Vocational and technical education in Lebanon: Strategic issues and challenges¹

Gebran Karam

Lebanese American University, Lebanon gkaram@lau.edu.lb

The current status of the Lebanese vocational and technical education (VTE) system is assessed and the strategic issues and challenges facing it are identified. In addition to the economic and social challenges that are common to many developing countries, the Lebanese system suffers from idiosyncratic problems, which may require innovative and bold reform strategies. The results of the first open consultations in the history of VTE with public and private sector stakeholders and key decision makers are analysed. These results are used to confirm the analysis of the current situation and to chart a strategic planning process for policy making, reform, and improved effectiveness in Lebanese vocational and technical education.

Vocational education, technical education, educational policy, educational reform, effectiveness improvement, Lebanon

BACKGROUND TO THE STUDY

Lebanon is a small country of 10,452 square kilometres, situated in the heart of the Middle East on the Eastern shores of the Mediterranean Sea. There is a resident population of about 4 million inhabitants as well as about two to three million Lebanese residing abroad. Without its own natural resources the country has relied throughout the ages on trade, services, light industry, and the economic support of a continuously expanding Diaspora. The national economy was devastated during the civil war that took place between 1975 and 1990. It has only partially recovered because of the subsequent years of political immobility, factionalism, and mismanagement. The measurable Lebanese Gross Domestic Product (GDP) has been estimated to be around \$US 17-20 billion in the last couple of years with very limited growth if any at all. The national debt has increased to an estimated \$US 40 billion as of 2005. In the absence of any reliable statistical data, unemployment is officially estimated at around 20 per cent. The services sector currently dominates the economy. Light transformation and agro-food industries make a strong but limited contribution to the GDP. The agricultural sector, which has been a historical mainstay of the economy, is currently operating at its lowest efficiency contributing less than 10 per cent to the GDP. The economy relies heavily on the financial support of Lebanese immigrants and on foreign investment from neighbouring Arab countries. Unofficial estimates put the contribution of the Lebanese abroad at more than 25 per cent of the GDP.

The first vocational school in Lebanon was founded by a western religious mission in 1863 (Ramadan, 2002). The vocational and technical education (VTE) system has since seen progressive growth leading the Lebanese Government to organise it in a formal way under the

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Directorate General of Vocational and Technical Education in the early 1970s. It was re-organised in 1993, and again in 1999 (ETF, 1999; Tecsult-Kredo, 2004). The Lebanese VTE System may have served Lebanon well in the past, but it is now hard-pressed to develop a new vision and implement major changes in order to deliver its mission and to prepare future generations for life and work in the twenty-first century (Interlaken Declaration, 2001; Qureshi, 1996; Ryan, 2001; Wilson, 2001). The VTE system must also face the upcoming regional and global economic challenges as the country prepares to join the World Trade Organisation (WTO) and to become an economic partner in the European Union.

Traditionally technical education was simply defined as a program of studies that prepared a technician. However, the scope of technical education has changed as our world has become more technological. Today, there are many technical skills of value to students, parents, consumers, citizens, and workers alike. In addition, the demand for technicians in the workforce has increased dramatically both in number and in variety.

One definition of technical education is that it is a combination of instruction and experiences that results in knowledge about, or skills in using a given technology. In addition, technical education can be viewed from three perspectives:

- (a) providing a foundation of technical knowledge, skills, and awareness for the youth;
- (b) developing basic technical knowledge and skills in adults; and
- (c) providing lifelong learning to improve existing technical knowledge and skills and develop new ones.

In order to make the best use of resources and provide high quality VTE for every student, it is essential that the VTE system and the market place work together seamlessly. This collaboration must include the directing of resources towards occupational and career preparation where there is the greatest need and opportunity. These two foci must be brought together to provide education and training that address workforce shortages and future economic growth. They must also help direct students toward these areas where consideration given to the students' interests and aptitudes (Lynch, 2000; Qureshi, 1996; Ryan, 2001; Wilson, 2001).

Businesses must see the importance of providing training opportunities for their employees while workers must see the benefits of using such opportunities. Because improved worker skills benefit the economy, it is appropriate for the government to provide incentives and assistance to businesses offering employee training and education programs. The two components of the national education system, the general education (GE) and the vocational and technical education (VTE) must also be partners in education and in providing lifelong learning (Ryan, 2001; *Skilling Australia*, 2005). As part of their collaboration, they must provide consistency in documentation, transcripts, and credit transfer within and between systems, as well as traceability.

