

Republic of Lebanon

Office of the Minister of State for Administrative Reform

Center for Public Sector Projects and Studies

(C.P.S.P.S.)

# Overview on the Technical and Vocational Education in Lebanon

الجمهورية اللبنانية

مكتب وزير الدولة لشؤون التنمية الإدارية  
مركز مشاريع ودراسات القطاع العام



Technical education  
for everybody

Ministry of Technical  
and Vocational Education

Republic of Lebanon

# Contents

*Letter from the Minister* 3

*Editorial* 4

*Historical review* 7

*Current situation* 10

*The ongoing rehabilitation project* 18

*The development plan* 22

*Performance improvement* 28



# Letter from the Minister

**T**echnical and Vocational Education (TVE) is a pivotal facet of the secondary education system. In some industrialized countries, the enrollment of students in technical education exceeds that of general education, reaching 70% of their total number. In Lebanon, this rate is only about 25%.

**A**s a means to reinstating TVE in its natural role in the post war period, the "National Agreement Document" elevated TVE to a factor of national development. Paragraph 5, Article 4 outlined the following goals: " to reorganize vocational and technical education, to enhance it and to develop it according to the development and reconstruction needs of the Nation". The government, thus, adopted and executed a series of decisions, projects, and programs in order to meet with these requirements.

**A**dedicated ministry, the Ministry of Technical & Vocational Education (MTVE), was established for the first time in Lebanon in 1993 to deal specifically with this type of education. In particular, the Ministry gave priority to the rehabilitation of its educational institutions, in order to increase enrollment in TVE programs. Credits were allocated to rehabilitate school buildings, to provide them with the required technical and administrative equipment, to train teachers, to reform educational curricula, and to enhance the efficiency of the central administration. Once the ministry had organized the situation of its institutes and schools, it moved on to set a long term plan to develop TVE so as to make it accessible for all.

**T**he new ministry has become a non-stop work site, with many conferences and seminars held in its premises. Representatives of the ministry have attended international meetings and traveled worldwide to study the latest innovations in TVE.

**We** are confident that the TVE will become in the future the free choice of gifted students who opt for other than the general education.

*The Minister of Technical  
and Vocational Education*

**Farouq Barbir**

*Beirut, 1/9/97*

For many decades, technical and vocational education (TVE) has taken the lead in pre-college education in both the industrialized and developing countries. This education path is considered to be the effective way of achieving economic growth and social balance.

TVE paths of specialization have diversified at all levels and in every field of training. While limited in the beginning to manual occupations, TVE quickly embraced hundreds of professions at its three levels: vocational, technical, and higher technical. Consequently, the requirements for enrolling in TVE changed, along with the technological development, the diversification of vocational specialization streams, and the attitude of the public.

These worldwide trends influenced, in the sixties, the implementation in Lebanon of a modern system of technical and vocational education. By creating large new schools, adequately equipped, and by adopting new educational schemes and curricula, the Government succeeded in attracting a great number of students into the diversified training programmes.

In Lebanon's post-war era, the Ministry of Technical & Vocational Education (MTVE) cared first to the rehabilitation of its resources. Then, in its long term plan, it emphasized the following objectives:

- To improve the performance of the TVE by attracting higher level intermediate school graduates, by revising the programs and improving the rate of use of teaching premises and equipment, and by enhancing the role of the central administration.

- To enable the TVE to fulfil the labour market needs, by quickly adapting itself to the changes and by modifying its structure according to those needs. This imposes the setting of structures and mechanisms that allow flexible handling of the changes and their translation into practical procedures on the levels of curricula, paths and average of admittance and graduation in the educational institutions.
- To offer equal opportunities in TVE for all citizens by providing a network of educational services in all regions.
- To set up an educational system for the future, namely by diversifying the curricula and the related educational methods, modernizing the equipment, creating shifting bridges among specialization programmes, and making the system more flexible in order to adapt to the latest innovations. Such a system is intended to be far from the stagnant educational ladder and should approach the more open "educational tree" concept.
- To enlarge the capacity in the TVE in order to accept 28,000 new students annually, that is all those who leave the intermediate school and do not join the general secondary school, and to train them in the various technical fields for acquiring the desired skills.

**T**hrough what we built in the past years and what we are carrying out now in the TVE development plan, we are looking forward that the TVE will be in Lebanon - just as in the developed countries - the pioneer by the quality of its training and of its physical and human facilities, so as to attract the best students, because we do believe that the labor market needs thinking brains more than working hands.

**The Director General  
of Technical  
and Vocational Education**

**Dr. Ali Zaraket**

Dekwaneh, 1/9/97

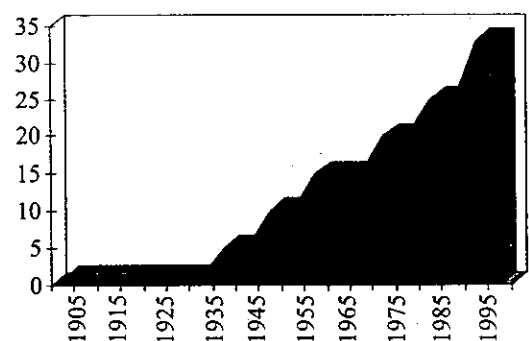
# Historical review

In 1863, a religious mission which was established in Lebanon since the middle of the 19th century founded the first vocational school in Lebanon. More than 40 years later, the first public technical school, the "Arts and Crafts School" of Beirut (Ecole des Arts et Métiers), was built in 1904. This school remained the only public technical institution until Lebanon's independence in 1943.

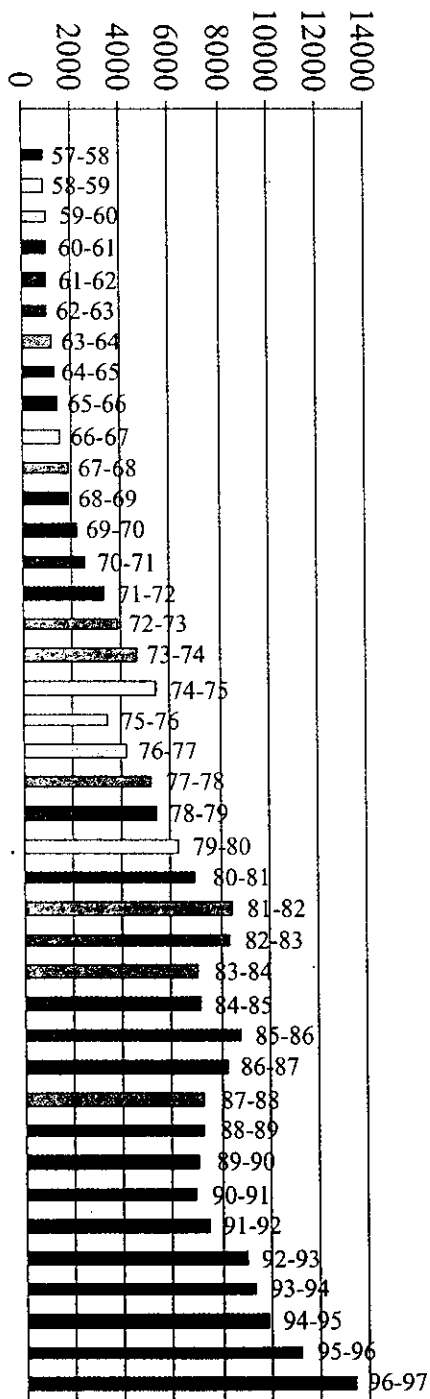
Since the independence, the successive Lebanese governments have been keen to develop the TVE sector. They started by building five new technical schools, between 1945 and 1956, in Tripoli, Zahleh, Saida, Beirut and Deir-El-Kamar. At the same time, they set up a special administrative structure, the Directorate of Technical and Vocational Education within the Ministry of National Education.

During the 1960s, the public technical education grew up and expanded. Its activities fell within a national comprehensive plan for balanced development:

- Construction of 15 new schools in various regions.
- Creation of the "Institut Pédagogique National de l'Enseignement Technique" (IPNET), responsible for the education and training of teachers.
- Coherent structuring of TVE in specific domains and cycles.
- Creation of technological institutes for the training of higher technicians.
- Promulgation of a set of regulations that constitute the main legal frame for TVE.

