

EDUCATION & BUSINESS OCCUPIED PALESTINIAN TERRITORY



EDUCATION AND BUSINESS STUDY

Occupied Palestinian Territory

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List of acronyms

AGIP	Academic Governmental Industrial Partnership
AOC	Arab Occupational Classification
ACAQ	Accreditation and Quality Assurance Commission
BTC	Belgian Technical Cooperation
CHE	Council for Higher Education
CSR	Council for Scientific Research
EDIP	Enterprise Development and Investment Promotion
EFE	Education for Employment
EU	European Union
GDP	Gross Domestic Product
GTZ	German Technical Cooperation
HE	Higher Education
ICP	Institute for Community Partnership
ICT	Information and Communication Technology
LET	Local Employment and Training
LMIS	Labor Market Information System
MENA	Middle East and North Africa
MoNE	Ministry of National Economy
MoEHE	Ministry of Education and Higher Education
MoL	Ministry of Labor
NGO	Non Governmental Organization
OPT	Occupied Palestinian Territory
PA	Palestinian Authority
PCBS	Palestinian Central Bureau of Statistics
PPU	Palestine Polytechnic University
QIF	Quality Improvement Fund
SME	Small and Medium Sized Enterprise
TEI	Tertiary Education Institute
TVET	Technical and Vocational Education and Training
USM	Union of Stone and Marble

Foreword

Many countries worldwide reinforce their education and training systems' capacity to respond to the pressures of globalisation and the challenges of the knowledge society. Closer cooperation between business and education is one of the tools for providing learners with new skills and competences for work. However, knowledge available on the current forms and modes of cooperation between the education and economic sectors, and the roles and responsibilities of the different stakeholders is limited and fragmented.

The European Commission's Directorate General for Education and Culture has entrusted ETF to carry out a study on education and business cooperation in the EU neighbouring countries and territories (involved in the Enlargement process as part of the Instrument for Pre-accession Assistance, the European Neighbourhood Partnership Instrument, or in Central Asia) in order to:

- draw up an inventory of current cooperation between education and business;
- identify to what extent EU approaches and policies are relevant to the EU neighbouring countries;
- provide tailored information and recommendations to national policy makers and donors for future programming initiatives and capacity building measures.

For the purpose of this study, the term education includes VET, post-secondary non-tertiary and tertiary education, including public and private institutions. The term business covers any entity with economic activity regardless of its legal status. This can include multi-nationals, public and private companies and SMEs, micro-business and actors in the informal economy, social partners (employers' and employee organisations, civil society organisations and their training bodies) as well as national, regional and local authorities. While the focus of the study is on identifying and reflecting on policy or strategically driven approaches to cooperation, the study considers education and business cooperation in a very broad sense, meaning any kind of relevant policy provision and/or formalised or non-formalised interaction between an education/training provider and a business organisation.

The present paper is the specific contribution for the occupied Palestinian Territory. It has been elaborated as a joint effort and follows a study design, consisting of desk research, data exchange with partner institutions, as well as focus group meetings in May 2010 and a validation workshop conducted in July 2010. During this intensive consultation process, facilitated by the ETF, the main national stakeholders (representatives from relevant ministries, social partners, the education system, businesses and the civil society) discussed the state of the play and provided recommendations for its improvement. The ETF produced the final report based on the key discussion points and messages.

This report will serve as input for a regional ETF study, relevant for the European Neighbourhood south region and for a cross-country ETF study on education and business cooperation (reflecting on the findings of all countries with which the ETF cooperates), both due to be published in spring 2011.

The ETF is grateful for the opinions shared and insights provided by participants during the rich discussions in all meetings.

A. Executive summary

Small and medium-sized enterprises constitute the majority of businesses in the Palestinian economy. Almost 97% of those enterprises employ less than nine workers, and 99% of them employ less than 20 workers. The labour force counts for almost 650,000. The employees distributed by sector are as follows: agriculture (17%), industry (15%) and services (68%). The unemployment rate decreased in the Gaza Strip from (39.3%) in the fourth quarter of 2009 to (33.9%) in the first quarter of 2010, and in the West Bank from (18.1%) in the fourth quarter of 2009 to 16.5% in the first quarter of 2010.

