The Lebanese Education Sector

Dual Education System

1. The Juxtaposition of the Public and Private Sectors in Education

The education system in Lebanon is often described as a dual system where public and private educational institutions offer similar education services. These two sectors operate almost independently of each other, which makes them more adjacent sectors than complementary¹. The private education sector charges school fees and premiums, while public education is essentially free. As for the 'free' private educational institutions, their role is limited to providing this service at both the pre-primary (kindergarten) and elementary levels because they are largely supported by the State².

It is to be noted that the private education sector was ahead in its inception of the public education sector, as it was initiated by missionaries who created the majority of private schools before the proclamation of independence of Lebanon in 1943. After independence, the Lebanese State began construction of public schools until their number equated the number of private schools during the 1960s. However, the displacement of the population internally and externally, and the decline of the State's investment in public education during the civil war (1975-1990), enabled the private sector to play a greater role in education in general, over the last two decades.

⁽¹⁾ The Ministry of Social Affairs / United Nations Development Program (2010), the National Strategy for Social Development prepared by the Consultation and Research Institute CRI, Beirut: United Nations Development Program.

⁽²⁾ The Ministry of Education and Higher Education (2004), the National Action Plan for Education for All 2004-2014, Beirut: The Ministry of Education and Higher Education.

2000 62% 1992 45% 1980 42% 1967 51% 1960 49% 1958 64% 1946 67% 1944 81% 0% 20% 40% 60% 80% 100% ■ Public education sector ■ Private education sector

Illustration 1: The evolution of the number of private and public schools between 1944 - 2000

Source: Nimr Fraiha (2003), "The Educational Center for Research and Development in 1017 days," Beirut: Dar – Alibdaa

Indeed, the private education sector is back in expansion at the expense of public education since the 1980s, in view of the State's semi-absence. This may be related to the growing parents' belief not to enroll their children in public education, unless they cannot afford the burden of tuition fees of private schools. The number of public schools reached 1,275 in 2013, as compared to 1,502 private schools and other free. Public education comprised about 44% of the total number of teachers (94,499 teachers) during the 2012-2013 school year, and about 31% of all students enrolled in the Lebanese educational system in that year³. The official enrollment ratio in public education is considered very low compared to other countries in the region (about 75% and 96% respectively in Jordan and Egypt in 2006)⁴.

⁽³⁾ Educational Center for Research and Development, Statistical Bulletin for the Academic Year 2012-2013.

⁽⁴⁾ Al-Masah Capital Limited (2011) MENA: Education Sector Report.

Due to the current perception of poor quality of education in public schools in comparison with private schools, the enrollment ratio in public schools in Lebanon continued to decrease in recent years. One reason behind the poor level of public education could be that a large number of teachers lack the adequate qualifications to teach.

"Significant discrepancies are evident between the public and private education at the level of terms of quality [...] Nine students out of 1,000 students in public schools earn the Baccalaureate [Secondary/Hi-School] certificate without from the first round, compared to 225 students in private schools"⁵. Despite the large number of public schools, and the concerted efforts of the Ministry of Education and Higher Education (MEHE) to improve the quality of teaching and learning, most parents prefer to send their children to private schools, based on their evaluation of the quality of education offered by private schools as being even better than the quality of education provided by public schools.

2. Public Spending on Education

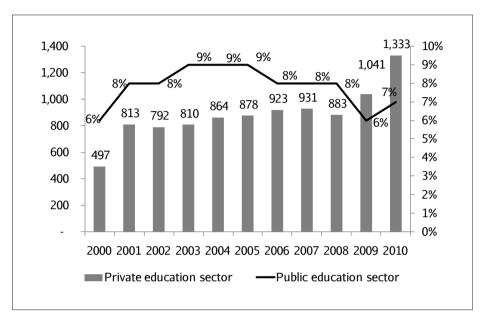
The educational system in Lebanon is characterized by inadequate government spending on education, which only accounted for about 2.9% of GDP in 2001 then decreased to 2.7% in 2007, and 1.8% of GDP in 2009⁶. MEHE's share of total State Budget's expenditures ranged between 5.8% and 9% during the period between 2000 and 2010. In spite of the rise in public spending on education from about 497 billion Lebanese liras (LL) in 2000 to about LL1,293 billion in 2010, the share of expenditures allocated to MEHE from the overall Budget remained almost stable (5.8% in 2000, and 6.8% in 2010)⁷.

⁽⁵⁾ United Nations Development Program (2009) Lebanon: National Human Development Report: Towards a Citizen's State.

⁽⁶⁾ UNESCO (2011) Institute for Statistics Global Education Digest 2009: Comparing Education Statistics across the World. Montreal: UIS.

⁽⁷⁾ The Lebanese Government, The Budget Bill for the year 2000 and 2010, Beirut: Ministry of Finance.

Illustration 2: The Ministry of Education budget by its share of the total State Budget



Source: Ministry of Finance, the annual report on public finances and projects of public budgets laws between 2000 and 2010

It should be noted that there has not been an enactment of public budget laws since 2005 (thus resorting to a procedure of cut-off/pro-rating accounts), but the annual budget projects stayed with that share as almost the only indicator for estimate MEHE's budget, bearing in mind that such estimates may not represent MEHE's actual spending. Based on the available information, it is clearly noted that primary and middle school education receive the largest share MEHE's budget, followed by higher education and secondary education.

