub and a Centre of Higher Learning* (2005)

Even though the enrolment rate of Mauritian students at tertiary level has gone up tremendously in the past five years, the Gross Tertiary Enrolment Rate is still low as compared to other countries as shown in Table 2(j).

Table 2(j): Gross Tertiary Enrolment Rate (GTER) for Selected Countries

Country	GTER (%)
Africa	
Botswana (2001)	4
Côte d'Ivoire (1998)	7
Egypt (1998)	38
Ghana (2001)	3
*Mauritius (2004)	20.7
Morocco (2001)	10
Namibia (2001)	7
Senegal (1998)	4
South Africa (2001)	15
Tunisia (2001)	23
Asia & Pacific	
Australia (2001)	65
India (2000)	11
Indonesia (2001)	15
Japan (2001)	49
Malaysia (2001)	27
New Zealand (2001)	72
Republic of Korea (2001)	82
Singapore (2001)	45
Sri Lanka (1995)	5
Thailand (2001)	37

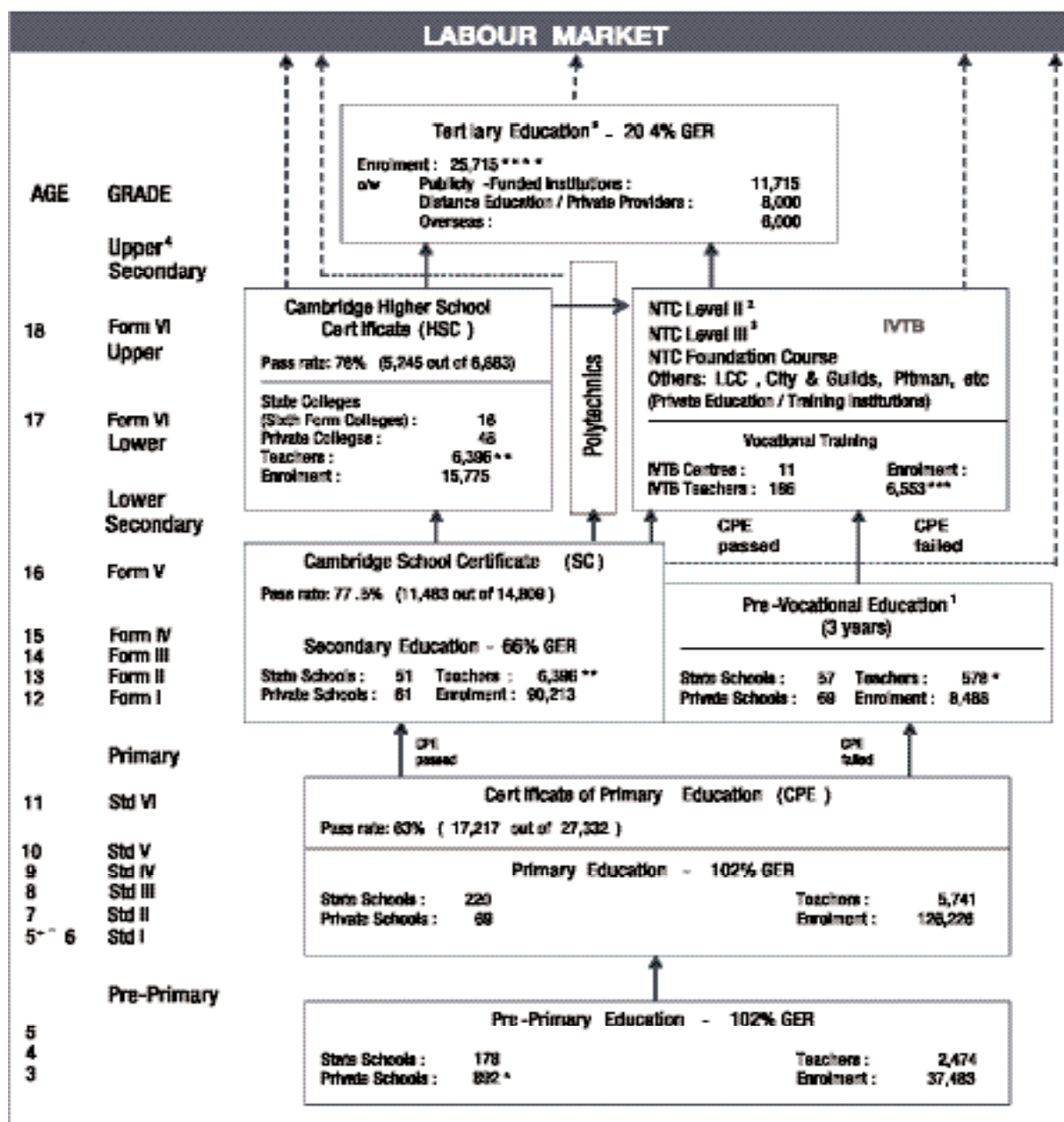
Country	GTER (%)
Europe	
Czech Republic (2001)	34
France (2000)	54
Hungary (2001)	44
Ireland (2000)	47
The Former Yugoslav Rep. of Macedonia (2000)	25
United Kingdom (2000)	59
North America	
Canada (2000)	59
Jamaica (2001)	17
United States (2001)	81
South America	
Brazil (2001)	18
Chile (2002)	42
Colombia (2001)	24