With a high 91% adult literacy rate, Palestinians are the most educated population in the region. In West Bank and Gaza, there are 11 traditional universities, one open university, 12 university colleges, and 18 community colleges. Moreover, there are more than 200 institutions in the West Bank and Gaza providing short and long term training programmes. These include vocational secondary

schools, vocational training centres, cultural centres, societies and charitable organisations, and agricultural and economic development centres.

Education and business cooperation is not yet institutionalised so it is based on individual endeavours. Vocational education and training has not yet been accorded sufficient attention by the Palestinian government. A serious attempt at developing the sector was made in 1996 through the formulation of a strategy for vocational and technical education and training which was never implemented. Another attempt was made by the Ministry of Education and the Ministry of Labour in March 2009 to reactivate this strategy and to overcome the obstacles and challenges faced by the sector.

Many initiatives have taken place to enhance or bring together these entities for more comprehensive and efficient cooperation, such as the Quality Improvement Fund (QIF), Education for Employment (EFE), and Youth Employment Services (YES) all of which lacked the broader perspective of combining all stakeholders in one clear strategy, in which cooperation roles are distributed after a realistic assessment of needs and capacities. In the TVET sector, donors focus on career guidance and counselling, curricula development and labour market information systems. As regards support to the tertiary education sector, donors work bilaterally with tertiary education institutions.

Education and business cooperation faces several challenges such as: the lack of activity of the Higher Council for TVET and Higher Council for Education; high fragmentation of representative organisations for the private and academic sectors; the structure of the private sector (mainly family-owned SMEs); overlapping training programmes provided by education institutions; a dispersed education and training system in terms of types of institution, their objectives and the bodies responsible for them; and a lack of tracer studies. Other challenges include the low motivation of students to follow vocational education and training and the high workload of trainers and teachers.

The main recommendations of the study address various levels and players. At policy level there is an urgent call to implement the TVET strategy based on a sound vision and complement it with new legislation requiring education institutions to develop programmes and school-to-work mechanisms for graduates through systematic cooperation with the business community. The setting-up of a continuing training system would contribute to addressing the needs of the labour market and employed and unemployed Palestinians.

Business can play a crucial role in the identification of skill needs, in the implementation of apprenticeship schemes and in the design and running of sector specific training centres (initial and continuing training).

Education institutions should become more proactive in involving business in the various phases of training programming, design, implementation and evaluation, including participation in the scientific councils.

Capacity building should target directors of education institutions to support more efficient management and trainers and teachers to improve their pedagogical skills and technical know-how.

B. Context / Policy

The occupied Palestinian Territory (OPT) consists of two parts. West Bank (5,860 km²) including East- Jerusalem, and Gaza Strip (360 km²). In 2009 the population was estimated at 4.4 million (63% in the West Bank and 37% in Gaza Strip). The macroeconomic situation continued to improve in the West Bank, but in Gaza conditions remain difficult due to the blockade. Real GDP is estimated at 6.8%, consisting of an estimated 8.5% growth in the West Bank and 1% in Gaza (IMF, 2010). GDP composition by sector is as follows: agriculture (5%), industry (14%), and services (81%).

Small and medium-sized enterprises (SMEs) constitute 99% of economy and are the largest employers. Various studies have been initiated by the Palestinian National Authority to identify the best way to support and encourage SMEs to boost economic development. It could be argued that these studies are still in their initial stages and have not been translated into action or practical steps. The labour force counts almost 650,000. Employees by sector are as follows: agriculture (17%), industry (15%) and services (68%). The unemployment rate decreased in Gaza Strip from 39.3% in the fourth quarter of 2009 to 33.9% in the first quarter of 2010, and in the West Bank from 18.1% to 16.5%. The results showed that the highest unemployment rate was concentrated among young people aged 15-29: the 20-24 age group has the highest unemployment rate at 35.7%, distributed as

25.5% in the West Bank and 55.4% in Gaza Strip, followed by the 15-19 age group which reached 34.3% - 28.7% in the West Bank and 53.2% in Gaza Strip, then the 25-29 age group with 28.1% - 21.4% in the West Bank and 38.9% in Gaza Strip. The labour force participation rate for females remains low at about 15.5%, compared to 67.0% of men. Women's unemployment reached 26.4%. Jobs for women are primarily in the education sector 34.7%, followed by agriculture, forestry, hunting, and fishing at 20.5%, and health at 9.4% (PCBS, 2010).