100% 9% 9% 9% 9% 9% 9% ■ VET 90% 19% 80% 20% 21% 21% 22% 23% ■ University 70% 18% 15% 19% 60% 19% 18% 18% Secondary 50% ■ Primary and 40% Intermediate 49% 30% 47% 47% 48% ■ Research 47% 46% 20% ■ Administrative 10% 0% 2007 2008 2009 2010 2011 2012

Illustration 3: Distribution of the Ministry of Education budget

Source: Ministry of Finance, Public Budgets Bills

The in-depth analysis of the structure dedicated to primary and secondary education expenses shows that the most important element in this expenditure is on salaries of teachers belonging to MEHE's cadre, and representing approximately 72% of the total budget for primary and intermediate educational levels in 2007. However, this ratio has gradually decreased to about 53% in 2012, due to flaws in the correction of teachers' salaries, and the State's increased reliance on contractual teachers, which led to an increase in the latter's part of the total allocation for spending on primary and secondary education.

The budget allocations for primary and secondary education include Government subsidies to private free schools, which registered a remarkable leap in their share of the primary and intermediate education budget between 2007 and 2012, from about 10% to 24% (4% total budget of the Ministry in 2007 to 11% in 2012). This leap took place in spite of a previous formal proposal to reduce support to free private schools with poor performance⁸, in an attempt to limit the volume of public expenditure on education.

^{(8) &}quot;The State of Education Financing in Lebanon: Facts, Figures and Suggestions" - The Ministry of Higher Education (2004).

100% 8% 10% 11% 10% ■ Taxes 14% 90% 24% 7% 9% 12% 15% 7% ■ Support to NGOs (free private 80% 5% 4% schools) 5% 4% 9% 70% 5% ■ Support of public school funds 4% 60% 7% ■ Transport subsidies 50% ■ Family benefits 40% 72% 69% 69% 68% 65% ■ Salaries of contractual 30% 53% workers 20% ■ Salaries of permanent employees 10% ■ Rent of schools and their 0% maintenance 2007 2008 2009 2010 2011 2012

Illustration 4: Budget distribution of Elementary and Intermediate Education 2007-2012

Source: Ministry of Finance, Public Budgets Bills 2007-2012

It is difficult to estimate the present cost per student in every stage of education in the public sector due to lack of recent and detailed data. However, the data available for previous years show that the annual cost per student at the primary level reached, in the middle of the first decade of the millennium, nearly LL1,930,761 (\$1,287), compared to LL2,593,465 (\$1,729) in the intermediate phase, and LL3,069,795 in high school (\$2,046)⁹.

Nevertheless, it is generally agreed on a large scale that the increasing public expenditure on education "was not associated with a parallel improvement in the size and quality of service production in the public sector"¹⁰. It should be noted that the lack of effectiveness of spending is due in great part, to inequitable distribution and ineffective use of resources (especially human resources)¹¹.

⁽⁹⁾ The Ministry of Higher Education (2010): Quality Education for Development- General Framework for Strategy Development and Education-General Education Development Plan (pre-university): 2010-2015.

⁽¹⁰⁾ United Nations Development Program (2009): National Human Development Report 2008-2009: Towards a Citizen's State.

⁽¹¹⁾ The Ministry of Higher Education (2010): Quality Education for Development- General Framework for Strategy Development and Education-General Education Development Plan (pre-university): 2010-2015.

The policy of grants and school assistance received by the employees of the State indicates that they use the bulk of these subsidies to educate their children in private schools. "In 2004, school grants received by public employees annually were estimated at \$150 million, 89% of which was spent by them on school fees for their children attending private schools" 12. And as shown in the table below, the proportion of these grants increased in 2011 to almost 13% of MEHE's total expenditure, which is equivalent to 3.5 times the value of aid that private schools themselves get (free private schools that serve the poorest of children).

Table 1: The distribution of expenditure of the Ministry of Higher Education 2006-2009

	2006	2007	2008	2009	2010	2011
Education (billions of Lebanese pounds)	960	976	950	1,170	1,272	1,262
Ministry of Higher Education	89.0%	88.5%	87.9%	88%	87.9%	87.1%
Wages and salaries of the General Directorate of Education staff	56.0%	58.6%	54.1%	51.8%	54.6%	59.1%
Salaries and wages of the Directorate General of Higher Education staff	0.1%	0.1%	0.1%	0.1%	0.1%	0.1%
Wages and salaries of the General Directorate of Vocational Education Staff (VET)	8.3%	8.1%	8.7%	9.5%	9.4%	9.6%
Financial contributions to the salaries and wages of the Lebanese University	17.8%	18.6%	19.4%	24.3%	22.7%	21.8%
Financial contributions to educational institutions, non-profit (private schools)	5.3%	4.4%	6.0%	4.4%	4.0%	3.7%
Buildings under construction (construction and rehabilitation of schools)	3.4%	3.2%	1.0%	0.5%	0.8%	0.5%
* Scholarships in the private education sector	11.0%	11.5%	12.2%	11.8%	12.1%	12.9%

Source: Ministry of Finance, "The Annual Public Finance Report", 2006 - 2011

⁽¹²⁾ World Bank (2010): "Project Information Document" Report Number: AB5607.

3. Household Spending on Education

In addition to the education spending of public money, families bear a major share of the cost of education in public and private schools in the form of premiums and registration fees and other expenses, including textbooks, transportation, uniforms and activities outside the curriculum costs. The studies on family budgets for the years 1997, 2004 and 2012, show that spending on education is higher among high-income households. In fact, the proportion of money spent on education by families from their total money expenditure in 2012 was equivalent to 5% in households whose annual income does not exceed LL7.8 million Lebanese, while this percentage rises to about 8% in households whose annual income exceeds LL28 million Lebanese¹³. On average, the proportion of spending on education out of the total household expenditure in 2012 was about 6% nationally.