Compiled from Data Obtained from UNESCO

*Source: Tertiary Education Commission (2005)

The structure of the Mauritian education and training provision system is shown in Figure 2.1.

Figure 2.1: Structure of Mauritian Education and Training Provision System



KEY : (Note: Figures quoted are as at year 2004)

NTC : National Trade Certificate

IVTB : Industrial and Vocational Training Board

GER : Gross Enrolment Ratio

1 : Pre-Vocational Education was launched in 2000/01 school year and comprises predominantly students who failed CPE Examination: it is followed by the NTC Foundation Course,

2 : Requirements for NTC Level II vary between SC and HSC or NTC III

3 : Requirements for NTC Level III vary between Form III and SC or NTC Foundation Course (Minimum age: 15),

4 : Upper Secondary are included in the structure of Private Secondary Schools, whereas for the State sector, Sixth Form Colleges have been set up since 2003,

5 : Refers to Post A-level / HSC.

* : Includes municipalities/village councils and roman catholic aided school

** : Include both Upper Secondary and lower Secondary, as appropriate.

*** : Refers to enrolment in IVTB Centres only, (figures are provisional) o/w full time (NTC II and NTC III): 2, 533, part-time (mostly non-award courses); 4020

**** : Estimates: source Tertiary Education Commission.

The National Qualifications Framework

In the wake of the rapid development taking place in the private provision of tertiary education locally, two institutions have been created by the Government, namely the Mauritius Qualifications Authority (MQA) and the National Accreditation and Equivalence Council (NAEC), set up to look after aspects of quality and accreditation. The MQA has been established with the objectives of developing, implementing and maintaining a National Qualifications Framework for an effective certification system, ensuring compliance with provisions for registration and accreditation as per the MQA Act 2001 and ascertaining that standards and registered qualifications are internationally comparable.

MQA is responsible for the formulation of policies for the registration and accreditation of bodies responsible for establishing, monitoring and auditing national standards and qualifications. It is also called upon to register qualifications, register and accredit training institutions, recognise and validate competencies for purposes of certification obtained outside the formal education and training systems, generate national standards for any occupation, keep a database of learning accounts and publish an annual list of registered unit standards, qualifications and training institutions. In 2005, around 325 training institutions were registered with the MQA.

Expenditure on Education

Undoubtedly, human capital is a key determinant of economic growth and emerging evidence indicates that it is also associated with a wide range of non-economic benefits such as better health and well-being. Investment in human capital, and by implication in education, has thus moved to centre stage in strategies to promote economic prosperity, fuller employment and social cohesion. As a result, education is increasingly considered an investment in the collective future of societies and nations, rather than simply in the future success of individuals.