With a high 91% adult literacy rate, Palestinians are the most educated population in the Middle East and North Africa region (World Bank, 2006). Today, there are more than 200 institutions in the West Bank and Gaza providing short and long term training programmes. These include vocational secondary schools, vocational training centres, cultural centres, societies and charitable organisations, as well as agricultural and economic development centres. Tertiary education¹ consists of universities that provide bachelor and master degrees and colleges that provide two or four years of education for a diploma. There are 11 traditional universities, one Open University and 12 university colleges². In addition to these institutions, there are 18 community colleges providing post secondary education, five of which are technical colleges. These institutions are run by several bodies that include: the Ministry of Education and Higher Education, the Ministry of Labour, the Ministry of Social Affairs, UNRWA, several philanthropic associations, and a large number of religious and profit organisations, in addition to private and public organisations (World Bank, 2006). There are five streams in school-based vocational training: industrial, agricultural, commercial, hotel and home economics. Fifteen secondary industrial schools offer 17 specialisations with 2,185 students enrolled in 2004/05. Total student enrolment for the five streams increased from around 3,000 in 1999/2000 to 5,561 in 2004/05. This is considerably lower than the Ministry of Education and Higher Education 2000-05 target (9,000) as this type of training remains unpopular among most students and parents/guardians. The demand for most vocational training is weak. A few community colleges with a limited capacity of 200-300 students have a high applicant-place ratio (especially for nursing and the UNRWA Gaza Training Centre). The rest of the community colleges have only around one applicant per place. Manual skilled occupations continue to have a low status and only the least academically able students are expected to enrol at TVET institutions. The majority of colleges have low student-teacher ratios and high unit costs. In addition to community colleges, the Ministry of Labour and the Ministry of Social Affairs provide other TVET opportunities: 12 rehabilitation centres that target dropouts, slow learners and 'social cases'. The total enrolment was around 850 in 2004/05 with 380 graduates. The Ministry of Ex-Detainees also offers TVET to around 1,000 students, mostly males. 450 students are enrolled in the National Institute of Information Technology (World Bank, 2006).

Among the most important comparisons of TVET to academic education³ are the following:

- low levels (less than 5%) of student enrolment in vocational education and training;
- low levels of unemployment among graduates of vocational education and training compared to graduates of academic education;
- low levels of average daily wages of graduates of vocational education and training compared to those of university graduates;
- a high employment rate among graduates of vocational education and training compared to general education and university graduates;
- the service sector absorbs the biggest number of graduates of vocational education and training;
- inadequate government and private sector involvement in vocational education and training.

UNRWA institutions concentrate more on vocational education and training and this is the reason for the high percentage of employed UNRWA graduates compared to other government or privately owned institutes). The main reason students usually take up vocational education and training⁴ is their inability to pursue academic education and the fact that they believe in the importance of VET. The

¹ www.moehe.gov.ps

² <http://www.moehe.gov.ps/stats/Daleel%202007-2008.pdf>

³ www.pal-econ.org

⁴ www.pal-econ.org

vocational education and training system is dispersed in terms of types of institution, their objectives and the bodies responsible for them.

Trust between education and business is limited. However, the culture of education-business cooperation started to grow significantly after 1994, once the Palestinian Authority (PA) took over. This can be down to many reasons: before 1994, the education sector was governed by the Israeli occupation through military laws; the TVET strategy and Higher Council for TVET were only created after 1994.

C. Structures / Methodologies / Approaches

Education and business cooperation is explicitly included in TVET policies. The Palestinian TVET strategy is structured to involve all stakeholders in the design and delivery process. This includes relevant ministries and representatives from the private sector, UNRWA, Chambers of Commerce, and NGOs. However this strategy is not fully implemented.