An increased use of technology in the workplace is augmenting the skill and knowledge demands on workers at all levels and in virtually all areas of the workplace. Maintaining a flexible and skilled workforce requires that all incumbent and future workers receive regular up to date technology skill training.

The Lebanese VTE system finds itself at the centre of three debates. The first concerns the relationship between labour and education and the role of the latter as a social and economic development engine (Qureshi, 1996; Tabbron and Yang, 1997; Ziderman, 1997). The second debate is about maintaining central administrative control versus decentralising responsibilities. The third debate is about the likely and possible career paths of VTE graduates (Lynch, 2000; Su-Lin and Westbury, 1998; Wilson, 2001).

This paper presents the first findings of a major effort to develop a forward-looking strategy for the VTE system in the Republic of Lebanon.

Field research and interviews with major stakeholders in the education sector were conducted in the areas of: general education, vocational and technical education, and higher education. Representatives from labour and industry syndicates, as well as business associations and relevant organisations were also interviewed. Furthermore, a representative group of top policy makers and political leaders was consulted. All meetings took place during the fall of 2003 and complementary work was undertaken during 2004 (Tecsult-Kredo, 2004).

In addition to examining interviewees' views and opinions, a literature review of existing relevant data and documentation was also carried out to obtain a representative description of the role of the VTE, identify the problems that this sector is experiencing at this time and their incidence in similar countries with similar vocational training requirements (Atchoarena, 2001; European Training Foundation, 1999; Lynch, 2000; Powell, 2001; Qureshi, 1996; Ryan, 2001; Skilling Australia, 2005; Su-Lin and Westbury, 1998; Tabbron and Yang, 1997; Wilson, 2001; Wold Bank, 2004; Ziderman, 1997). The purpose of this exercise was to form a clear picture of the situation and to assess the feasibility and adequacy of the proposed strategic objectives for the future development of the VTE sector.

STATUS OF THE LEBANESE VTE SYSTEM

The VTE sector in Lebanon is under the responsibility of the Ministry of Education and Higher Education (MEHE) through the Directorate General of VTE (DGVTE). Comparable to many countries in the world (Su-Lin and Westbury, 1998) the VTE educational process is carried out by both the public and private sectors separately. The DGVTE administers both public and private VTE schools. The administrative structure of DGVTE is as shown in Figure 1.

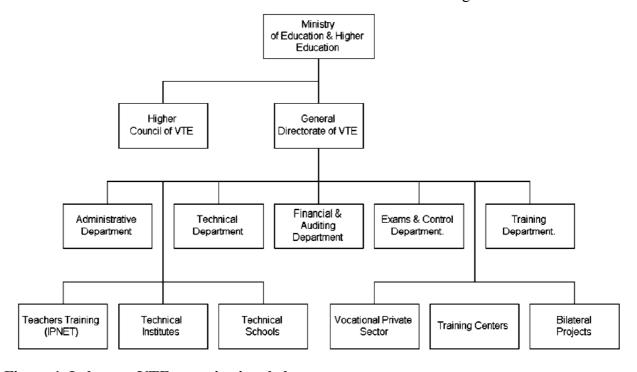


Figure 1. Lebanese VTE organisational chart

The Higher Council of VTE (HCVTE) is a consultative body comprised of representatives of government agencies involved in the VTE, as well as private sector and industry representatives. The Higher Council is headed by the Minister of Education and reports directly to that person.

The core mandate of the council is to orient VTE and establish links with the production sectors. Unfortunately this council has not discharged any of its duties in the last ten years.

In 2002-2003 the DGVTE employed 52 staff members (28 males, 24 females) to supervise and manage the VTE educational system in Lebanon which serves close to 100,000 students studying and working in a number of public and private schools. The DGVTE also directly operated 64 schools and employed about 300 administrators and 7300 teachers. Only 750 teachers worked full time, the remaining persons were hired on a yearly contract basis. About 30,000 students attended public sector VTE schools in 2002-2003.

In the private sector there were 371 schools spread throughout Lebanon in 2002-2003. These schools accommodated about 56,000 students of whom 60 per cent sat for public examinations and 40 per cent received private certificates. These schools employed 881 administrators and 6154 teachers. In 2003, the success rate in the public examinations was 60 per cent among student candidates. The DGVTE managed all the private school students who sat for national public examinations and authenticated all certificates issued by these schools.