According to a recent study¹⁴, the total annual cost that a family incurs toward each student at primary level in a private school ranges between LL1,822,668 (\$1,215) and LL2,149,119 (\$1,433 US), depending on the discounts they manage to get on tuition fees. The total annual cost per student in the intermediate stage varies from LL2,139,819 (\$1,427) to LL2,473,818 (\$1,650). In the free private schools, registration fees in primary school for the 1999-2000 school year varied between LL325,000 (\$217), and LL375,000 (\$250). In addition, there are annual insurance premiums in the amount of LL25,000 (\$17) and LL5,500 per student as extra compensation for transportation in the case of schools, which are 300 meters above sea level. Thus, the annual cost total per pupil becomes between does not exceed \$506 per student, depending on the size of discounts on tuition fees¹⁵, and that's according to the same study. Whereas in public schools, and according to the same study, the total annual cost to the family for each student at the elementary level ranges from LL315,044 (\$210) to LL340,336 (\$227), and it ranges between LL422,000 (\$281) and LL474,653 (\$316) in the intermediate stage.

The table below shows the distribution of the comparative cost per pupil, according to the registration and the cost of books, transportation and food fees.

⁽¹³⁾ Central Administration of Statistics (2012) National Survey of the Family Budget for the Year 2012, Beirut. Available on the website: http://cas.gov.lb/index.php/demographic-and-social-en/householdexpenditure-en.

⁽¹⁴⁾ Helsinki Consulting Group (2005) "Needs Assessment Report": Helsinki Consulting Group.

[&]quot;Needs Assessment report- Component 1.3: Rationalizing the Education Sector's Financing System" Education Development Project, world Bank Loan No. 7010-LE.

⁽¹⁵⁾ ibid

Table 2: The distribution of the Cost of Education by Cost Items and Educational Stage in private and public schools (1999 - 2000)

	Free private schools		Subsidized private schools		Public schools		
Tuition fees	Kindergarten	Primary	Intermediate	Primary	Primary	Intermediate	
Books	77	72	73	52	26	26	
Transportation	3	7	7	12	18	18	
Food and drink	10	9	8	13	16	16	
Additional	5	6	7	13	28	28	
expenses	5	6	6	9	12	12	
Total	100	100	100	100	100	100	

Source: Helsinki Consulting Group (2005) "Needs Assessment Report", which was prepared at the request of the Ministry of Education, based on preliminary statistics- Educational Center for Research and Development

Distribution of Schools and their Characteristics

1. Distribution of Schools

The available data on the number and distribution of schools do not indicate that Lebanon suffers from lacks in that regard. Some studies rather indicate the existence of a surplus in the number of schools¹⁶. Furthermore, according to the results of a comprehensive survey of public schools in the context of the project "D-RASATI", Lebanese public schools do not suffer from an excess number of students in classrooms, which means that the schools have the capacity to accommodate a greater number of students. The average number of students per class, in almost 50% of public schools, amounts to 10-20 students, while the average is between 5 to 10 pupils per class in about 31% of public schools¹⁷.

⁽¹⁶⁾ National Human Development Report (2009) of the United Nations Development Program in Lebanon "Toward a Citizen's State" (2008-2009).

⁽¹⁷⁾ The Ministry of Higher Education (2011) "D-RASATI" Report on the Survey Results.

Therefore, the problem does not lie in the number of schools in Lebanon, but rather in their non-equitable distribution among regions. As a matter of fact, some regions are characterized by a clear predominance of private schools, while the opposite occurs in other areas where public schools dominate in number. More precisely, there is a predominance of public schools in the poorest areas of Lebanon, particularly in the North and South. However, the capital, Beirut, which is the relatively richest region in Lebanon, is home to the vast majority of private schools.

Table 3: The distribution of schools by Sector and Region

	Special free sector	Informal sector	Private sector	Total
Beirut	9%	37%	54%	100%
Beirut suburbs	14%	22%	64%	100%
Mount Lebanon	10%	49%	41%	100%
North	11%	63%	27%	100%
Bekaa	19%	52%	30%	100%
South	13%	55%	32%	100%
Nabatieh	16%	56%	28%	100%

Source: Educational Center for Research and Development (2010), "The Development of Education Indicators 2002 – 2010"

2. Physical Infrastructure and Services

Many studies have shown that public schools suffer from the problem of inadequate buildings and equipment. A study in 2004 showed that over 30% of the buildings do not meet school construction standards, and about 20% of the buildings need renovation and rehabilitation¹⁸. The study also highlights the lack of availability of services and school supplies - such as laboratories, libraries, computer and personalized rooms for workshops - in public schools. And if available, they are in most cases not used effectively for several reasons, among which are slow, or lack of, administrative decisions and the lack of specialized staff¹⁹.

⁽¹⁸⁾ The Ministry of Higher Education (2004), The National Strategy for Education in Lebanon, Page 63.

⁽¹⁹⁾ Study of Association of Secondary School Teachers -2001.

A recent comprehensive study was conducted in 2011 on infrastructure in 128 public schools out of 1,281 schools in Lebanon, financed of the United States Agency for International Development (USAID) in cooperation with the MEHE as part of "D-RASATI" to support the rehabilitation and development of schools and improving teacher conditions²⁰. The study shows that only 43% of public school buildings are owned by the MEHE, while the rest of the schools are owned by individuals, municipalities, religious institutions, or by civil society organizations. The type of ownership affects the mode of MEHE's commitment to the issues of school maintenance and infrastructure development.