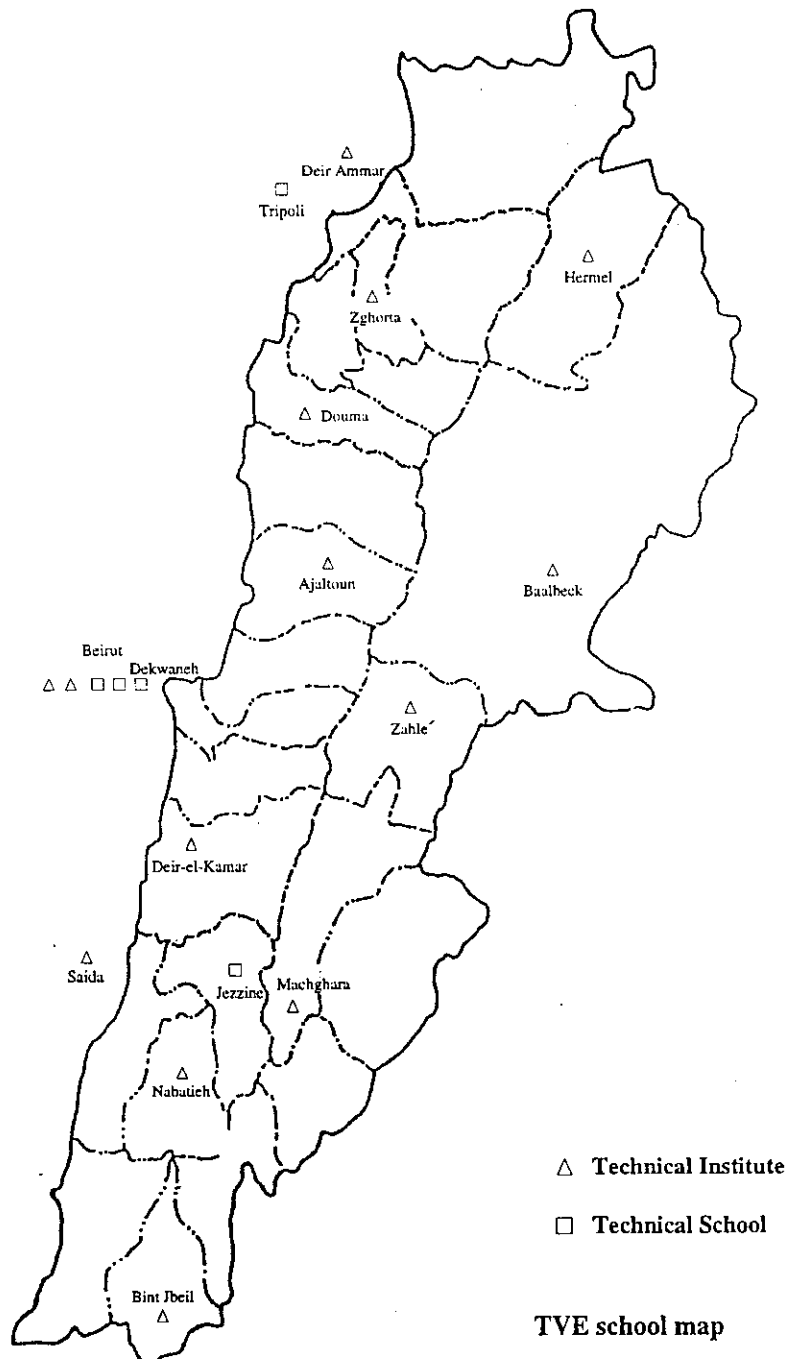


Growth of schools number



Technical schools population

By the year 1975, the number of students enrolled in TVE reached 5354, with school locations all over the country (see map). The private sector had experienced a tremendous development prior to this time as well, with an enrollment of 20,000 students. More than 16,000 of these students, however, received a narrowed training which did not entitle them to obtain official diplomas.



TVE school map



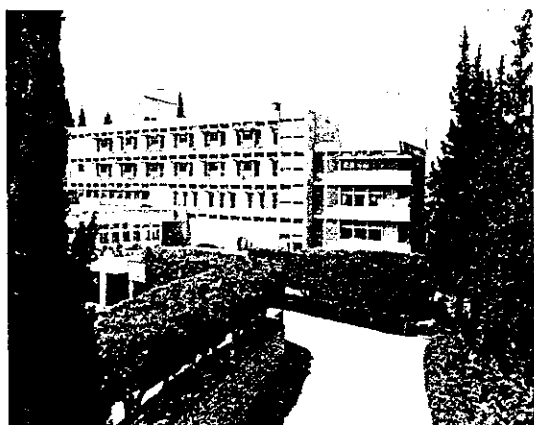
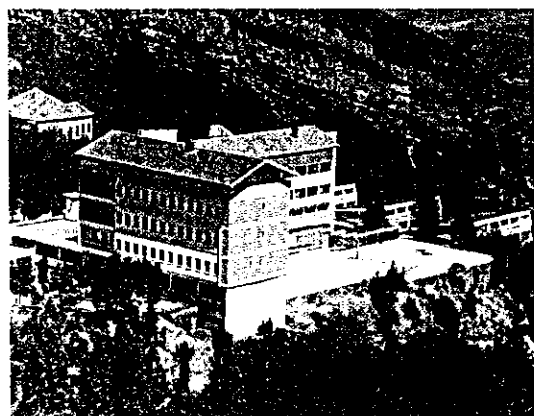
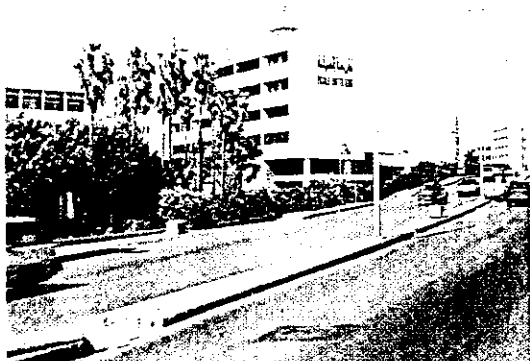
In addition to the growth and to the geographical expansion of TVE, the structure of specialization paths and, therefore, of curricula, was substantially revised. The "vocational aptitude certificate" and the "assistant-engineer" diploma were replaced by programs more responsive to the labour market expectations. These new programmes raised technical education to a noble rank, which resulted in a rush of students joining TVE institutes and schools.

Finally, the promulgation of a coherent set of regulations ensured order and clarity in all national training activities:

- The Lebanese government, represented by the Ministry of National Education, became the only authority allowed to award diplomas.
- Public establishments were clearly classified and regulated by adequate rules.
- Private schools were governed by precise laws and regulations.
- Curricula were reviewed.
- The administration of technical education was enhanced and raised to the rank of Directorate General.

These improvements were, unfortunately, halted by the war in 1975.

# Current situation



## Educational institutions

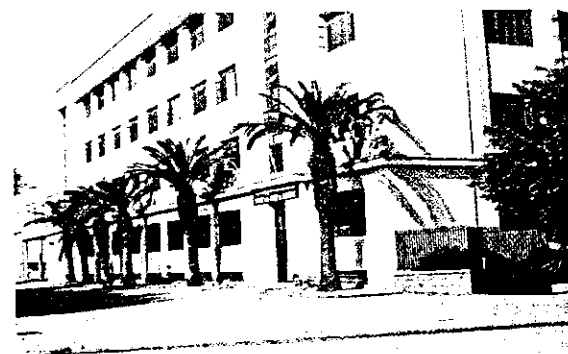
During the 1996-97 academic year, 29 public education institutions operated across the country. Four additional schools were run by the ministry, in cooperation with non-governmental organizations (NGOs), under the form of bilateral projects.