At the same time, cooperation in the tertiary education sector is still based on individual schemes between the universities and colleges and their surrounding local communities rather than national policies or laws.

A higher education law provides the legal framework. Nevertheless, the main problem is that the law has not been implemented as was intended, and in many respects the governance bodies do not function optimally. As far as these bodies are concerned, the Council for Higher Education (CHE) even predates the establishment of the Ministry of Education and Higher Education. The 1998 higher education law did not actually establish the CHE by name. It stated that the Minister may create a consultative committee. The CHE is chaired by the Minister of Education and Higher Education and composed of all public and governmental university heads, one representative of private universities, one two-year Community College Dean, the Deputy Minister of Finance, the Deputy Minister of Planning, two representatives from the Ministry of Education, eight academics, and a Secretary General. The business sector is not represented at all.

The Higher Council of TVET was formed in 2005 as part of the implementation plan of the national strategy for technical and vocational education and training. The council is composed of 16 members with equal representation of public, private, and other relevant bodies. The Council is chaired in rotation by the Ministry of Education and Higher Education and the Ministry of Labour. Its mandate is to establish the overall policies and strategies for TVET, define national TVET priorities, oversee the implementation of the strategy, and secure the necessary financial resources.

These two councils do not function well and the economic sectors are not sufficiently covered. Rather than addressing the major strategic issues of the size, shape and direction of the system as a whole, the CHE spends most of its time during meetings (which do not occur as often as they should), discussing how the limited government funding should be distributed between universities and other areas of immediate concern, such as staffing.

A new committee was established recently and consists of representatives from the Ministry of National Economy, the Palestine Polytechnic University, and the Palestinian Private Sector Coordinating Council. It was created to discuss the competitiveness of the private sector at national level. This agreement is an outcome of the Academic-Governmental-Industrial Partnership (AGIP) conference⁵ which took place on 12 May 2010 in Hebron. The committee is in its initial start-up stage and aims at unifying all efforts and donations to make industry more effective.

In 2002, the Ministry of Education and Higher Education established an Accreditation and Quality Assurance Commission (AQAC) and the Council for Scientific Research (CSR). The AQAC chaired by someone appointed by the Minister, and has a board of 12 professionals whose mandate is to take final decisions about licensing and accreditation for ministerial ratification. The board comprises four representatives from local universities, three from related Palestinian organisations, two from the Ministry of Planning, one from UNRWA, one from the private sector, and one from the technical and vocational education sub-sector. The Commission works under the umbrella of the Ministry of Education and Higher Education and is responsible directly to the Minister. According to the current governance practices of AQAC, the commission is considered semi-

⁵ AGIP Conference was funded by EDIP/ USAID project. Please see <http://agip.ppu.edu>

independent. However, there are some concerns with regard to the set-up, role, and practice of its board. Currently, the AQAC board does not exercise any significant policy making role.

The CSR is a body that was established and operates within a draft by-law set out by the ministry that has not yet been ratified. The CSR is chaired by the Minister and comprises a vice-chair nominated by the Minister, a Secretary General, the Director General for Scientific Research at the Ministry, all deans of research at Palestinian universities and three ministry registered research centre representatives. Due to its limited resources, particularly financial, the CSR lacks both the potential to deliver its tasks and the ability to carry out its duties.

In both bodies representativeness of the business sector are absent or limited.

Most initiatives regarding education and business cooperation in higher education are based on donor interventions. The Quality Improvement Fund (QIF)⁶ is a project funded by the World Bank and the EU where the ceiling of the grant for tertiary education institutions is increased if partnerships between the institutions themselves or with the business community can be demonstrated. QIF facilitates a change of culture in the financing of tertiary education, the setting of national priorities, and a new framework for tertiary institution relations with each other and with the private and public sectors. The QIF board is independent from the government and includes representatives from government, tertiary education institutions, and the business community. It is hosted by the Ministry of Education and Higher Education. The chair of the QIF board is selected every year by the board members. The Board meets regularly to realign the priorities of the fund and amend and reform technical issues and requirements. The QIF board coordinates its work with the donors and submits a yearly report reflecting the summary activities and outcomes of the fund to the ministry. In order to promote the Bologna Process⁷, an EU-funded team called "Higher Education Reform Experts" works under the umbrella of Tempus National Office also located in the ministry. The team is composed of seven experts representing seven universities in the West Bank. One of the aims of the Bologna Process is to bridge the gap between tertiary education institutions and the business community.