In addition, a number of rented school buildings is not initially designed for use as a school, and therefore lack the necessary equipment and complementary facilities such as playgrounds and laboratories. The study also suggests that school buildings owned by MEHE are relatively in a better condition than the rented ones. In detail, more than 30% of the school buildings owned by MEHE are compatible with the quality standards school buildings, compared to only 14% of schools not owned by MEHE²¹.

In terms of basic services, about 70% of public schools lack alternative sources of drinking water in case the primary source of this water is not drinkable. Moreover, over 25% of these schools have only one drinking water tap for every 33 students, while about 83% of those in charge of public schools reported that the water taps are in poor condition. In addition, almost half of these schools do not meet the required ratio of toilets to the number of students.

Regarding the equipment, over 60% of public schools are equipped with laboratories, whereas the rest of the schools lack such laboratories. In addition, only 38% of the schools have a laboratory dedicated to Information Communications Technology (ICT).

D-RASATI study identified a positive relationship between the rate of student enrollment and the school's physical infrastructure, as students are more inclined to

⁽²⁰⁾ The Ministry of Higher Education (2011) "D-RASATI" Report on the Survey Results.

⁽²¹⁾ The Ministry of Higher Education (2011) "D-RASATI" Report on the Survey Results.

join a school with suitable infrastructure. The study also highlights the negative impact of the school's incompatible physical condition on the rates of academic success in the official Brevet exams.

While the Governorate of North Lebanon represents the largest share of public schools compared to other governorates, a large number of public schools is in poor condition. According to the results of "D-RASATI" on the degree of need of each public school for rehabilitation, it was found that the schools in the North, Bekaa, and Mount Lebanon are the most needy. Moreover, 30% of Northern Lebanon schools are in the category of the most needy²².

Student Characteristics

1. The Distribution of Students

The total number of students enrolled in public and private schools, and in United Nations Relief and Works Agency (UNRWA) schools, in all levels of education, reached 975,695²³ students during the 2012-2013 school year. Students were distributed over 2,777 schools (public and private schools, and UNRWA), according to the educational levels as follows: 18% in pre-school, 48% in primary school, 21% intermediate, and 13% at the secondary level²⁴. Overall, the public education sector absorbs only about 31% of the total number of students enrolled in schools overall, while the private education sector attracts more than 53%, despite the aforementioned relative convergence between the numbers of public and private schools. The remaining number of students in private schools distributed free (13%) and UNRWA schools (3%)²⁵.

⁽²²⁾ The Ministry of Higher Education (2011) "D-RASATI" Report on the Survey Results.

⁽²³⁾ Educational Center for Research and Development, Statistical Bulletin for the Academic Year 2012-2013.

⁽²⁴⁾ Educational Center for Research and Development, Statistical Bulletin for the Academic Year 2012-2013.

⁽²⁵⁾ Educational Center for Research and Development, Statistical Bulletin for the Academic Year 2012-2013, p 8.

Table 4: Female share of the total number of students in public and private schools and UNRWA schools 1974 - 2012

Education	1973-1974	2001-2002	2012-2013
Pre-primary	46.9%	48.6%	48.2%
Primary	47.2%	48.1%	48.1%
Intermediate	46.5%	52.1%	52.4%
Secondary	41.8%	55.0%	58%
All stages of public education	46.7%	49.8%	50.2%

Source: Center for Educational Research and Development, Statistical Bulletins 2001-2002, 2009-2010, 2012-2013; and The Development of the Education Sector in 20 Years: Statistics and Trends 1972-1973 / 1994-1995

Students enrolled in public schools in the Northern region, which is the poorest in Lebanon, represent the largest percentage of the total number of students in this region (46%), compared to only 23% of the total number of students in Beirut.

Table 5: The distribution of students by Sector and Region 2012- 2013

	Informal sector	Special free sector	Private sector	UNRWA	Total
Beirut	23%	7%	67%	4%	100%
Beirut suburbs	14%	10%	75%	1%	100%
Mount Lebanon	26%	8%	65%	1%	100%
North	46%	12%	38%	4%	100%
Bekaa	34%	24%	41%	1%	100%
South	36%	12%	38%	13%	100%
Nabatieh	40%	20%	40%	0%	100%
Total	31 %	13 %	53 %	3 %	100%

Source: Educational Center for Research and Development, Statistical Bulletin for the Academic Year 2012-2013

A study reveals for a number of interesting features in the distribution of students in the education sector, and by educational stage. At the kindergarten level, private schools account for the highest enrollment rate (63% in paid private schools, and 15% in free private schools), while the proportion of students enrolled in public-sector pre-primary schools does not exceed 23%, which makes it a obvious reference to the weakness of public investment in pre-primary education. This low enrollment in kindergarten in the public sector can be explained by the lack of pre-primary educational services in all public schools. In addition, pre-primary education in private schools extend over three years (serving children from age three to five), while this stage is limited to two years in the public educational sector (serving children age four to five). These facts constitute an additional incentive for parents to enroll their children in private schools from kindergarten. Moreover, a worrying fact is that once these children enter private schools at this early stage of education, they are more likely to stay in these schools, thus diminishing the possibility of them moving to a public school. This constitutes a key factor among others to explain the reasons for the low percentage of students enrolled in public education before secondary school in general in spite of the sums that the State spends in that regard, as well as the continuing increase in the number of teachers, especially the recent wave of contract teachers.