			BT																						
Region	Establishment	Nb. of students	Electronics	Electricity	Ind. Mechanics	Autom. Mech.	Air conditioning	Bldgs. & P. W.	Topography	Aeromechanics	Arch. drawings	Hotel tech.(prod.)	Hotel tech.(sales)	Commerce sciences	Secretarial work	Documentation	Comp. programming	Nursing	Interior design	Ind. chemistry	Programming	Preschool ed.	Electr. progr.	Hotel prod.	
Greater Beirut	Arts and crafts	662	x	x	x	x	x	x	x	x	x														
	Hotel sc.l	520										x	x												
	Tourism sc.	600												x	x	x	x								
	Nursing inst.	154																x							
	Technical sc.-Bir Hassan	700	x	x	x	x				x	x			x	x					x	x				
	Hotel sc.-Bir Hassan	266										x	x												
Mount Lebanon	Tech. sc. Deir-el-Kamar	147			x	x					x		x												
	Tech. sc. Hammana	108	x								x								x		x	x			
	Tech. sc. Ajaltoun	530	x	x			x	x			x	x	x	x							x				
	Tech. sc. Barja	98	x	x	x			x						x											
Bekaa	Tech. sc. Bednayel	386						x						x				x				x	x		
	Tech. sc. Baalbeck	430	x	x	x		x	x	x					x	x			x	x			x			
	Tech. sc. Hermel	370			x	x		x						x											
	Tech. sc. Zahleh	308	x	x	x	x		x						x											
	Tech. inst. Bekaa	875		x	x				x	x				x	x			x	x		x				
	Tech. inst. Machghara	240		x	x				x					x										x	
South Lebanon	Tech. sc. Saida	1085	x	x	x	x	x	x				x	x	x											
	Tech. sc. Nabatieh	470	x	x	x	x					x	x	x	x	x				x						
	Tech. inst. Jezzine	115	x	x			x	x						x	x									x	
	Tech. sc. Bint Jbeil	300		x	x									x				x			x				
	Tech. sc. Sarafand	185												x			x	x							
	Tech. sc. Jouaya	177	x	x							x									x					
North Lebanon	Tech. inst. Tripoli	900	x		x										x			x	x		x				
	Inst. Deir Ammar	600			x	x	x	x	x		x										x				
	Tech. sc. Zghorta	566	x		x						x	x	x	x							x				
	Tech. sc. Douma	171		x	x				x										x						
	Maritime inst. Batroun		Opening 97-98																						

Region	Establishment	Nb. of students	TS												
			Electricity	Electronics	Optometry	Civil engineering	Aeromechanics	General mech.	Hotel management	Tourism tech.	Interpreter	Accountancy	Management tech.	Med. laboratory tech.	Nursing
Greater Beirut	Tech. ind. inst.	700	x	x	x	x	x	x							
	Hotel inst.	300							x						
	Tourism Inst.	598								x	x	x	x		
	Lab. techniques inst.	83												x	
	Nursing inst.	154													x
	Hotel inst. Bir Hassan	133							x						
	IPNET Bir Hassan	413	x	x		x						x		x	
Beirut	Tech. inst. Bekaa	875			x							x	x		x
South Leb.	Tech. Inst. Jezzine	115			x							x			
	Tech. sc. Sarafand	185													x
North Leb.	Tech. inst. Tripoli	900	x										x	x	x
	Inst. Deir Imar	600			x										
	Tech. sc. Zghorta	566								x	x				x

Region	Establishment	Nb. of students	LT							
			Ind. electronics	Electronics (telecom.)	Topography	Optometry	Electricity	Electronics	Mechanics	Nursing
Grt Beirut	Tech. ind. inst.	700	x	x	x	x				
	IPNET /Dekwane	312					x	x	x	x
	IPNET/Bir Hassan	413						x		x

Region	Establishment	Nb. of students	BP										
			Beauty special.	Engines mechanics	Bldgs. electr.	Aid accountant	Radio-TV repairer	Cabinetmaker	Sheet metal manuf.	Carpenter	Shorthand typist	Nursing aid	Aid accountant
Mount Lebanon	Nursing Inst.	154	x										
	Tech. sc. Deir el Kamar	147		x	x								
	Tech. sc. Hammama	108				x	x						
	Tech. sc. Ajaltoun	530			x			x					
	Tech. sc. Barja	98			x					x			
Bekaa	Tech. sc. Baalbeck	430	x	x				x	x			x	
	Tech. sc. Hermel	370	x	x						x			
	Tech. sc. Bekaa	875					x	x			x		
	Tech. Inst. Machghara	240	x	x								x	x
South Lebanon	Tech. sc. Nabatieh	470		x									x
	Tech. Inst. Jezzine	115			x			x					x
	Tech. sc. Bint Jbeil	300	x		x							x	
	Tech. sc. Jouaya	177			x					x			
North Lebanon	Tech. Inst. Tripoli	900	x	x					x	x		x	
	Tech. sc. Douma	171	x	x									



### Vocational training level

#### 1- Vocational certificate (CAP)

- Typist
- Waiter
- Aid tailor
- Carpenter
- Fitter
- Blacksmith
- Welder
- Installation electrician
- (Bldgs

#### 2- Vocational Brevet (BP)

- Aid accountant
- Shorthand typist
- Waiter
- Pastry cook
- Beauty specialist
- Nursing aid
- Dressmaker
- Cabinet-maker
- Engine mechanics
- Car body repairer
- Buildings electrician
- Machines electrician
- Radio TV repairer
- Offset printing

### Technical level

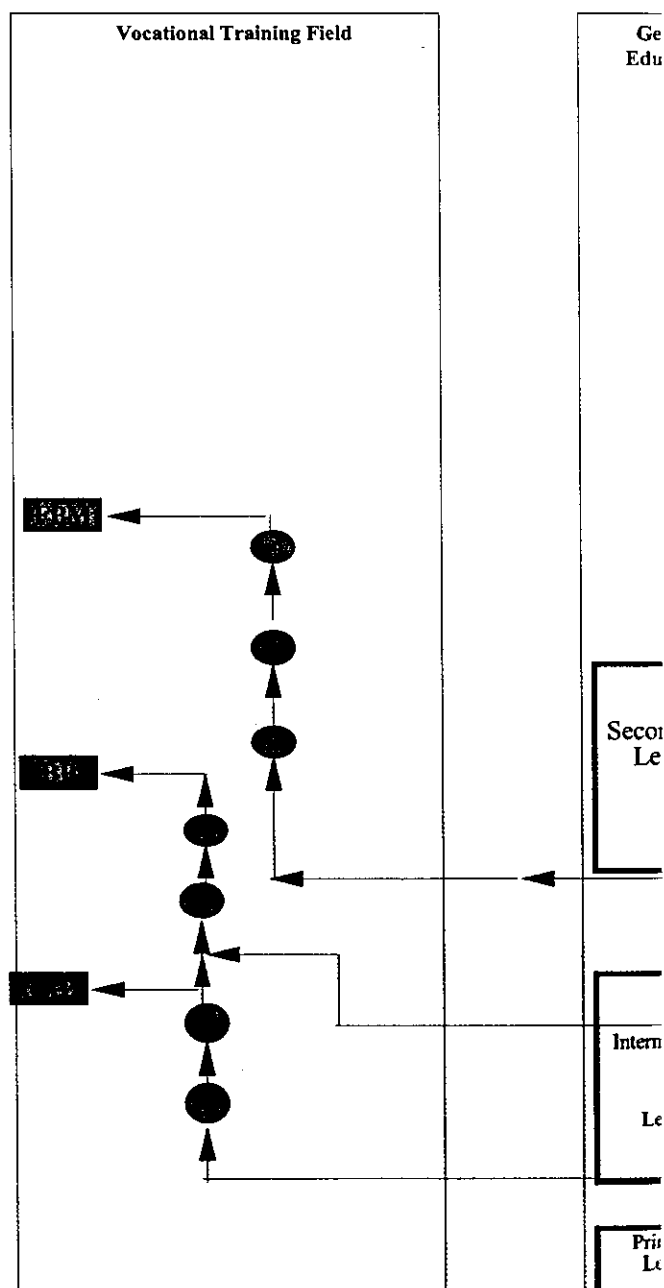
#### 1- Technical baccalaureate (BT)

- Preschool education
- Commercial sciences
- Secretarial work
- Documentation
- Hotel tech.(sales)
- Hotel tech. (prod.)
- Nursing
- Industrial chemistry
- Interior design
- Advertising
- Air conditioning
- Industrial mechanics
- Automotive mechanics
- Aeromechanics
- Electricity
- Electronics
- Computer programming
- Music
- Architecture drawings
- Bldgs and public works
- Topography
- Aid dentist