The private sector is divided into schools operated by Non-Profit Non-Governmental Organisations (NP-NGO), and schools operated for profit. The number of institutions and their regional distribution is shown in Table 1. This distribution follows population density.

Table 1. Regional distribution of VTE schools (2002-2003)

Dogion	Number of Schools		
Region	Public Sector & NP-NGO joint ventures	Private Sector (NP-NGO & for profit)	
Greater Beirut	13	187	
Mount Lebanon	10	50	
North Lebanon	9	71	
Bekaa Valley	13	22	
South Lebanon and Nabatyieh	19	41	
Total	64	371	

It is worth mentioning that, with the exception of some NP-NGOs, the private sector is mainly involved in providing specialised programs in the services or so-called 'soft' sectors for which the required investment in buildings, and equipments is low when compared to that required for the industrial or so-called 'hard' specialties.

In some cases the Ministry cooperates with Non-Governmental Organisations to achieve projects of common interest, which are referred to as 'bilateral projects' or 'joint ventures'. This gives the Ministry the chance to expand its educational services outside its own institutions and schools, either by financing NGO schools or by managing schools established by NGOs.

TECHNICAL EDUCATION AND VOCATIONAL TRAINING

The (VTE) comprises two basic fields, namely, Technical Education and Vocational Training. Each field has a number of levels. Vocational training focuses on the jobs and occupations which do not require extensive theoretical knowledge. It addresses practical and manual competencies and skills. The vocational training field comprises four levels, three of which lead to the award of a qualification:

- (a) short term training,
- (b) the CAP (Certificat d'Aptitude Professionnel),
- (c) the BP (Brevet Professionnel), and
- (d) Baccalaureate Professional Dual System (German model).

Technical education relates to jobs and occupations requiring a thorough knowledge of the theory and a solid scientific and technological base. Technical education also requires a thorough grounding in general education. This field comprises three levels:

- (a) BT (Baccalauréat Technique),
- (b) TS (Technicien Supérieur), and
- (c) Applied Engineering or what was previously named as LT (*Licence Technique*) and the LET (*License d'Enseignement Technique*).

Table 2 presents the number of specialisations offered per level of qualification.

Table 2. Specialisations by degree (2002-2003)

Level	Number of Specialisations
CAP (Certificat d'Aptitude Professionnel)	6
BP (Brevet Professionnel)	15
Dual System Professional Baccalaureate	5
BT BT (Baccalauréat Technique),	23
TS (Technicien Supérieur)	27
LT (Licence Technique)	10
LET (License d'Enseignement Technique)	6
Total	92

Table 3 shows the total number of students enrolled in the VTE sector in the three years dating from the year 2000.

Table 3. Number of students in the VTE (Public and Private)

School Year	Number of Students
2000-2001	77,917
2001-2002	82,647
2002-2003	92,231

Of the 92,231 students in the VTE in 2002-2003, 68,270 students were enrolled in programs leading to official degrees. Table 4 shows the distribution of students in the degree programs. Table 4 shows the distribution of students by degree program.

Table 4. Students' distribution by degree program (2002-2003)

Level	Percentage of Students
CAP (Certificat d'Aptitude Professionnel)	1.26
BP (Brevet Professionnel)	8.0
Dual-System Professional Baccalaureate	1.0
BT (Baccalauréat Technique),	58.5
TS (Technicien Supérieur)	28.3
LT (Licence Technique)	2.8
LET (License d'Enseignement Technique)	0.15
Total	100.0

It is worth noting that great emphasis is being placed on the secondary and higher levels (BT, TS, LT, LET), and fewer resources are allocated to the middle level (for example, the CAP, BP). The direction taken by the Ministry confirms the general trend to abolish the middle level from the vocational education system in order to concentrate on the secondary levels and above. The VTE share of enrolment at the secondary level is around 25 per cent, whereas it exceeds 50 per cent in some industrial countries. The Government of Lebanon has decided without much analysis or strategic planning to double the capacity of the VTE that is offered in the public schools by expanding the number of schools and extending it regionally to about 115 schools. Most of the planned new schools have been built with external donor funds (Arab, Islamic, and OPEC funds) and are waiting to be furnished, equipped, and staffed. The relevant authorities have no definitive plans as to what educational programs are to be offered at these schools, and no operating budgets have been allocated to them.