The ratio of students enrolled in public schools gradually increases up the ladder of educational levels, whereby some 28% of the total number of students are registered at the elementary level, and around 35% at the intermediate level, and a maximum of 45% in secondary education. In primary schools in particular, nearly half of the total number of students (46%) are enrolled in paid private schools, and about 22% in the free private schools, which points to the preference of parents for private schools for their children's education.

This trend also applies to the intermediate and secondary levels, which free private schools do not offer. The ratio of students enrolled in private schooling at the intermediate level reaches about 61% of the total number of students at this stage, while the percentage of students enrolled in private secondary education reaches about 52% of the number of total students at this stage. It should be noted that the low level of enrollment in private schools at the secondary stage, as compared to that of the intermediate stage, is due to several factors, including the fact that tuition fees in private schools increase when moving to a higher stage of education, which leads families to rely on public schools for their children's secondary education. Another key factor is that public secondary education retains an overall quality and is relatively good or at least acceptable, compared to the decline in public education at both the primary and intermediate levels.

Table 6: The distribution of students by Sub-Sector and Educational Phase 2012-2013

Educational phase	Number of students	In public sector	In free private schools	In private schools	In UNRWA	Total
Pre-primary	172404	23%	15%	63%	0%	100%
Primary	471626	28%	22%	46%	4%	100%
Intermediate	207889	35%	0%	61%	4%	100%
Secondary	123776	45%	0%	52%	3%	100%
Total	975695	31%	13%	53%	3%	100%

Source: Educational Center for Research and Development, Statistical Bulletin for the Academic Year 2012-2013

2. The Analysis of Enrollment Rates

Primary Stage: Considerable progress has been made in enrollment rates at the national level, making these rates close to the global average. However, there are still many inequalities, especially among regions, in addition to the prolonged absence of the policy of integration into the education system, which limits opportunities for children with special needs to access education.

The status enrollment rate²⁶ of Lebanese students in elementary school reached about 110.4% for 2004, and 104% in 2009, according to UNESCO, despite the absence of enforcing compulsory education strictly. The net enrollment rate²⁷ reached 92.7% in 2004. The gap between the status enrollment rate and the net rate is due to grade retention factors, and to delay factors which are discussed in the section on performance of the education system. Based on the statistical data of the Central Administration of

⁽²⁶⁾ The gross enrollment rate is the number of children enrolled in a certain stage of education (regardless of age) divided by the population of the official age group corresponding to the same educational level.

⁽²⁷⁾ Net enrollment rate is the number of children enrolled in a certain stage of education, who belong to the official age group corresponding to the stage of education concerned, divided by the total population in the same age group.

Statistics (CAS) for 2004, the fundamental differences do not exist in the net rate at the gender level, despite the fact that the male enrollment ratio (111.7%) exceeds that for women (109.7%)²⁸.

Intermediate Stage: While basic education includes both primary and intermediate levels, compulsory education in Lebanon is applied until the age of twelve, which is generally until the last year of primary school. This gap explains to some extent the decline in enrollment in the following years of education, starting from the intermediate phase which takes three years, while noting that students are not subject to an official examination to proceed to the seventh year (the first year of intermediate level). However, what can be indicated in this regard is a significant drop in enrollment of both Lebanese and Palestinian students, as well as the emergence of discrepancies at the level of social status in favor of girls. Specifically, the net enrollment rates among the Lebanese students witness a significant decrease, from 92.7% at the elementary level to 68.5% at the intermediate level. This may be related to lower primary school completion rates, high rates of repetition and / or dropout at this stage.

As for the total enrollment rate, it maintains a relatively high level, reaching 97.7%, thus indicating that high repetition rates may be the main factor behind it²⁹. In fact, the highest percentage of repeaters (failed) in all intermediate school years was registered in the seventh grade - the first year of this stage – as it approximately reached 8.5%³⁰. It is noteworthy that the gross and net enrollment rates with regard to girls rate (104% and 72%, sequentially) are higher than those registered for boys (92% and 65%), which most likely points to a higher repetition or dropout rate for male students.

⁽²⁸⁾ Central Administration of Statistics (2006), "The living conditions in Households, Year 2004".

⁽²⁹⁾ Central Administration of Statistics (2006), "The Living Conditions of Families in the Year 2004".

⁽³⁰⁾ Central Administration of Statistics, UNICEF (2009): Multiple Indicators Cluster Survey - Third Cycle - Lebanon.

Enrollment and Attendance at the Secondary Level

To move to the stage of secondary education, all students, including Palestinian refugees, undergo official examinations in the last year of intermediate education³¹. This is generally accompanied by a significant drop in enrollment rates at the secondary level. For Lebanese students, the gross enrollment rate at the intermediate level is 97.7% on average, which drops to 62.2% at the secondary level; and the net enrollment rate decreases from 68.5% to 42.3%, according to data from the Central Administration of Statistics (CAS) for 2004. The difference between the gross and net enrollment rates noted above are attributed to high rates of school retention and delays. Another reason for the decline in enrollment is that a number of post-intermediate students get enrolled in technical and vocational schools (423 schools, including 117 public, and 306 private), instead of pursuing secondary education. The latest statistics (2011/2012) indicate that 53,016 students were enrolled in these schools, most of them (31,056) at pre-university stage³².