Most initiatives regarding education and business cooperation in TVET are based on donor interventions. GTZ, the German international cooperation organisation, provides substantial support: they helped to review the TVET strategy and have carried out activities such as labour market information system development, and support for career guidance and counselling. GTZ promotes integrated approaches to improve vocational training and develop the labour market. It follows a comprehensive vocational training strategy that addresses all areas of relevance to the labour market and employment. Guided, too, by the labour market strategy, it focuses particularly on employment for young people and tries to reduce imbalances in the demand and supply of labour. GTZ set up local employment and TVET (LET) councils in Nablus, Ramallah, Bethlehem and Hebron, under the management of the governors and comprising representatives from the ministries of labour and education, the private sector and education institutions. These convene on a regular basis to discuss the projects needed to better link education with the labour market at regional level. The Belgian development centre, BTC, is currently supporting a curriculum development project in full cooperation with the business sector, represented by the Chambers of Commerce and Industry⁸ in Jerusalem, Hebron, Ramallah, and Nablus, and hopefully Gaza in the near future. These are considered as focal centres in the governorates. USAID has intervened to support TVET⁹ through a programme oriented mainly towards the NGO TVET league. The league is a networking body that represents the Palestinian non-governmental vocational education and training organisations. Members of the league started holding their periodical networking meetings in May 2000. The league was formally established in May 2003 as the non-governmental body that participates in the implementation of national plans for developing the Palestinian vocational education and training sector. The EU will make €4 million available from 2011 to make TVET more relevant to labour market needs through projects carried out by TVET institutions in partnership with the private sector.

Education and business cooperation projects do not cover all economic sectors or all regions. Current cooperation projects focus on: ICT, stone and marble, food processing, and pharmaceutical sectors. It is worth mentioning that there are significant differences in the economic sectors in the

⁶ QIF is established on a competitive basis open to eligible tertiary institutions in Palestine. www.tep.ps

⁷ www.tempus.ps

⁸ Mr. Jamal Jawabreh, General manager of Chambers of Commerce

⁹ Mr. Ayman Sultan, PPU

south, middle and north of the West Bank and the Gaza Strip. Potential sectors in the southern part of the West Bank are tourism, food, stone and marble, and handicrafts. Services, ICT and pharmaceutical sectors are mainly located in Ramallah, while the north of the West Bank is best known for its textile, chemical and food industries (Palestinian Chambers of Commerce, 2010)¹⁰.

Examples of education and business cooperation include the three way agreement between the Ministry of Education and Higher Education, Nablus Chamber of Commerce, and LIB-NRW (German implementing organisation) to upgrade Nablus Industrial School to provide training to private sector employees and students. Another example is the signed agreements with Hebron, Nablus, Jerusalem and Ramallah Chambers of Commerce to upgrade TVET curricula based on the Arab classification and funded by the Belgian Government. Palestine Education for Employment (PEFE) is a foundation providing jobs and incomes for Palestinian young people through many initiatives such as the Mini-MBA Business Training and Job-Placement project, Construction Management Training and Job-Placement project, and "Jobs for Hope - AMAL" business training in English, and the Workplace Success project. Education and training for employment's unique contributions are creating powerful partnerships; developing practical and relevant training programmes that are tailor-made to meet the needs of businesses; linking graduates of their training programmes directly to jobs; and enabling existing education institutions to better prepare their graduates for the workforce by providing them with world class curricula and methodologies. Mercy Corp and Save the Children¹¹ are implementing an online entrepreneurship training programme, "Bader on Line", addressing TVET students at different levels. The programme aims to train students on entrepreneurship skills using e-learning. Another good example is the education and business partnership between the Palestine Polytechnic University, Ministry of National Economy, and Union of Stone and Marble as shown in the box below.