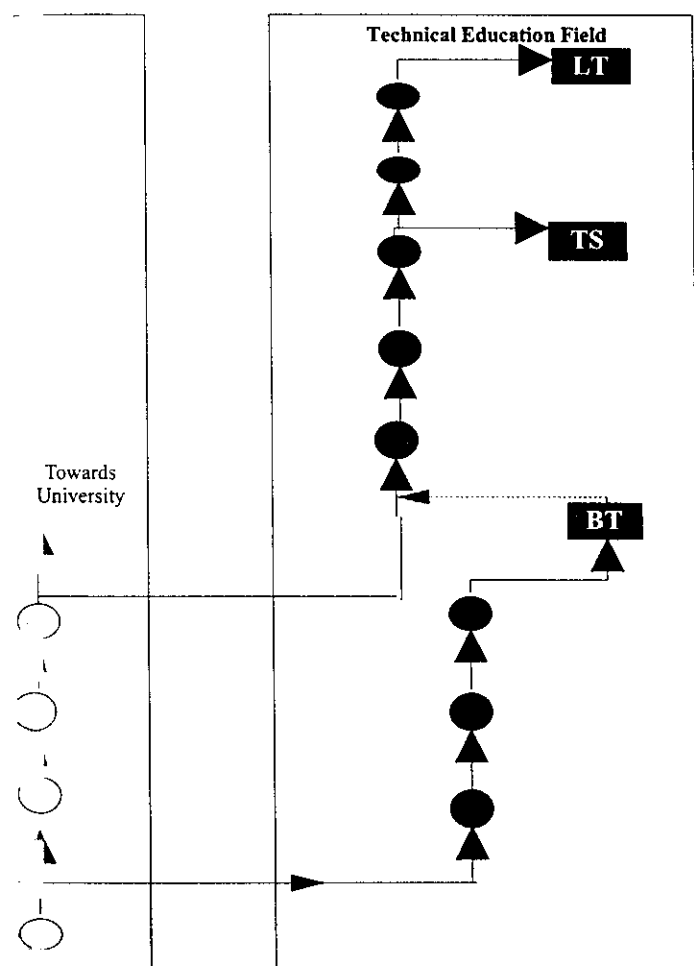
## Levels and specializations

The TVE comprises two basic fields: technical education and vocational training, each having a number of levels. To enroll in these programs, students should fulfill pre-defined educational criteria. The drawing below shows the present organization of TVE.

The specializations available in technical education cover most fields of employment, except those occupations requiring a university degree.



## Levels and degrees

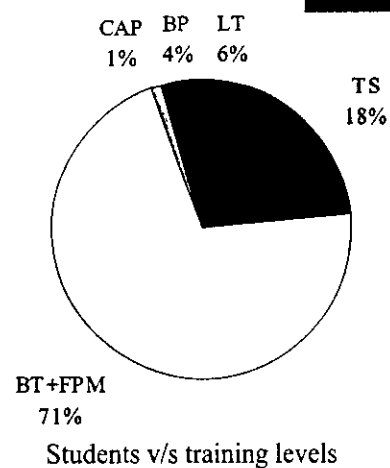


### Legend:

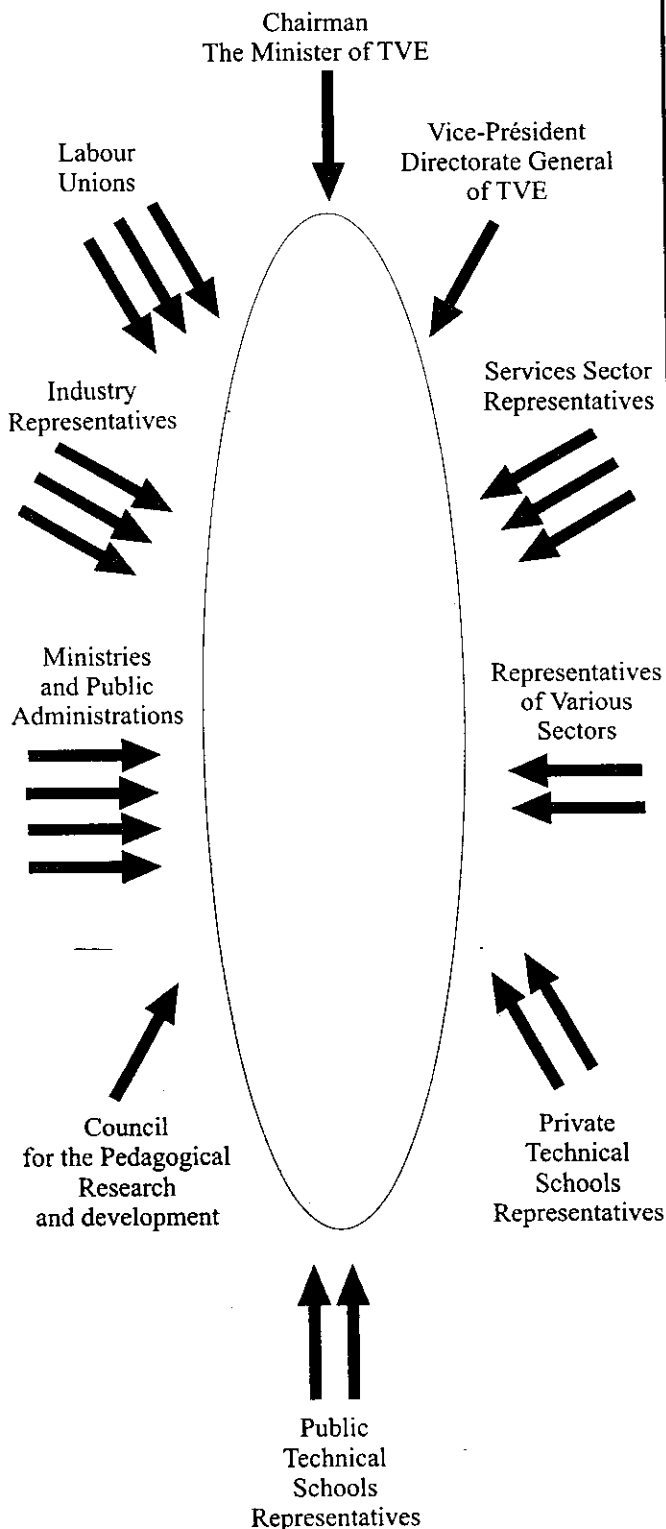
**CAP:** Vocational certificate  
**BP:** Vocational brevet  
**FPM:** Higher vocational brevet  
**BT:** Technical high school degree  
**TS:** Higher technician degree  
**LT:** Bachelor degree in technology

- 2- Higher technician (TS)
  - Social service
  - Physiotherapy
  - Medical lab tech.
  - Nursing
  - Chartered accountancy
  - Interp. and execut. secretary
  - Tourism techniques
  - Specialized education
  - Nursery and primary educ.
  - Civil engineering
  - Topography
  - Electricity
  - Electronics
  - Management tech.
  - Aeromechanics
  - Dental prosthesis
  - Interior design
  - Banking
  - Fashion designing
  - Restaur. and hotels mgmt
  - Optometry
  - Radiology

- 3- Bachelor degree in technology (LT)
  - Electronics / Telecom.
  - Industrial electronics
  - Electricity
  - Mechanics/machines
  - Civil engineering
  - Management techniques
  - Nursing
  - Physiotherapy
  - Medical lab tech.
  - Accountancy



## The Higher Council of TVE



## Curricula

The TVE sustained substantial damages during the Lebanese war. Perhaps the worst was that the curricula were not revised and became obsolete. Indeed, a full generation of students and teachers were trained according to old criteria of competence that the labour market had abandoned long time ago.

The curricula currently used by the Ministry of TVE were reviewed in the 1980s. New curricula in a modular form were prepared for the Technical Baccalaureate with the help of the UNDP and the UNESCO; however, the war impeded their implementation. It was only in 1992 that a revised - though insufficiently - version of the Industrial Technical Baccalaureates was introduced.

The Ministry of TVE intends to develop new rules and regulations regarding curricula development, in order to match the rapid evolution of modern technology.

## Relations with the NGOs

The Ministry of TVE has established two types of relationship with non-governmental organizations: advisory and cooperative.

The TVE National Council is the highest advisory authority. It gathers, under the authority of the Minister, representatives of various educational institutions, unions and economical bodies in the private sector, as well as representatives of some public administrations who deal with training activities.

The Ministry also appoints consultative committees to investigate previously identified problems related to specific sectors of employment and training.

In addition to this consultative relationship, the Ministry cooperates with non-governmental organizations and private schools for the achievement of projects of common interest. Those projects, called "bilateral projects", give the Ministry the chance to expand its educational services outside its own institutions and schools, either by financing private schools in order to train a certain number of students or by managing schools built and equipped by private organizations. The number of current bilateral projects is 11.

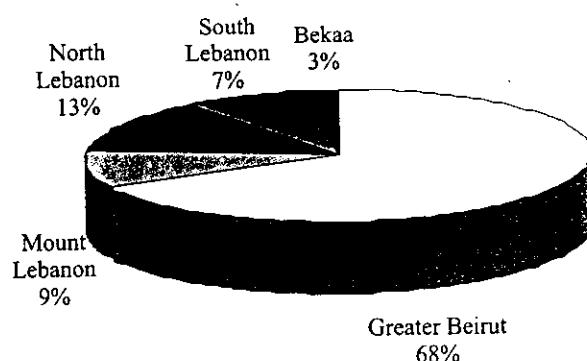
## Private schools

The 280 private technical and vocational schools form a vast network which enrolls 42,000 students.