According to the household survey³³ data for 2009, the total net enrollment rate at the secondary level for Lebanese students reaches up to 81.1%, with significant variations between regions, with the lowest rate being in Northern Lebanon (between 66.9% and 69.1%), and the highest being in some provinces of Mount Lebanon and Bekaa (90%). It should be noted that the net attendance rate was 85.2% for females, against 77.4% for males³⁴.

⁽³¹⁾ In 2013, the Syrian displaced underwent their own State exams, but they were asked to show an identity document in order to obtain their results.

⁽³²⁾ Research Centre and educational development (2012), Statistical Review 2011-2012.

⁽³³⁾ Net attendance rate: the percentage of children who belong to the official age group corresponding to a certain level of education, and who attend this educational level. This statistic is from The National Household Data Survey. The net rate of attendance at the secondary level is the percentage of children who are in the official age corresponding to the stage of secondary education and attending secondary school or higher levels.

⁽³⁴⁾ UNICEF / Central Administration of Statistics (2011), "Multiple Indicator Cluster Survey - Third Session 2009 (MICS 3).

Table 7: Net attendance rates at the secondary level of Lebanese students 2009

Areas	Net attendance rate
Beirut province	83.9
Mount Lebanon Province	
Beirut's southern suburbs	83.8
Other Mount Lebanon	92
North Province	
Akkar - Minieh - Dinieh	66.9
Other districts of the North	69.1
Bekaa	
Baalbeck Hermel District	90.4
Other districts Bekaa	80.6
South Province	79.8
Nabatieh	80.6
Total	81.1

Source: Central Bureau of Statistics / UNICEF Management (2011), "Multiple Indicator Cluster Survey - Third Session in 2009"

4. The educational system performance

1. The size of the classroom

It is a known fact that congested classrooms are one of the factors affecting the quality of teaching and learning. But the results of the "D-RASATI" study showed that the average number of students in one class in about half of the total number of public schools (1,280 schools) is from 10 to 20 students, while a small percentage of schools (107 schools) declared a number of at least five students per class. The highest percentage of such a surplus in space (38% of schools) was registered in the district of Batroun of Northern Lebanon³⁵. It is therefore clear that the level of overcrowding in

⁽³⁵⁾ The Ministry of Higher Education (2011) Report - Studies "about the field survey".

the classroom is not a major issue in public schools, i.e. in terms of its negative impact on the quality of student learning. However, with the influx of displaced Syrians, it is expected that the degree of class congestion has changed significantly, particularly in the North and the Bekaa.

Table 8: The average number of pupils per grade and their distribution by sector

	Official		Special free		Private		Total	
	number	%	Number	%	Number	%	Number	%
Less than 10 pupils	366	26.81	18	4.88	128	11.84	511	18.2
From 10 to 15 pupils	256	18.75	50	13.55	146	13.61	452	16.1
From 16 to 25 pupils	603	44.18	141	38.21	549	51.16	1293	46.06
From 26 to 35 pupils	139	10.17	153	41.46	241	22.46	533	18.99
From 36 to 45 pupils	1	0.07	7	1.9	9	0.84	17	0.61
More than 45 pupils	0	0	0	0	1	0.09	1	0.04
Total	1365	100	369	100	1074	100	2807	100

Source: Educational Center for Research and Development, "The Development of Education Indicators between 2002 and 2010"

According to statistics from the Center for Educational Research and Development (CERD), all levels of education for the school year 2012 – 2013 registered the lowest rate for the number of students per teacher in the public sector (7.2 students per teacher), followed by the private sector (11.6 students per teacher), while the highest rates came from the free private schools (18.6 pupils per teacher) and UNRWA schools (19.9 students per teacher). The recent results for "D-RASATI" indicate the pupil-teacher ratio in public schools is from 1-5 students per teacher as a minimum, and 20 students or more as a maximum.

Table 9: The average number of Pupils per Teacher, according to Sectors

	Public schools	Free special schools	Private schools	UNRWA Private Schools
Number of teachers	41,307	6,888	44,703	1,601
Number of students	299,245	127,846	516,627	31,877
Number of schools	1275	358	1075	69
The average number of students per teacher	7.2	18.6	11.6	19.9

Source: Center for Educational Research and Development, "Statistical Bulletin for the Academic Year 2012- 2013"

In addition, CERD's statistics show that the suburbs of Beirut, the Bekaa, and the North recorded the highest rate of number of students per teacher. This would affect the quality of education provided by these schools. According to a 2003 study on a sample of 4,400 students in the fourth grade in public schools and free private schools, a negative correlation was found between the rate of the number of students per teacher on the one hand, and the rate of success on the other hand. The lowest rate of students per teacher was recorded in schools with the highest rate of success. The rate of students is higher in schools where the rate of success is average. These rates reach their maximum in schools where the success rate becomes low³⁶. In spite of that, since the low average number of students per teacher in public schools is generally associated with a low level of student performance, it is therefore clear that there are other factors influencing the quality of education and the learning process.

⁽³⁶⁾ Helsinki Consulting Group (2005) referenced previously.