One way of assessing the impact of human capital for the collective performance of nations is by measuring the impact of various factors on growth in gross domestic product. GDP alone, or even economic well-being, cannot adequately reflect the full dimensions of human well-being – which include the enjoyment of human rights and civil liberties, good health, a clean environment and personal safety – but the role of economic growth in this equation should not be underestimated. Growth in economic output not only provides the resources for tackling poverty, social exclusion and poor health, but also expands the range of human choice. Economic well-being, flowing from economic output, should thus be recognised as an important component of human well-being.

Many studies conducted both in developed and developing countries have shown that there exists a direct link between economic growth and investment in education; many countries have realised this and have invested heavily in education.

Table 2(k) shows public expenditure on education as a percentage of the Gross National Product for some countries. One important observation is that the average expenditure for the world stood at 5.2 percent in 1994.

Table 2(k): Public Expenditure on Education as percent of GNP in 1995

World	5.2
China	2.5
Philippines	3.0
Thailand	4.1
India	3.3
Malaysia	4.7
Singapore	3.0
Pakistan	2.8
Turkey	2.2
South Korea	3.7
Egypt	4.8
Mexico	4.9
Brazil	5.1
Argentina	3.8*
United States	5.4*
Japan	3.6*
Canada	6.9*
Germany	4.8
Russian Federation	3.5
Poland	5.2
Hungary	5.3

Source: UNESCO (1999)

Progress towards quality in primary education is seen in high enrolment rates, investment in infrastructure (school buildings, playgrounds, school gardens, audio-visual facilities and school libraries), decreasing pupil-teacher ratio, school feeding programme, school health programme, provision of free text-books, teacher education and an effective assessment system. The total expenditure in the education sector has increased continuously over the years as shown in Table 2(l).

For the year (2005/2006), the budget devoted to education in Mauritius is Rs 6 900 million which makes education the largest sector of government in terms of public expenditure. This amount represents 16.5 percent of public expenditure, excluding debts servicing.

From the figures in Table 2(m), it is clear that the government has continuously increased the share of expenditure on education, having realised the importance of investing in education, and it provides an indication of the percentage of total expenditure of GDP for the past ten years.

Table 2(l): Public Expenditure on Education in Mauritius (2001 – 2005)

	2001/2002		2002/2003		2003/2004 ¹		2004/2005 ¹		2005/2006 ²	
	Rs. (Mn)	%	Rs. (Mn)	%	Rs. (Mn)	%	Rs. (Mn)	%	Rs. (Mn)	%
Ministry of Education	4,038.9	98.2	4,479.6	97.9	5,160.5	97.8	5,611.4	97.4	5,948.9	97.2
Pre-primary	59.2	1.4	68.0	1.5	78.4	1.5	107.0	1.8	99.0	1.6
Primary	1,286.1	31.5	1,417.0	31.0	1,514.2	28.7	1,565.0	27.2	1,777.1	29
Secondary	1,621.2	39.4	1,830.1	40.0	2,308.1	43.7	2,579.3	44.8	2,554.7	41.8
Technical & Vocational	76.1	1.9	81.0	1.7	94.6	1.8	113.7	1.9	123.5	2.0
Post Secondary	639.7	15.6	671.8	14.7	622.0	11.8	796.7	13.9	747.7	12.2
Other ³	353.6	8.6	411.7	9.0	543.2	10.3	449.7	7.8	646.9	10.6
Other Ministries ⁴	74.7	1.8	94.4	2.1	112.2	2.2	146.7	2.6	165.6	2.8
Total	4,113.6	100.0	4,574.0	100.0	5,272.7	100.0	5,758.1	100.0	6,114.5	100.0
Public Expenditure on Education as a % of Total Government Expenditure		12.98		13.27		14.7		15.7		14.3

1 annual, 2 provisional: budget estimates, 3 includes administrative staff, MES, MRC & Conservatoire

4 includes Sea Training, MIH, IVTB, MQA, Training Program & Technology - School IT Program

N.B 1 US\$ is approximately Rs 34

Source: Digest of Educational Statistics CSO (2006)

On the international scene, India provides a good example of a developing country investing heavily in education. India is home to 17 percent of World's total population accommodated in an area of 2.4 percent of the World's total area. The country has witnessed phenomenal educational development – both in quantitative and qualitative terms, since independence.