An e-tracking system designed to act as a media between the supply and demand sides has been included in two schemes. The first is a project under the World Bank fund and it covers universities in the QIF project, and the other is a UNESCO funded project designed to serve vocational schools. The main idea of these schemes is to provide a platform for education institutions, businesses and the labour market to give concrete opportunities for job seekers and job providers. The Palestine Information and Communications Technology Incubator (PICTI) organised a Technology Entrepreneurship Forum (TEF) which successfully identified seed ventures for potential funding assistance from institutional investors. PICTI partnered with Intel Corporation and the University of California in Berkeley to introduce the "theory to practice" seminar as part of technology entrepreneurship education in July 2008. A total of 30 professors attended the seminar to localize and develop curriculum related to technology entrepreneurship at their own campuses. Other successful examples are presented in annex 1.

The TVET Marble and Stone Centre was established in 2009 at Palestine Polytechnic University (PPU) in Hebron, as the first centre in the Middle East that is specialised in the stone and marble industry. The Centre provides education, training, and lab tests. The curriculum was developed and industrial equipment selected by the PPU and USM. This TVET centre is based on a unique partnership that brings together the Palestinian Ministry of National Economy (the public sector), PPU (the academic sector), and Union of Stone and Marble-USM (the private sector). The Board of the Centre comprises the three parties and agrees all plans and activities. The Board meets regularly and decisions are taken by vote.

PPU achieves its vision as a university that serves the community and the USM should be satisfied with the quality of graduates thanks to their heavy involvement in curriculum development and staff selection.

By 2011, almost 20 students will finish their two-year diploma, and 300 workers (working in the stone and marble industry) will be given training.

¹⁰ <http://www.pal-chambers.org/>

¹¹ The Technical Vocational Education and Training programme (TVET) implemented by Save the Children US and Mercy Corps as a sub-grantee, aims to improve non-governmental technical and vocational education and training in the West Bank.

D. Challenges

There are two fundamental underlying issues at systemic level that must be addressed. Education and the labour market need the highest levels of government to formulate an overarching strategy to guide and coordinate reform initiatives. Furthermore, the existing persistent national systemic barriers to the creation of a demand driven, competency-based, flexible and responsive education system need to be overcome. The main general obstacles include: the pervasiveness of the academic model, bureaucratic processes, and a lack of performance management systems. In addition, a vehicle for creating a vision for education, leading and coordinating its growth and development is lacking; and strategic planning for the education and business sub-sectors is missing. Labour market and institutional performance information is not being used for programme planning. As an example, most education institution graduates hold degrees in education, humanities and arts, and social sciences while only a small number hold degrees in health, service or agriculture. At the same time, business sector statistics indicate a desperate need for the latter.

Other obstacles include: insufficient coordination among education providers to address accessibility, transferability and accreditation; TVET suffers from an unattractive image and is promoted poorly as a viable education alternative; the TVET environment lacks incentives and spirit of competition; and gender needs/considerations are not taken into account.

At the level of the education institution, there is insufficient flexibility, innovation and responsiveness; weak institutional autonomy; overly bureaucratic and centralised management, administrative and human resources practices; inadequate gender-sensitive policies and practices; inadequate recognition of and connection to workplace experience; and little consideration of lifelong learning. The OPT is not productive when it comes to the generation of knowledge. The challenge is to improve the use and exploitation of publicly funded research and development. Although there are a number of programmes that strengthen pathways through which the knowledge generating capacities of public higher education and research can work together with enterprises to bring innovations to the market, the level of lasting strategic cooperation between the two sectors is still too low.

At the education programme level, business participation in programme planning, curriculum design review and delivery is weak; there is insufficient use of flexible models for programme delivery such as a student centred approach; education programmes focus on academic rather than applied knowledge; there are not enough gender sensitive measures in recruitment and programme delivery, particularly in TVET; instructors/trainers lack relevant, current and recurrent workplace experience; and guidance, student support, job counselling and placement are poor and pay little attention to gender differences. The comparatively low levels of entrepreneurship call into question the country's ability to foster growth and jobs. The challenge for education is to provide a learning environment that stimulates independence, creativity and an entrepreneurial approach to harnessing knowledge.