Table 10: The average number of Students per Teacher in public schools, at all stages of education, by province

	Beirut	Suburbs of Beirut	Mount Lebanon	North	Bekaa	South	Nabatieh	Total
0 to 5	7.9	9.4	23.4	13	11	8.5	18.1	13.1
6 to 15	74.2	53.6	59.6	56	57.1	66.3	59.7	58.9
16 to 25	15.8	25.7	14.6	24.1	23.1	20.9	18.1	21.5
26 to 35	2.1	7.8	1.9	5.8	7.3	3.9	3.6	5.3
35+	0	3.4	0.5	1.1	1.4	0.4	0.4	1.3
Total	100	100	100	100	100	100	100	100

Source: Center for Educational Research and Development, The Development of Education Indicators Between 2002 and 2010

2. Curriculum, Teachers, and the Process of Teaching and Learning

The curriculum reform of 1997 was considered a big step towards improving the quality of education in Lebanon, in the various types of education, public and private (and UNRWA schools, where the same curricula are implemented). These new curricula encourage the acquisition of skills such as cooperative learning and opportunities for experiential learning which aim at broadening the students' educational horizons, and helping them acquire the skills necessary to grow in a developed and diverse world. However, there are studies that evaluated the new curricula and highlighted a number of problems. The most important of these studies and the most holistic is the study conducted by the Lebanese Association for Educational Studies (LAES) commissioned by UNESCO in 2003, which highlighted the following issues³⁷:

- Incompatibility between the goals and overall objectives and the practical implications of educational materials.

⁽³⁷⁾ UNESCO (2003), "The Evaluation Study of Educational Curricula in Lebanon," prepared by the Lebanese Association for Educational Studies - Beirut.

- Deficiency in matters related to competencies, skills, and the time frame for implementation, as well as the scope of learning and sequence.
- Problems of quality of content, in terms of adequacy, relevance, and validity of the translation of technical terms, and the change that results from the curriculum being in different language versions.
- The intensity of some of the content of educational materials compared to the actual number of weeks of teaching during the school year.
- The problems caused by the general use of foreign languages in mathematics and science education, in the third cycle (intermediate) and the first and second cycles (primary years). The inability of students to acquire foreign languages negatively affects their acquisition of skills in mathematics and science.
- Problems in the evaluation system relevant to the requirements of implementation of the new curriculum, and in its requirements for educational resources and equipment.
- The difficulties encountered by teachers in the appropriate implementation of the new curriculum.
- Difficulties in the development of school textbooks and discrepancies in the quality of textbooks and teaching material at various stages of education (e.g. Arabic), and gender stereotypes.

The table below shows the skills and competencies of the current educational cadre (2009-2010), by stage and sector (public and private). The table shows that over 75% of public sector teachers hold a university degree or a teaching diploma, compared with about 60% of teachers in private schools, and only about 40% of free private schools teachers.

Overall, public sector teachers are characterized by having higher qualifications than their counterparts in the paid private sector and the free private sector. Accordingly, the poor performance of public education is not necessarily linked to the education level of teachers.

Table 11: the distribution of teachers according to the Degree of Education and the Education Sector

		Educational attainment						
Sector	Job	Below secondary	Secondary	Teaching Certificate	Academic	Total		
	Teacher	2%	20%	24.9%	53.1%	100%		
Official	Administrative	4.1%	29.1%	37%	29.8%	100%		
Official	Undefined	4.5%	28.5%	38.6%	28.7%	100%		
	Total	2.4%	21.4%	26.9%	49.4%	100%		
	Teacher	5.3%	54.1%	1.8%	38.9%	100%		
Special	Administrative	9.5%	55.4%	2.9%	32.3%	100%		
Free	Undefined		40%		60%	100%		
	Total	5.8%	54.6%	1.9%	38.1%	100%		
	Teacher	2.6%	37.1%	3.9%	56.4%	100%		
	Administrative	9.9%	44.6%	2.1%	43.4**%	100%		
Private	Undefined	3.3%	16.7%	1.7%	78.3%	100%		
	Total	3.8%	38.2%	3.6%	54.5%	100%		

Source: Center for Educational Research and Development, The Development of Education Indicators Between 2002 and 2010

The number of contract teachers in the public sector has gradually increased over the last twenty years - from 6,000 contract teachers in 1993-1994 (21% of teachers in total) to 14,308 in 2012-2013 (35 % of all teachers)³⁸. It should be noted that contractual teachers do not benefit from health insurance and pension plans, and are only paid against actual hours of instruction at the end of the school year. The increase in the number of contract teachers in public education is of influence on the quality of learning in schools. Most contract teachers are on part-time contracts, and are therefore in need

⁽³⁸⁾ Educational Center for Research and Development, Statistical Bulletin for the Academic Year 2012-2013.

to work in more than one school in order to secure their living conditions, which limits their available time for preparing for the classes they teach, and providing the additional support needed by students in schools. Contract teachers do not receive training by the CERD or the MEHE. The growing number of contract teachers has put great pressure on public schools, as it has led to fewer teachers being in the official cadre, normally supervising extra-curricular activities and participating in school committees.

Since the law does not allow teachers to join unions or union federations, they resorted to the creation of associations to support their claims for better working conditions. Diminishing wages and the dwindling opportunities within the official teachers' cadre has led the teachers associations in primary and secondary levels to carry out several strikes in recent times, the most recent being in 2013-2014.

3. Retention. Dropout. Success

Data available for the school year 1997- 1998 indicate that from a hypothetical cohort of 1,000 students enrolled in the first year of primary school, only 75 students graduate from secondary school (with a Baccalauréat diploma) without having registered failure or class repetition (School Retention). This rate varies according to the region: It reaches 161 students in schools in Beirut, and 48 students in the north; in the Bekaa it fall to 24 students. In addition, it varies depending on the parents' socio-economic group, with up to 224 students in families belonging to the middle class, and down to 27 students in poor families. However, this disparity culminates with regard to the public education sector where the rate falls to 9 students against 225 students in private schools³⁹.