Table 2(m): Percentage of GDP spent on education for Mauritius

Year	Percentage of GDP at market price spent on education in Mauritius
1994/95	3.8
1995/96	4.2
1996/97	4.0
1997/98	4.3
1998/99	3.5
1999/00	3.5
2000/01	3.5
2001/02	3.8
2002/03	4.0
2003/04	3.7
2004/05	3.7
2005/06	3.8

Source: CSO (2006)

However, the national goals of universal elementary education and total eradication of illiteracy have still remained elusive. The government is committed to achieving these national goals and has been steadily increasing the budgetary allocation for education. India spent 4.11 percent of its GDP on education during 2000-2001 but about 44 percent of its adult population still remains to be made literate.

Table 2(n) compares the population, literacy rates and level of public expenditure on education in India and some of its neighbouring countries. Afghanistan with 63.75 percent adult illiterates is at the top, closely followed by Bangladesh, Nepal and Pakistan.

Table 2(n): Population, Literacy & Public Expenditure in India and some Neighbouring Countries

Particulars	Population (millions) (2000)	Percentage to world Population (2000)	Percentage of adult illiterate	Public expenditure on education as percentage of GN
World	6055.0	100	NA	NA
Afghanistan	21.2	0.35	63.7	NA
Bangladesh	129.2	2.13	59.2	2.2
China	1277.6	21.10	15.0	2.3
India	1027	16.96	44.2	3.2
Indonesia	212.1	3.50	13.0	1.4
Japan	126.9	2.10	NA	3.6
Myanmar	46.4	0.77	15.3	1.2
Nepal	22.5	0.37	58.6	3.2
Pakistan	156.5	2.58	56.7	2.7
Sri Lanka	18.8	0.31	8.4	3.4

Source: Statistical Yearbook (1999), UNESCO & Census of India (2001) – Provisional population total

Improvement in any educational system is inevitably influenced by existing structures and financial limitations. According to Ginzberg (Ginzberg, 1971), *until the people understand that change can occur, that it can be directed, that education and new technology can assist in achieving it, and that people can benefit from change, little development will occur. Probably the greatest challenge to making manpower effective is determining the type and timing of the programme that can best contribute to change.* Therefore, it is vital to keep moving in a steady and purposive way towards establishing a solid human resource base in our country.

Recommendations

With a view to achieve key objectives to promote education in general, the government may adopt the following measures:

- Equality of chances in education at all levels. There will be a need to give equal treatment to all educational institutions financed by the government whether it is in rural or in urban areas
- Ensure that education and training are oriented towards the requirement of globalisation and world of work so that our labour is well equipped to face the realities of globalisation
- Increase the intake capacity of tertiary institutions to more than 10 000 students. Every year, the number of applicants at the University of Mauritius and University of Technology and other tertiary institutions is increasing. Therefore, the government must ensure that the supply of seats meets the demand
- Upgrade level and quality of education and promote international recognition of the technical and professional studies and also set the standard according to international level
- Review the teaching-learning process by placing more emphasis on teachers' training and ICT in educational institutions.

In this context, the government will have to work in collaboration with all the stakeholders and interest groups to achieve the 4 "E" which are:

Empowerment
Education
Entrepreneurship
Employability

Measures should be taken to promote meritocracy in employment, social justice and equality in recruitment. Career guidance should be intensified with a view to achieve efficiency and competitiveness.

Some of these measures would be:

- Review the Public Service Commission and the Local Government Service Commission for better equality in the public sector;
- Setting of an Employment Equity Commission to ensure equality in recruitment;
- Establishment of Corporate Responsibility Charters; and
- Setting up of training and capacity building programmes in order to have more professionals.