This educational sector is characterized by its:

- Liberty to prepare students for either official diplomas or private school certificates. In the first case, students follow the curricula of the official diploma. In the second case, private schools execute special curricula, approved by the Ministry. Some of these may be considered as relevant to the accelerated vocational training, others may be compared to some types of continuous education.
- Liberty to apply the fees of their choice. Non-profit schools owned by charity institutions have reasonable school fees. In the other cases, fees are a function of supply and demand, governed by the rules of competition.
- Liberty to accept students of different ages in the same class.

**Private schools population by region**



- Care for profitability.

- Spread of evening classes to attract a larger number of students.

**N**vertheless, the private sector plays a positive role.

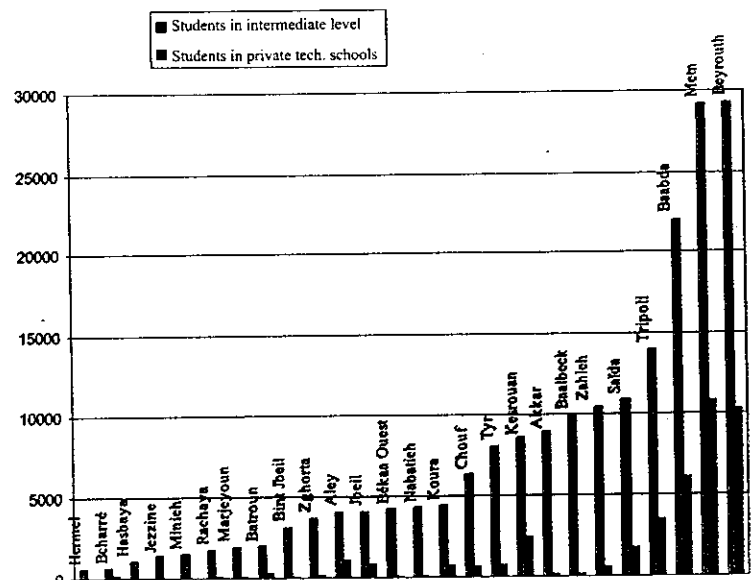
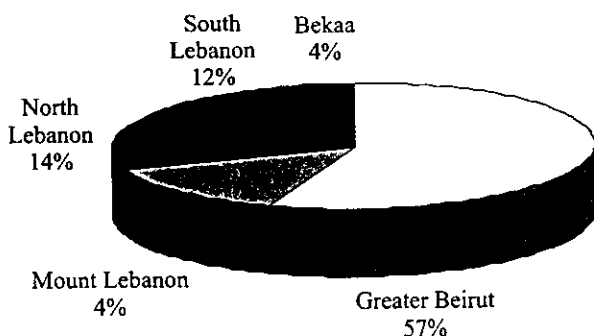
In fact, for more than 130 years, the private sector has served TVE and trained thousands of young Lebanese to practise the many occupations needed by the society.

## Characteristics of private education

### Geographical spread

**P**ivate technical and vocational schools are located in densely populated regions. Most of them are implemented in Beirut and its suburbs (56%) and in the *mohafazat* and *cazas* capitals of Tripoli, Jounieh, Zahleh, and Saida.

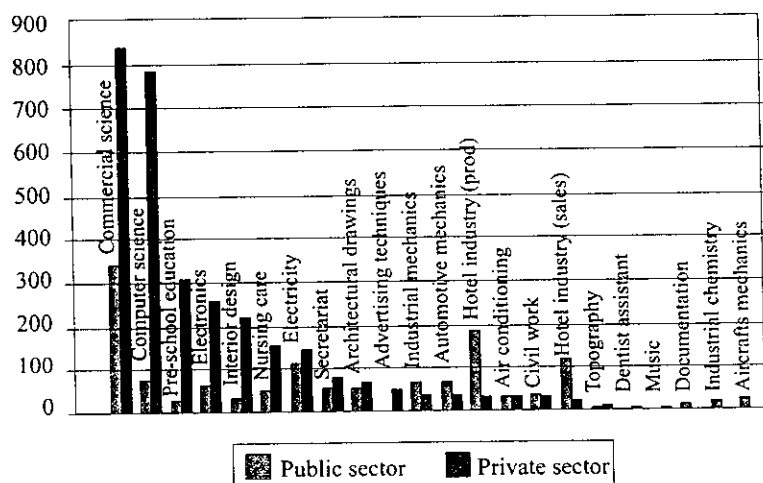
**Geographical distribution of private schools**





### Prevailing specializations programs

Private schools tend to limit their expenses and investments, and occasionally to prevent financial losses, by giving priority to the "classroom type training" which mainly serves the tertiary sector. The next priority goes to the training for occupations in light industries, especially in electronics, where costly equipment and large workshops are not required.

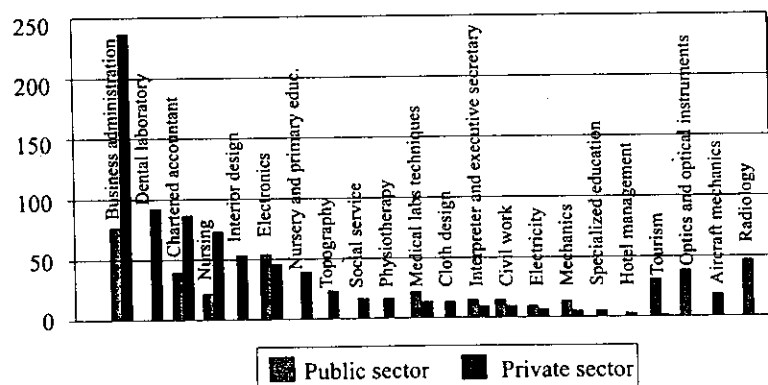


### **Technical Baccalaureate graduates in 1996**

Specialization	Public sector	Private sector
Commercial sciences	344	844
Computer programming	75	784
Preschool education	25	307
Electronics	62	257
Interior design	29	221
Nursing	50	153
Electricity	110	146
Secretarial work	55	81
Architectural drawing	55	65
Advertising	0	47
Industrial mechanics	67	37
Automotive mechanics	68	37
Hotel techniques (prod.)	186	32
Air conditioning	30	32
Buildings and public works	34	32
Hotel techniques (sales)	118	23
Topography	4	10
Aid dentist	0	5
Music	0	3
Documentation	10	0
Industrial chemistry	18	0
Aeromechanics	22	0

### Training types

Since the 1960s, the trend to obtaining a government-awarded official diploma has been increasing, thus negatively affecting the students enrollment in short training courses attested by school-delivered certificates.



### **Higher technician graduates in 1996**

Specialization	Public sector	Private sector
Management techniques	77	236
Dental laboratory	-	91
Chartered accountant	39	85
Nursing	22	72
Interior design	-	53
Electronics	54	44
Preschool and primary ed.	-	37
Topography	-	23
Social services	-	16
Physiotherapy	-	15
Lab. techniques	21	13
Fashion designer	-	12
Interpreter & exec. secret.	15	9
Civil engineering	9	7
Electricity	14	5
Mechanics	14	5
Specialized education	-	3
Hotel management	-	2
Tourism techniques	30	-
Optometry	36	-
Aeromechanics	17	-
Radiology	44	-

# The ongoing rehabilitation project

**A**lmost everyone and everything in Lebanon has suffered from damages left by the 15-year war (1975-1990): individuals, families and social groups as well as institutions and public services, including TVE.

**T**he government has already taken action to counteract the effects of the war and its influence on this sector of education. Although the alleviation of some effects, especially the psychological trauma of a whole generation, requires many years, other damages may rapidly be repaired. Since its creation, for example, the Ministry of TVE has made rehabilitation a priority, beginning with the most urgent needs: the physical structures and equipment, the teachers' qualification, and the educational curricula

## Rehabilitation of physical structures and equipment

**P**art of the first World Bank loan granted to Lebanon in 1993 was assigned to the rehabilitation of TVE public institutions. The restoration of the buildings is now achieved, thanks to the efforts of the Council for Development and Reconstruction (CDR). At the end of the works, schools were able to admit their maximum number of students. From the 1993-1994 academic year to 1996-1997, student enrollment increased from 9350 students to 13,000 students.