STAKEHOLDERS AND SOCIAL PARTNERS

Stakeholders in the VTE sector can be divided into two broad categories: public and private sectors. Each sector can be divided further into two types of stakeholders: those acting directly in the VTE domain and those whose activities affect or are affected by the VTE system. Since the VTE strategy is a matter of national interest, all stakeholders need to be included and asked to participate in the strategy development consultations.

Public Sector Stakeholders

Parliamentary Commission on Education

The Parliamentary Commission on Education is the legislative channel through which education laws as well as yearly budgets are processed. It is also the highest planning and strategy development authority.

The Directorate General of VTE

The Directorate General is responsible for the organisation and management of the whole sector, under the supervision of the Minister of Education and Higher Education. The DGVTE is responsible for the curricula, programs, specialties, the administration of unified national examinations, and the issuing of technical education degrees for the whole vocational and technical sector in Lebanon.

The Directorate General of General Education

The Directorate General is also responsible for the organisation and management of the general education sector, under the supervision of the Minister of Education and Higher Education. The DGGE is responsible for the administration of unified national examinations, and the issuing of complementary and secondary education awards for the whole sector in Lebanon. More importantly, it operates the publicly owned schools offering free education to close to 50 per cent of the students in the general education system in Lebanon. Under the current arrangement, the VTE branches off the general education system at the level of the primary or the complementary cycles of education. It absorbs those students who fail the official examinations. As such, these students are literally dumped into the VTE by the general education stream without further interaction between the two systems, as is also common in many parts of the world (Su-Lin and Westbury, 1998).

The Directorate General of Higher Education

The Directorate General is responsible for the organisation and management of the higher education sector, under the supervision of the Minister of Education and Higher Education. As such it is directly involved in regulating the flow of students from the VTE stream back into higher education institutions (colleges, and universities). It is also concerned with the university level technical education degrees (LT, and LET) delivered by the DGVTE to its graduates.

The Centre for Education Research and Development (CERD)

The CERD is by law responsible for the development of strategy, curricula, programs, planning for the education sector, training, and the upgrading of human resources, and all related tasks under the tutelage of the Ministry of Education and Higher Education. In practice during the last ten years, CERD has concentrated on the general education sector, with a hands-on approach in developing and updating curricula, as well as upgrading programs for human resources.

The Directorate General of Social Affairs (DGSA)

The mandate of this directorate in the Ministry of Social Affairs is, as well as its budget, financial support for NGOs and other institutions that are involved in social development such as agencies offering vocational and technical education to needy groups in Lebanese society. As such the DGSA subsidises part or all of the tuition for VTE students at some of the largest Non-Profit NGO-operated schools such as Al-Aamiliyah, Al-Makassed, Father Kortbawi Institution, and the Antonine Technical Schools.

The National Employment Office (NEO), Ministry of Labour

The NEO is a recently created administration with a wide mandate to act as a bridge between the unemployed and the employers. It offers retraining and short vocational courses to the unemployed. It provided training for about 2000 individuals in 2003, through contracting out those training services to private non-profit VTE institutions.

The Investment Development Authority of Lebanon (IDAL)

IDAL operates under the direct supervision and control of the Office of the Prime Minister, and as such has a wide mandate to develop and apply policies designed to encourage foreign investments and development projects of all types (industrial and others) in Lebanon, as well as to assist in the export promotion and local business development.

The Council for Development and Reconstruction (CDR)

The Council for Development and Reconstruction (CDR) is an autonomous administration under the supervision of the Office of the Prime Minister and The Council of Ministers. Its work is planning, designing, and carrying out all infrastructure development works funded by international donors and agencies as well as some major nationally funded projects.

Other Ministries and Directorates

In addition to the Ministries of Education and Higher Education and Social Affairs that are directly responsible for the VTE sector, a number of other ministries are indirectly concerned at the highest decision-making levels (Ministers and Directors General). They are the Ministries of Labour, Finance, Economy and Trade, Industry, and the Office of the Minister of State for Administrative Development.