At the business level, it is obvious that more than 90% of industries are classified as small family administered businesses. This implies that efforts have to be devoted to enriching family business administration tools and mechanisms and tackling small scale problems in financing, promotion, technical assistance, raw materials and other business essentials. Productivity across all industrial sectors does not exceed 50% on average, and only few industrial investments were evident in the West Bank in the last decade, most in the form of support to existing enterprises (PFI, 2010). It is worth mentioning that there is a lack of coordination between different private institutes, and inter-sector and inter-industry relations are weak. There is no unified reference for the private sector (i.e. unions, chambers, associations) to reinforce capacity to help SMEs to address their skills needs, information lacks accuracy and the government is unable to control and regulate the internal market and eliminate unfair competition with local producers. Improving employability involves not only those who enter the labour market - the upgrading of competences for those already in the workforce is an equally important challenge.

Social cohesion and competitiveness, both important constituents of sustainable development, are the main drivers in defining the contribution that education institutions can make. In this context, they should work towards enhancing the employability of their graduates to better match the demands of the labour market. If cooperation is still limited this could be explained by a series of bottlenecks such as political uncertainty and mobility restrictions and the structure of the business community, which is based on family owned industries that are usually limited to employing relatives and close friends and

are reluctant to become involved in cooperation schemes or programmes. There are some examples of industries refusing to accept students for training programmes for business secrecy reasons.

E. Recommendations

Among the most important recommendations presented in the study are the following, listed in priority order.

Policy level

An overarching vision for education and business cooperation should be created, with consensus among stakeholders on a clear and articulated mandate for each stakeholder and agreement on a policy framework within which conceptual, structural and operational reforms will be undertaken. Existing systems must be examined and reorganised effectively. A national Palestinian strategy for TVET must be implemented along with policies and processes to guide the development of the system. This should be realised through the operationalisation of the TVET Council to ensure high-level coordination and direction for the TVET system including the gender sub-committees. Legislation governing the relationship between education and business sectors endorsed by the Cabinet and Palestinian Legislative Council is also required. This should give incentives to those industries and companies that train and employ graduates from TVET and tertiary institutions. Furthermore, this legislation should offer the necessary incentives to encourage the private sector to invest in vocational education and training. Tax reduction can be a good such incentive.

The government is encouraged to make more coherent and rationalise education and training provision by merging training institutions, revising curricula, developing a quality assurance system, meeting national and international standards and controlling the licensing of new institutions offering training already provided elsewhere.

The setting-up of a continuing training system involving both education institutions and the business sector would address the needs of both employed and unemployed people seeking personal development, and at the same time, would support the establishment of a National Qualifications Framework.

Government and the business sector are advised to implement the Arab Occupational Classification (AOC) to identify specialisations and levels of performance.

Efforts to develop policies for the professional management of intellectual property are encouraged to support universities to provide a more coherent framework for knowledge transfer between tertiary education institutions and industry.

Business level

The various institutions representing the private sector should bring their efforts together to enable them to play a complementary rather than a competitive role. TVET input may include: engaging enterprises in apprenticeship schemes and contributing to the identification of skills needs for the design of more responsive curricula and a more diversified offer of trades. The establishment of sector-specific training centres in partnership with the public providers is another measure that can address the evolving needs of the labour market in the mid-term. Contributions and/or co-funding of research and development projects together with the universities is another way that cooperation can help to create the required changes in culture for all parties. Entrepreneurs are also welcome to contribute directly to training delivery in classes.

Implementation level

At the level of higher education and TVET institutions, business representatives should be included in the councils for each academic/vocational programme. This would include chambers of commerce, industry federations, and the private sector. Furthermore, education institution heads should effectively involve businesses in all phases of programming, planning, design, delivery and review, while encouraging their teaching staff to become more involved with the business community through a transparent incentive scheme. Labour market information including gender perspectives should be used more effectively for planning and monitoring. Local business and institutions need to look jointly into modernising necessary tools and equipment.

The promotion of entrepreneurship and carrying out of placement courses and open days should be done jointly by higher education and TVET institutions along with businesses and companies. These should become regular events, rather than being limited to once or twice a year (although some of the institutions conduct such events on ad-hoc basis).