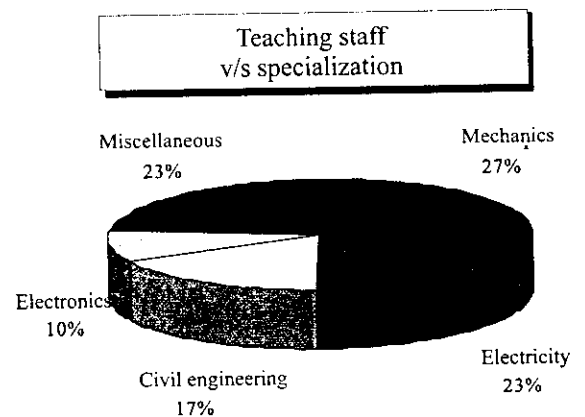
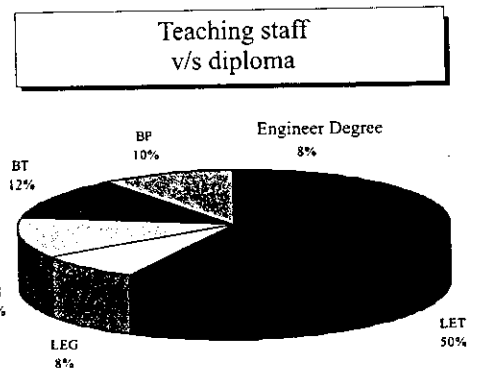
**T**he Lebanese Treasury, through annual budgets, financed the replacement of the equipment and furniture, which had been almost entirely destroyed in most schools. Despite a slow pace, the Ministry provided all institutions with equipment adequate to cover their basic needs. The effort continues.

## Teachers' competence

To restore and to raise teachers' competence is a tremendous task. During the war, many teachers emigrated or retired. The vast majority of those who currently serve were trained at the IPNET during the war. However, neither these trainees nor their trainers were able, during the war, to get access to any information related to the changes in their respective fields. Furthermore, that period witnessed major changes in both the technological and the pedagogical fields, therefore enlarging the gap between the actual competence of the staff and the desirable one.

The MTVE faces a variety of physical and functional barriers in attempting to bridge that gap. Training to improve knowledge and performance takes time, given the wide range of information to be delivered and the large number of the involved teaching staff. Besides, it is not possible to train teachers during the school year, because no available teachers can replace them. Buildings and equipment necessary for training are also used throughout the school year. Furthermore, part of the summer vacation is dedicated to public exams, to which teachers are requested to participate. Finally, Lebanese qualified trainers are not always available in every field, and recruiting foreign experts is expensive and difficult, especially in the summer.

Despite these obstacles, the Ministry of TVE is working hard to raise the qualification of its educational staff. The French technical assistance to Lebanon within the framework of bilateral cooperation is focused on preparing efficient new teachers at the IPNET and on improving the skills of the active teachers. In addition, and in order to accelerate the process, the Ministry has entrusted a specialized firm (Development Services) to implement additional three-month training sessions for almost 240 teachers.



Engineer Degree  
 LET: Bachelor Degree in Technical Educ.  
 LEG: Bachelor Degree in General Educ.  
 TS: Higher Technician Degree  
 BT: Technical Baccalaureate  
 BP: Vocational Brevet

**T**he Ministry has made extensive efforts to facilitate the conduct of successful sessions, by providing premises and equipment and by committing teachers to attend the sessions. Fortunately, these sessions concluded with tangible results that reflect positively on the performance of TVE as a whole.

### ***Renewing the educational curricula***

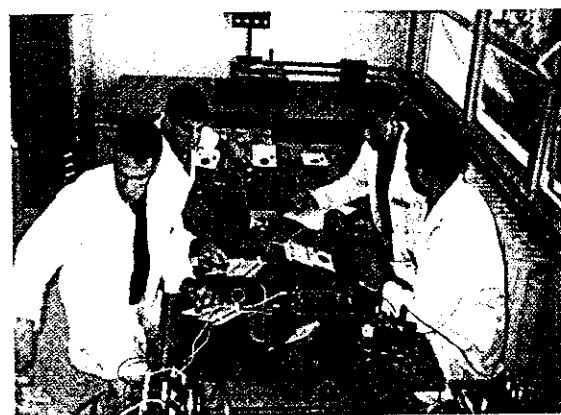
**B**ringing the curricula up to date is, at once, one of the most urgent rehabilitation measures, and a major objective for a long-term educational development.

**E**arly in 1997, the Ministry of TVE launched a program for revising the curricula of 22 specializations of the Technical Baccalaureate certificate and 23 specializations of the Higher Technician diploma. Those paths were given priority because a great number of students are actually enrolled in them. This program is conducted with the assistance of a private firm and should end in the spring of 1998. The curricula will then be tested and gradually adopted as from the beginning of the 1998-1999 academic year.

**A**t a later stage, within the framework of development, an extensive study will be carried out to adjust the general structure of technical education, to determine the various paths at each level, and to revise the curricula for each of these specializations. Thus, the urgent need exists to prepare a plan for the extension and renovation of the TVE system.

## ***Preparing a VTE development plan***

The rehabilitative actions taken by the Ministry aimed only at allowing the TVE to regain its position and to address urgent requirements. The labour market requirements, however, are much greater than the total capacity of the students enrollment in public and private institutions. A TVE Development Plan is about to be completed and will be submitted to the Council of Ministers for ratification. The future of TVE will be greatly influenced by the foundations, the objectives, and the main achievements of this plan.



# The development plan

Republic of Lebanon  
Office of the Minister of State for Administrative Reform  
Center for Public Sector Projects and Studies  
(C.P.S.P.S.)

*Technical education for all*

## Objectives of the plan

To be consistent and realistic, any TVE plan must balance the competing pressures of the social demand for education and of the economic offer for employment.

The social demand for education results from the legitimate right of everyone to be prepared for a job. On the other hand, the economic offer for employment is affected by circumstantial data that can be adjusted only by exerting pressure on economic trends, which is not the role of TVE. As such, a TVE development plan should rely on a comprehensive national plan that could gear the economical growth through incentive schemes.

Despite the fact that the Lebanese government has not yet laid out such a plan, the Ministry of TVE has prepared a plan that is as proactive as possible. When carrying out the investigations, it appeared that the volume of the social demand for training is equal to that of the economical offer for employment. It was therefore possible to assign a double objective to the plan : responding to the social demand by satisfying the economical expectation.

However, to attain these objectives implies the achievement of many huge projects. It would be adventurous to schedule those projects on a short period. The Ministry has therefore preferred to programme their execution in three stages of five years, ending respectively in the years 2002, 2007, and 2012.

## Basic options of the plan

The VTE structure, in its stages and certificates, reflects the current hierarchy of most occupations in the labor market. The following levels of occupations are taught in TVE:

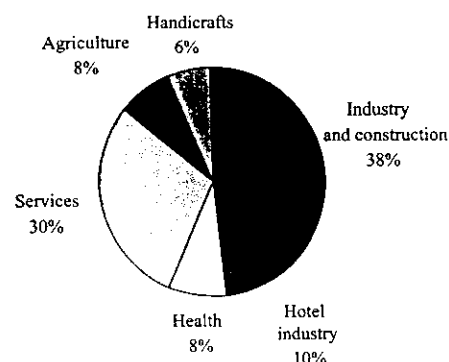
- **Highly skilled:** Higher Technician Diploma (TS).
- **Skilled:** Technical Baccalaureate (BT) and Vocational Mastery Formation (FPM).
- **Semi-skilled:** Accelerated training courses.

## Students flow and distribution

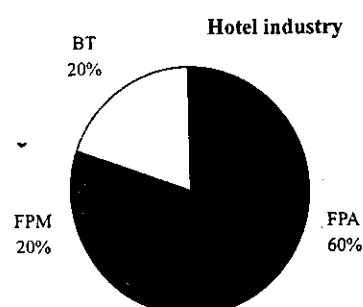
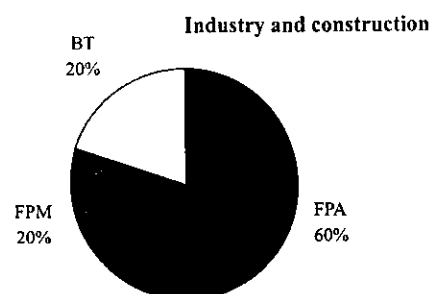
Many analytical studies about the employment sectors in the labor market are available and provide a general picture of its current structure. However, it is not appropriate for the educational institutions to reflect the exact structure of the present market. One can observe that the rapid evolution of production techniques and instrumentation shifts the structure of employment in the direction of higher qualifications.