Private Sector Stakeholders

Non-profit NGOs operating private VTE schools

The largest private sector players in VTE education are the charitable and social work NGOs who operate non-profit schools as social development and poverty reduction activities. These NGOs are mostly community based, with strong regional and religious ties. The NGOs have been the developers of this sector since the 1950s even before the government stepped in with the creation of the DGVTE. The most important institutions are organised around sectarian communities: the Al-Aamiliyah (Shiia Muslim), the Al-Makassed (Sunni Muslim), the Father Kortbawi Institution (Christian), and the Antonine Technical Schools (Christian). Seven NGOs have joined with the DGVTE to establish public-private partnerships to run VTE schools, mostly in the South and Bekaa regions.

For Profit Private VTE schools

There are literally more than 300 of those schools some with little more than a single classroom and a few instructors. The larger private for-profit VTE schools are concentrated around the major cities and centres of population, and offer highly competitive education. Some belong to European or North American networks and provide internationally recognised degrees and certificates with recognised quality control systems and credentials.

Association of Lebanese Industrialists (ALI)

The Association of Lebanese Industrialists (ALI) groups come from the largest industries in Lebanon, with about 1200 members that represent the majority of the country's industrial production and all its industrial exports except for gold and gem stones. The association is directly involved with VTE as the main employer of its industrial specialties graduates. ALI has established some cooperation with the DGVTE and other institutions in order to improve system responsiveness and meet the needs of the industry in education, training, and retraining.

Specialised Industry Syndicates

Syndicates grouping industrial sectors and sub-sectors such as Agro-food industries, plastics, paper and packaging, stone and cement construction products, civil works contractors, wooden furniture, printing, clothing, chemicals, tanneries, leather goods, paints, and alcoholic beverages are involved in VTE to a greater or lesser degree depending on their needs. The Agro-food industries syndicate is probably the most pro-active in translating needs into action; it has established a public-private partnership for the first food technician's school in the Bekaa Valley. This project, however, has not yet been started due to institutional and political problems in the Ministry of Education and Higher Education (MEHE).

Chambers of Commerce, Industry, and Agriculture (CCIA)

The regional chambers of commerce (Beirut and Mount Lebanon, North, South, and Bekaa Valley) as well as their head office in Beirut combine up to 50,000 active companies in trade, services, finance, as well as industrialists and agricultural producers. The chambers cater to the most immediate needs of their members, and as such have been organising and offering training courses, and continuous education on commercial practice, auditing, taxation, and business practices through private sector service providers.

Professional Groups

The professions in Lebanon are self-organised, operate as sovereign groups and represent the interests of their membership. The main professions are engineers, physicians, pharmacists, and dentists. These groups have strived to provide the required linkages between their needs and the offer of technical support staff, without much success as in the case of the medical profession which suffers because nurses and paramedical assistants are in short supply. The situation is similar in the engineering professions where the healthy ratio of three support staff to one professional is not attained, and unskilled labour or unqualified support staff is unfortunately the rule.

Labour Unions

Labour unions are organised for employment or working sectors. They are all federated in the General Federation of Labourers whose main efforts in recent years have concentrated on defending the basic rights of their membership particularly with regard to benefits and salaries.

The level of maturity of the unions has not yet reached the point where they are active partners in the development of economic and educational policies with lifelong training components.

Private General Education Schools

As potential suppliers of the VTE stream, these institutions play an important role; they have, however, not shown any interest in the subject of strategic issues and the challenges faced by the education system.

STRATEGIC ISSUES AND CHALLENGES

The VTE student population forms about 25 per cent of the total student population in Lebanon aged between 12 and 21 years. Significant and consistent public investment in VTE has been made during the last ten years. More than 85 per cent of the total investment in VTE has come from the public sector. Total VTE expenditure as a percentage of the GDP has ranged from approximately 1.8 to 2 per cent. In addition VTE has benefited from many external funding agencies in the form of long term loans and donations. International funding agencies such as the World Bank, the Islamic Bank for Development, the Arab Fund, the German Development Agency are the principal donors. Between 1995 and 2004 International funding agencies have made more than \$US200 million available to develop the VTE sector.

Site visits to VTE institutions and schools were carried out and information gathered through long structured and unstructured interviews with representatives of all stakeholders. The information gathered showed a multiplicity of agendas, a disconnected sector, antagonism between public and private sector stakeholders, deep rooted mistrust, lack of working relationships and linkages, an underachiever and dropouts stigma associated with students in the VTE system, lack of information to parents and students alike, lack of quality, reduced effectiveness, funding problems, structural and institutional problems, antagonistic relationships, pervasive corruption at the highest levels, and a lack of general and particular policies and strategies.