In following statistics which date back to the 2004-2005 school year, the average rate of school retention reached 10% at the elementary level (the highest record being in Grade 4, at 17.9%), and 13.5% at the intermediate level (the highest record being in Grade 7, at 20.3%)⁴⁰. The delay in school (students who have passed the age appropriate for their class), which creates is a big challenge since it increases the risk

⁽³⁹⁾ Consultation and Research Institute CRI (2000): Free Compulsory Education in Lebanon. Beirut: The Ministry of Higher Education.

⁽⁴⁰⁾ The Ministry of Education and Higher Education (2004), the Lebanese Association for Educational Studies (2007) National Strategy for Education in Lebanon: Vision Document, the Educational Development of the Ministry of Education, Beirut project.

of dropout. It reached about 24.2% on average of the total number enrolled in primary schools, and 41% of the total number enrolled in intermediate schools⁴¹.

4. Dropout

Estimates of the school year 1997 -1998 indicate the dropout of 593 students on a hypothetical cohort of 1,000 students enrolled in the first year of primary school, before the end of secondary school (= dropout rate of 9.5 %). The total dropout rate of primary school as a whole is about $3.3\%^{42}$ in the school year data. In 2004-2005, the dropout rate at the primary level was between 4.3% and 5.0%, from 5.4% at the intermediate level, and reaching peak in the Grade 9 which recorded $27\%^{43}$.

According to statistical data for the academic year 2004-2005, girls registered a dropout rate less than boys in all Lebanese regions. In addition, the highest dropout and repetition rates occurred in the North, the South, and the Bekaa, in comparison with Beirut and Mount Lebanon. The statistics of the year showed that the dropout and repetition rates are highest in the public sector in comparison to the private sector⁴⁴.

In addition, lower net enrollment rates in intermediate and secondary stages can be related either to the transfer of students from general education to vocational and technical education, or premature entry into the labor market. According to a report by the United Nations, many students in regions with high dropout rates believe that the education they receive is poor, and therefore prefer to leave school voluntarily at an early stage, as they associate the low quality of education with a high opportunity cost⁴⁵.

⁽⁴¹⁾ Educational Center for Research and Development (2004) Statistical Bulletin for the Academic Year 2004-2005, Beirut.

⁽⁴²⁾ Educational Center for Research and Development (2000) Compulsory Education in Lebanon: The Needs of Public Education.

⁽⁴³⁾ Lebanese Commission for Educational Sciences (2007), the National Strategy for Education in Lebanon: Vision Document, A Project of the Ministry of Higher Education for Educational Development.

⁽⁴⁴⁾ ibid

⁽⁴⁵⁾ United Nations Development Program (2009), Lebanon, 2008-2009: National Human Development Report - Towards a Citizen's State, Beirut.

Learning Outcomes

It is evident from the results of the latest assessment of Grade 8 students' performance level in math and science (TIMSS 2011) that Lebanon ranked 25th among 42 countries in mathematics, and ranked 39 in science⁴⁶.

In TIMSS 2007, Lebanon occupied the rank of 28th among 48 countries in math and 40th in science. It is clear that, comparatively, the results remained almost stable in mathematics, while the results of science have decreased by 8%⁴⁷. Compared to the results of TIMSS 2003, and despite the marked improvement in the results recorded in 2007 and 2011, the results of the Lebanese students in math and science are still below the international average.

It is worth noting that the results of the public sector students in 2007 were below those of their counterparts in private schools, with a difference that reached 10% between the two sectors. Further, the students in the private sector recorded averages that are compatible with the international average in math and science.

Recommendations

- Strengthen Statistical data and the production and use of statistics for basic education:
- Develop a strategy for the production of national statistics, including a timetable for national surveys, to allow for a regular detailed analysis of the census, so that they form the foundation for all national statistics on free and non-free public and private schools, as well as the schools that pertain to various other institutions.
- Develop a strategy for the dissemination of information and statistical data on a large scale to enable citizens to access and discuss them.
 - Conduct periodic and regular studies concerning cohorts of students.
- Encourage conducting qualitative studies which focus on understanding the challenges that face certain categories of students. This will allow a better understanding of the key causal factors and plan for their treatment.

⁽⁴⁶⁾ http://timssandpirls.bc.edu/data-release-2011/pdf/Overview-TIMSS-and-PIRLS-2011-Achievement.pdf

⁽⁴⁷⁾ http://nces.ed.gov/timss/figure11_7.asp, http://nces.ed.gov/timss/figure11_3.asp

• Improve access to education at all levels, with a focus on reducing existing inequalities

- Develop a plan for regular kindergarten in all public schools and UNRWA schools, to promote training and develop school curricula.
- Develop proactive programs to prevent school dropout; such programs should combine social, financial, and educational support.
- Develop a transition program that contributes to the re-enrollment of children who have left school.
 - Develop a strategy to increase access of children with special needs to school.

• Intensify efforts to improve the quality of education

- The integration of newly developed indicators and benchmarks, to be used by educational inspectors in their assessment of private schools and free private schools.
- Monitor and control the quality of teaching and learning in private nursery schools in Lebanon.
- Assess teacher training needs, with a close link between training and performance monitoring.
- Prepare a special classification of the qualifications of teachers in kindergarten, and build their capacities.
- Provide training about children with special needs, and support schools that seek to apply the policy of integration.
- Strengthen statistical data related to school dropout rates and encourage research on the causal factors.
- Develop a national strategy to address the high dropout rates among the poorest students in the North and the Bekaa schools, as well as Palestinian and Syrian students.