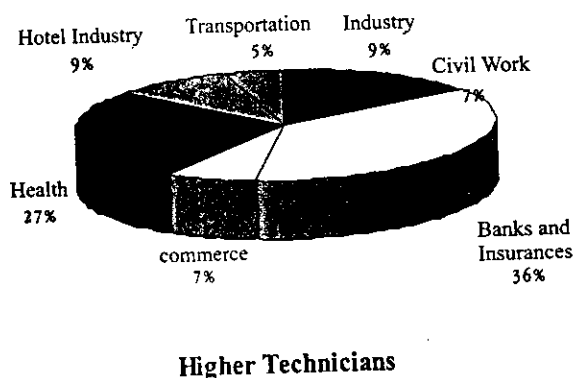
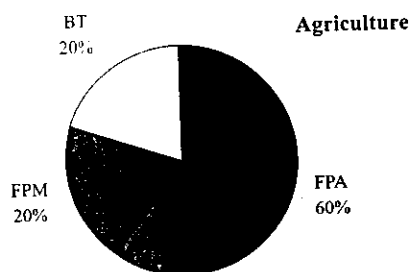
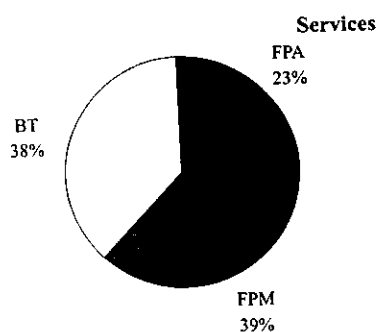
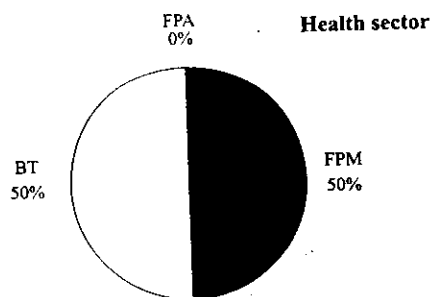
During the preparation of the plan, the Ministry of TVE preferred to take advantage of what has been experienced in more developed countries, in order to evaluate the future distribution of the manpower. The Ministry adopted the following option:

Sectorial flow distribution



Flow distribution by sector and by level





Sector/certificate	Total %	Accel. training	FPM	BT
Industry & bldg.	38	22.8	7.6	7.6
Hotel industry	10	6	2	2
Health	8	0	4	4
Services	30	7	11.5	11.5
Agriculture	8	4.8	1.6	1.6
Craft occupations	6	6	--	--
<b>Total</b>	<b>100</b>	<b>46.6</b>	<b>26.7</b>	<b>26.7</b>

This table provides a basis to calculate the required input capacities for each level of training. It also gives a general indication for the student distribution over the various fields of specialization.

## Typical educational institutions

The new school map will include three different types of educational institutions to respectively accommodate the three main levels of training :

The **Technical institutes** will house the education and the training of Higher Technicians. These institutes will respond to the needs of the mohafazat. Each institute will offer an average of 20 specializations, which will permit an annual input flow of around 400 students in the first academic year. Thus, the total capacity of each institute will be around 1200 students.

**Technical schools** provide for the preparation of the Technical Baccalaureate and for the Vocational Mastery Formation (FPM). Each school will offer four specializations, of which two should be in the industrial sector. The annual enrollment will accommodate 224 joining students, therefore allowing a total capacity of 672 students for each school. The needs of every caza will be satisfied by an appropriate number of such schools.



Vocational schools dispense basic professional education in an accelerated form, lasting between 500 (one-half year) and 1000 hours (one year). For occupations requiring around 500 hours, more than one training session can be offered during the school year, resulting in an increased output capacity. Vocational schools will offer 4 or 8 specializations, for an annual enrollment of 80 or 160 trainees per school, and will serve the demand of every caza.

It is, thus, possible to determine the students distribution across institutes and schools and to estimate the number of each type of schools which should be built.

Mohafazat	North Lebanon	Bekaa	Mount Lebanon	Beirut	South Lebanon	Nabatieh	TOTAL
Max. poss. input	5248	3725	10364	3223	3129	1696	27384
Current capac. (BT+FPM) Public schools	660	1100	1600	0	645	400	4405
Current capac. FPA Private schools	316	56	1340	613	163	19	2507
Current capac. (BT+FPM) Private schools	356	63	1507	690	183	22	2820
Addit. need FPM+BT	1794	1028	2427	1031	842	484	7607
Addit. need. FPA	2129	1680	3490	888	1295	771	10254
New vocational schools FPA	26	21	45	11	17	10	130
New vocational schools FPM+BT	7	5	9	5	4	2	32
Institutes of technology TS	1	2	5	1	0	1	10

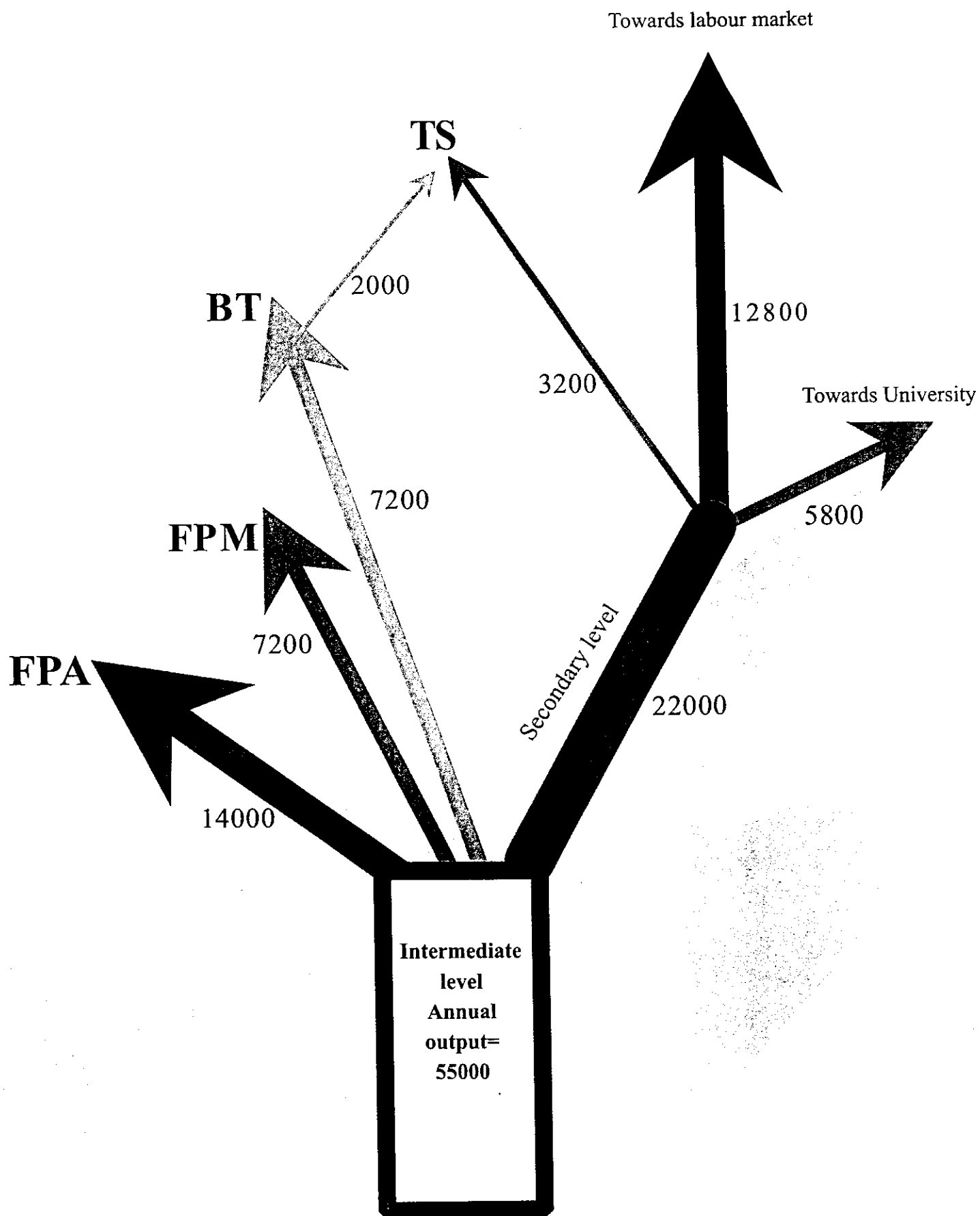


## **Expected trends in enrollment**

**N**o student should be allowed to join TVE before the age of 15 or before finishing the intermediate school. The drawing in the next page shows the students flow in the various stages of education and training

**E**ach year, around 50,000 students complete the intermediate school: 44% continue on to general secondary education schools (22,000 students), while only 25% go on to technical education schools (12,500 students). The basic objective of the plan is to make TVE available for all those who do not join the general secondary schools (the 15,500 students who do not presently enroll in TVE). Thus, the title of the development plan reflects this goal: "Technical Education for All"

**S**tudents enrolled in TVE will naturally split between the public and the private sectors. The Ministry will further strengthen constructive relations with the private sector. In some regions, a number of students may move from the private education to the public sector. Accurate estimations have permitted to calculate the public education share from intermediate school graduates. The previous table shows these results on the level of each mohafazat and determines the number of new TVE schools to be built



# Performance improvement

The objectives of the development plan not only aim at increasing the capacity of TVE schools and institutes but also places importance on diversifying TVE activities and improving its performance. Within this framework, the plan has selected future issues requiring further studies and has classified them into two categories: a) measures for reorganizing the structures and b) initiatives for improving the performance.