Two sets of issues have been identified, the first being structural and country related, the second being particular to VTE with commonalities across the world. The country related problem issues are:

- (a) the factional, dead-locked and highly corrupt political system that has prevailed in the last ten years (Adwan, 2003);
- (b) the absence of a clear vision, strategy, and policies for the whole education sector in general, and for the VTE sector in particular;
- (c) the concentration of public expenditures on the development of a physical infrastructure on a regional and political apportionment basis without a coherent national master plan;
- (d) the dire need for qualified administrators, instructor, and human resources at all levels and the inadequacy of human resources management structures within the government in general;
- (e) the patronage and and a so-called 'clientelism' system that characterises the citizens relationship with the government through the intercession of regional or communal chiefs; and
- (f) the failure of international donors to catalyse and bring about the required agenda of structural change by leveraging their external position, namely local politicians and decision makers (Powell, 2001; World Bank, 2004).

The second group of issues arises at the sector level. Recent tracer and labour market studies conducted by the MEHE under World Bank funding (Tecsult-Kredo, 2004; World Bank, 2004)

revealed a general state of dissatisfaction among both VTE graduates and their employers. These VTE graduates represent the middle and basic level trained manpower in the country and come from three streams.

- (1) There are 64 Vocational and Technical Schools and Institutes operating under the Ministry of Education and Higher Education (MEHE) and about 337 private technical and training schools. These schools combined produce close to 90 per cent of all VTE system graduates.
- (2) A small number of training centres operate under the sponsorship of various agencies such as the Ministry of Labour and the Ministry of Agriculture.
- (3) Short Training Programs are administered by the Ministry of Social Affairs, and the National Employment Office.

Data collected have indicated that there has been a manifold increase in the number of VTE public institutions (29 in 1996, 64 in 2004), and consequently a sizable increase in the number of graduates (from about 21,000 to approximately 30,000). This increase, due to governmental efforts in the last eight years, has not been matched, however, by any improvement in the quality of the graduates or their employability after training. The VTE remains confronted with the same recurrent problems and much remains to be done to improve both the quality and access to vocational and technical education. The major issues can be summarised as follows:

- (1) inadequate financial resources and funding mechanisms and an over-dependence on government funding;
- (2) lack of coordination between various governmental departments involved in VTE;
- (3) lack of liaison between industry and educational institutions resulting in low external efficiency;
- (4) lack of relevance of curricula to job market requirements;
- (5) inadequate human resources both quantitatively and qualitatively, poorly equipped and maintained workshops, and inadequate administrative infrastructures resulting in low internal efficiency;
- (6) poor institutional capacity for planning and development at the DGVTE level and lack of relevant data since the planning, management and organisation of the VTE revolve around central supply- oriented planning that has not kept pace with the needs of the labour market; and
- (7) poor coordination between the Ministry of Education and other government agencies and the public and private sectors resulting in low efficiency in the use of resources and poor linkages between the provider and users of VTE.

These results underscored the poor state of the VTE system in Lebanon and the failure of the government as well as international donor agencies to implement the required improvements and reforms (World Bank, 2004). The key to developing a successful strategic plan, and its detailed policies to meet the challenges of the VTE in a global competitive economy resided in building a consensus around key strategic objectives at the highest levels of the Lebanese decision making process. Using the results summarised above and additional information gathered from consultations and preparatory workshops, a draft set of key strategic objectives was identified. VTE goals and strategic objectives were then used as a background to carry out detailed interviews with a representative sample of high level decision makers from the public and private sectors. The interviewees were asked to rank these objectives as well as to comment openly on them. The sample included 29 major stakeholders from, which 12 political decision makers (four

ministers, three members of the parliamentary commission on education, and five directors general) were interviewed.

INTERVIEWS AND CONSULTATIONS WITH POLITICAL DECISION MAKERS

During December 2003, long structured interviews were carried out with 12 political decision makers who represented the full spectrum of political factions and religious communities in the Lebanese Government. As part of the consultative and participatory process, these key stakeholders were asked to complete a questionnaire aimed at identifying the different perceptions and positions with respect to the goals and the key strategic objectives that were identified. The consultations highlighted the symptomatic expressions of the tremendous problems considered in the previous paragraph. A 'silver lining' was, however, found in the shared convictions about the strategic importance of the VTE role in the future development of the Lebanese economy, and a commitment to improve the situation provided adequate conditions. This work elucidated the first consensus among otherwise opposing and antagonistic stakeholders.

The first part of the questionnaire proposed three goals for the VTE. Table 5 shows the responses were as follows.

Table 5. Ranking of VTE Goals by Importance

	Goals of VTE ranked by importance	Extremely Important	Very Important	Important	Not Important	No Opinion
1	Produce a well-trained and globally competitive workforce, skilled for employment	5	7	0	0	0
2	Improve economic opportunities for the underprivileged sections of the population and act as a poverty reduction and economic growth engine	7	4	1	0	0
3	Provide lifelong training and retraining opportunities for the Lebanese workforce	6	4	2	0	0

All three goals were found to be appropriate and very important without much variation in the opinions provided by the respondents, but the highest ranking was to 'Produce a well-trained and globally competitive workforce, skilled for employment' showing a correct and acute perception of the role of VTE in modern economies (Skilling Australia, 2005). The traditional role of VTE in Lebanon to 'Improve economic opportunities for the underprivileged sections of the population and act as a poverty reducer and economic growth engine' is still perceived to be of great importance from an economic and political point of view, for the mobilisation of the human potential at all social levels. The role of VTE as a provider of lifelong training is the least understood and appreciated.

The second part of the questionnaire referred to 12 strategic objectives that were identified. The answers were ranked in priority based on the responses of the interviewees with 1.0 being the highest priority possible. The closer to 1.0 the average score was, the higher the priority of the objective. The variation represented the standard deviation of the score of a given objective, and hence the level of consensus around it. The results are shown in Table 6.

A survey with only 12 respondents is primarily indicative and must be treated with caution. The results of this survey are, however, relevant as descriptors of the perceived priorities of 12 Lebanese decision makers at the highest level. Their opinions reflect those of the groups they represent, and these groups correspond to a large majority in the parliament and cabinet ministers.

The top priority objective confirms the consensus on the importance of the VTE in developing a modern workforce underscoring its economic relevance. The respondents unanimously found that the establishment of training and labour market links is of the greatest importance for the future VTE system.

Table 6. Ranking of VTE strategic objectives by priority

Priority	Strategic Objective	Average	Standard
Ranking		Score	Deviation
1	Establishment of training and labour market links	1.17	0.14
2	Development and clarification of educational paths	1.67	0.39
3	Institutional capacity-building and development	1.67	0.56
4	Improvement of internal efficiency. effectiveness and quality	1.67	0.72
5	Developing VTE awareness. appreciation and Recognition	1.75	0.85
6	Establishment of standards, certification, classification, accreditation &	1.83	0.64
	regulation		
7	Definition of orientation and size of the VTE sector	1.92	0.74
8	Establishment of links between private VTE schools, the private productive	1.92	0.91
	sector, the NGOs and public sector		
9	Improvement of accessibility, social equity and mobility	1.92	1.58
10	Improvement of funding, finance and accountability	2.00	1.33
11	Governance, management, administration and participation	2.33	0.89
12	Improvement of relevance, responsiveness and external efficiency	2.33	1.22

The next group of priorities, from Objectives 2 to 8, shows that the respondents are more or less unanimous in their support of these objectives.

Objectives 9 to 12 are more divisive and are perceived as less of a priority.

It is worth noting that Objectives 2 to 8 concentrate on sector problems, whereas Objectives 9 to 12 address the wider cross-cutting issues that require state-wide reform, institutional and structural change. This may explain the reluctance of decision makers to tackle the most difficult issues.

CONCLUSIONS AND RECOMMENDATIONS

- (1) The major problems and challenges facing the VTE system in Lebanon were analysed against the background situation of the country.
- (2) Problems were grouped in two sets: general country specific problems, and particular sector specific problems.
- (3) Goals and critical strategic objectives for improving the VTE system were presented.
- (4) The operators in the VTE environment were aware of the necessity to strengthen the VTE system. The majority of the stakeholders were willing and motivated to participate in the work to establish a strong and dynamic VTE sector, which had a built-in capacity to meet the challenges of the future.
- (5) A representative sample of 12 top level political decision makers were consulted in a structured interview about their opinions and perceived priorities as to future goals and objectives.
- (6) The economic role of the VTE was unanimously perceived as the top priority.
- (7) Sector specific strategic objectives were ranked as higher priority objectives than those that required country-wide reform.