## **Reorganizing the structures**

### Educational tree:

Complete reconsideration of the current educational ladder of the TVE.

### Syllabus structure:

The adoption of a flexible and diversified system of training, using educational modules which leave educational institutions and individuals free to draw various routes for education and training.

### Methods & means:

The exploration of educational innovations introduced as a result of the technological revolution, such as computer-assisted instruction (CAI), simulation programmes in training, use of specialized educational equipment, individualized training, teleconferencing, and the like.

### Documentation centers:

The inclusion of a documentation center in each school, provided with modern tools for research and documentation: multimedia, audio-visual equipment, access to networks as well as conventional published and printed materials. These centers will open to the public and may house various educational and cultural activities.

### Enhancement of the central administration:

**T**horough review of the current structure of the Ministry of TVE, in order to update its methods, to provide it with an adequate and competent staff, and to enlarge its authority and liberty of action. The implementation of the Ministry of TVE's ambitious plan and the management of new educational facilities require such a review.

### Others:

**M**any other activities must be revised, such as determining school time and controlling private schools through adequate standards.

## **Improving performance**

**T**he plan includes some projects that will stimulate momentum for further development of TVE:

### Continuous teacher training

**T**his project includes the basic training of new teachers and periodical updating sessions for in-service teachers.

### Provision of textbook

**T**his project targets all educational paths and aims at providing textbooks reflective of the official curricula at reasonable prices for all TVE students.

### Creation of a flexible system for public exam

**T**his project aims at simplifying the procedures of public examinations in order to increase the reliability of the student evaluation during his/her studies and to improve the efficiency of the examination process.



### Career counseling & guidance

**T**his project aims at informing intermediate school students and their parents, as well as the society at large, about the offerings and merits of TVE. A diversified campaign will be launched to orient people toward TVE paths of education.

### Others

**I**n addition to the revision of the curricula, the Ministry of TVE intends to undertake studies for the distribution of specializations in the schools of each caza, the development of bilateral projects, the launching of continuous education and distance learning programmes, and the coupling of education with production, among others.

## The new school map

## الجمهورية اللبنانية

مكتب وزير الدولة لشؤون التنمية الإدارية  
مركز مشاريع ودراسات القطاع العام

North Lebanon			
Cazas	Profess. schools	Techn. schools	Inst. of tech.
Tripoli	8	3	1
Minieh	2	1	
Koura	2	1	
Zghorta	3	1	
Batroun	1	1	
Akkar	10	4	1
Bcharreh			

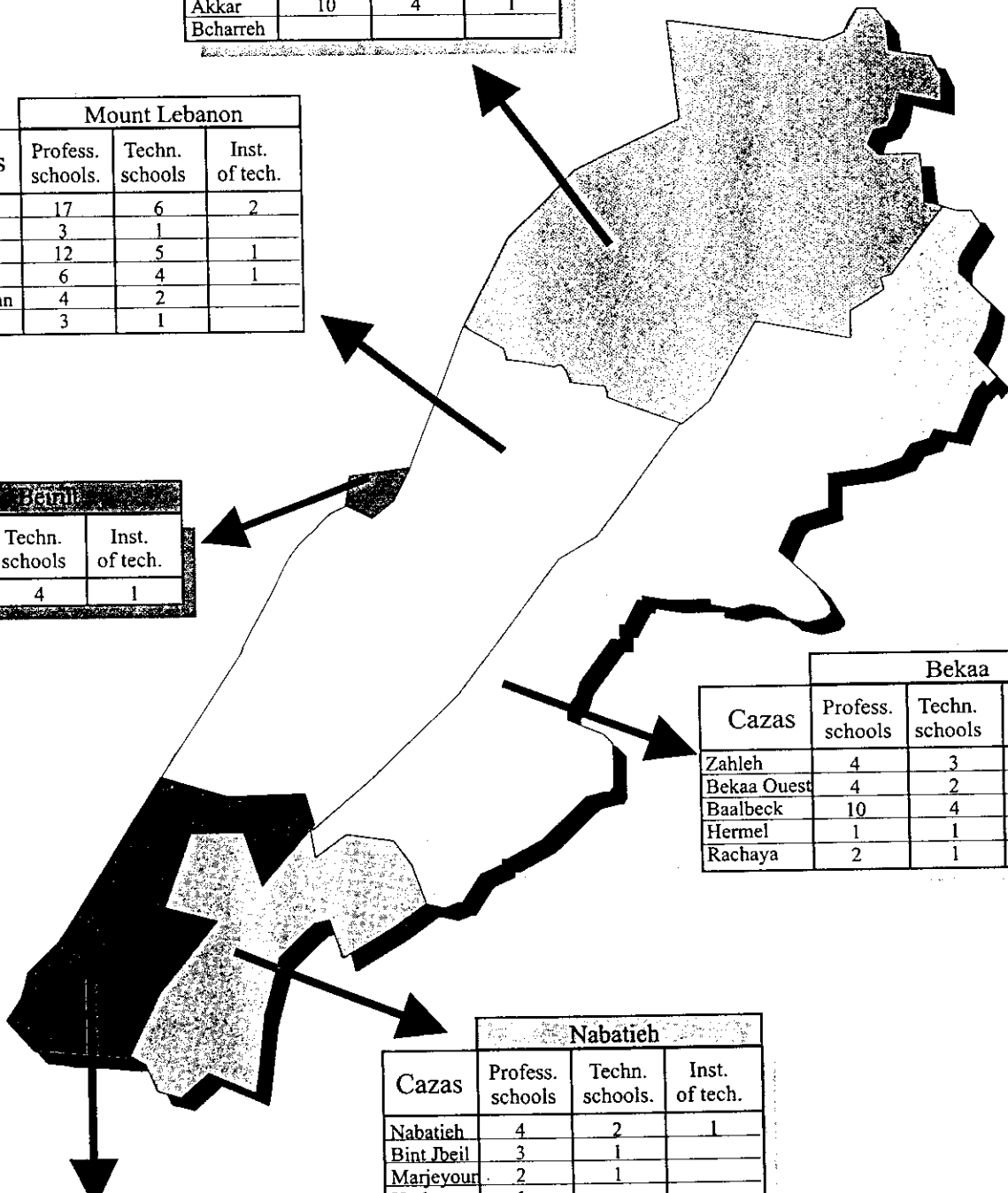
Mount Lebanon			
Cazas	Profess. schools	Techn. schools	Inst. of tech.
Baabda	17	6	2
Aley	3	1	
Metn	12	5	1
Chouf	6	4	1
Kesrouan	4	2	
Jbeil	3	1	

Beirut		
Profess. schools	Techn. schools	Inst. of tech.
11	4	1

Bekaa			
Cazas	Profess. schools	Techn. schools	Inst. of tech.
Zahleh	4	3	1
Bekaa Ouest	4	2	
Baalbeck	10	4	1
Hermel	1	1	
Rachaya	2	1	

Nabatieh			
Cazas	Profess. schools	Techn. schools	Inst. of tech.
Nabatieh	4	2	1
Bint Jbeil	3	1	
Marjeyoun	2	1	
Hasbaya	1		

South Lebanon			
Cazas	Profess. schools	Techn. schools	Inst. of tech.
Saida	7	3	1
Tyr	8	4	
Jezzine	2	1	



الجمهورية اللبنانية  
مكتب وزير الدولة لشؤون التنمية الإدارية  
مركز مشاريع ودراسات القطاع العام

Republic of Lebanon  
Office of the Minister of State for Administrative Reform  
Center for Public Sector Projects and Studies  
(C.P.S.P.S.)