In addition to the political will, improving technical education would clearly require the involvement and the partnership of schools, communities, and citizens. This study has attempted to put technical education in a context that could be understood, shared and developed by all

concerned Lebanese stakeholders. It has also attempted to draw the limits of consensus around the most critical issues in the VTE, identifying the most critical one. In response to that, the Lebanese Ministry of Education and Higher Education should direct all stakeholders concerned to an urgent examination of a national classification of qualifications, the occupational skills required by employers, and the range of courses VTE schools should be offering to meet the labour market demands. Pursuant to that, an appropriate sector strategy should be developed to tackle all problems identified in this study with a priority objective to ensure that existing VTE Institutions would have the skills, foresight, and freedom to identify and respond to the labour market demand for more flexible and highly skilled workers.

DEDICATION

This paper is dedicated to the memory of a friend and a great man: H.E. Dr. Bassel Fuleihan, a supporter of economic development and VTE reform in Lebanon who was assassinated in Beirut in the tragic events of February 14th, 2005.

REFERENCES

- Adwan, C., (2005). Corruption in Reconstruction: The cost of national consensus in post-war Lebanon. In *Corruption in Post-War Reconstruction, Confronting the Vicious Circle, based on the Proceedings of the 11th International Anti-Corruption Conference, Seoul, 25 May, 2003.* The Lebanese Transparency Association. [Online] http://www.tiri.org/documents/press_releases/20_jan_05/PWR_Lebanon_Adwan.pdf
- Atchoarena, D., (2001). From research to reality: An international perspective. In Research to Reality: Putting VET Research to Work, Proceedings of the Australian Vocational Education and Training Research Association (AVETRA) 4th Conference in Adelaide, Australia March 28-30, 2001.
- European Training Foundation (1999). Overview of Vocational Training and Education in Lebanon. [Online] http://www.etf.eu.int
- Interlaken Declaration (2001). Initiating debates on liking work, skills, and knowledge: learning for survival and growth. *International Conference*, 10-12 September 2001, Interlaken, Switzerland. [Online] http://www.workandskills.ch/
- Lynch, R.L. (2000). High school career and technical education for the first decade of the 21st Century. *Journal of Vocational Education Research*, 25 (2). [Online] http://scholar.lib.vt.edu/ejournals/JVER/v25n2/lynch.html
- Powell, M. (2001). A comparative study of TVET projects Implementation experiences from Jamaica to the Gambia. *International Journal of Educational Development*, 21, 417-431.
- Qureshi, M. A. (1996). Current trends and issues in technical and vocational education in Asia and the Pacific. *UNEVOC INFO 8* (Aug), 1-3.
- Ramadan, B. (2002). Toward a more demand driven system of vocational and technical education in Lebanon. Republic of Lebanon Update, *World Bank. Fourth Quarter*, 2-6.
- Ryan, R. 2001. Master concept or defensive rhetoric: Australian VET policy against past practice and current international principles of lifelong learning. *International Education Journal* 2 (3), 133-147.
- Skilling Australia: New Directions for Vocational Education and Training, (2005). Australian Government, Department of Education, Science, and Training. Canberra: Commonwealth of Australia.

- Su-Lin, H.L.L. and Westbury, I. (1998). The transformation of Taiwan's upper secondary education system: A policy analysis. *Education Policy Analysis Archives* 6(18) 27p.
- Tabbron, G. and Yang, Jin, (1997). The interaction between technical and vocational education and training (TVET) and economic development in advanced countries. *International Journal of Educational Development* 17(3), 323-334.
- Tecsult –Kredo, (2004). *Developing a VTE sector strategy, inception report*. Beirut, Lebanon: Republic of Lebanon, Ministry of Education and Higher Education, Directorate of Vocational and Technical Education.
- Wilson, D. (2001). Réformer l'Enseignement et la Formation Techniques et Professionnels (EFTP) au Bénéfice d'un Monde du Travail en Mutation (in French). Perspectives XXXI, (March).
- World Bank (2004). Implementation completion report on a loan in the amount of US\$ 29 million to the Lebanese Republic for a LB-Vocational and Technical Education Project, Report No. 29120 Washington, D. C.: World Bank.
- Ziderman, A. (1997). National programmes in technical and vocational education: Economic and education relationships. *Journal of Vocational Education and Training*, 49(3), 351-366.