Capacity building

Directors should be empowered to manage their institutions more effectively and satisfy the skills needs of small and medium enterprises. A 'business culture' in education that promotes revenue generation strategies should be fostered.

A comprehensive system for initial and on the job training of trainers and teachers is needed. It should be established with strong links to the business environment focusing on competency-based, experiential teaching methodologies.

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Palestinian National Tempus Office: www.tempus.ps

Sharek Youth Forum: www.sharek.ps

Tertiary Education Project: www.tep.ps

TVET in OPT: www.tvet-pal.org

Welfare Association: www.welfare-association.org/en

Young Entrepreneurs Palestine: www.yep.ps

ANNEX 1: Current Initiatives of Education and Business projects

- Upgrading the car laboratory in Hebron Industrial School in cooperation with Hebron Chamber of Commerce and Colon Chamber of Commerce.
- Industrial School TVET Graduate traceability. Funded by UNESCO and implemented by the private sector, chambers of commerce and Ministry of Education and Higher Education.

- Apprenticeship programme funded by GTZ, targeting school students finishing their 10th level to provide them with parallel theoretical and practical training. As an example, students from Hebron focused on Mechatronics. They received training two days a week in the vocational school and spend the other four days in a car preparation workshop.
- Applied Research Institute, Jerusalem (ARIJ)¹² has implemented numerous projects and assignments in the field of natural resources management, agriculture, and IT. As an example, ARIJ conducted a short term consultancy to carry out a survey on science, innovation, and technology at Palestinian higher education institutions and research centres funded by UNESCO.
- On 21 July 2009, Young Entrepreneurs Palestine (YEP)¹³ organised the First National Entrepreneurship Conference. During the conference experts highlighted the importance of a national strategy for strengthening entrepreneurship in the country by empowering young entrepreneurs and building a strong entrepreneurship infrastructure using as many different means as possible, at education, finance and at social levels. Bethlehem University¹⁴ introduced an entrepreneurship course in the Information System Department, College of Science. Palestine Technical University¹⁵ in Khadouri is planning to introduce this course too.
- The universities of Al-Quds and Hebron have many cooperation programmes with the business community especially in the chemical, pharmaceutical and food processing fields. They are designed to address existing problems¹⁶.
- The printing house manager of the University Graduates Union is an engineer who teaches at PPU on a part-time basis. He trains students in his workshop for three hours a week¹⁷.
- The Welfare Association¹⁸, through the YES programme, promotes the employability of young people by designing and conducting training and counselling in cooperation between education institutions and the business community.
- Sharek Youth Forum (SYF)¹⁹ allows a number of graduating students to get real-life experience through traineeships. SYF aims to foster partnerships and provide space for community collaboration between education institutions, companies and organisations.
- The chairman of the Engineering and Metal Industrial Union, Mr. Robin Joulani, who owns a factory in Hebron, asked the Industry Synergy Centre²⁰ at Palestine Polytechnic University (PPU), to change graduation projects to fit company needs in two engineering programmes: Mechatronics and Industrial Automation. As a result, companies have recruited many graduates from these two programmes.

ANNEX 2: Education and Business Study working group, participants list

The Education-Business Study team would like to thank all stakeholders involved in the preparation of the study through the focus groups or interviews. Below are the list of representatives from ministries, civil society and experts from the education system and business community.

¹² <http://www.arij.org>

¹³ www.yep.ps

¹⁴ Mr. Mousa Rabadi, ICP Director, Bethlehem University

¹⁵ Dr. Daoud Zatari, University President

¹⁶ Dr. Rashid Jayousi

¹⁷ Eng. Wasem Sultan, UGU Printing House Manager

¹⁸ <http://welfare-association.org/en/>

¹⁹ www.sharek.ps

²⁰ The industrial synergy centre was established as a fund from the world bank and EU as a fruitful cooperation between PPU and the Palestinian Federations of Industries (PFI)

Name	Organisation	Title
Mr. Ziad Jweiles	MoEHE	General Manager
Mr. Mazen Sunokrot	Sinokrot Global Group	General Manager
Dr. Daoud Zatari	PTC/ Tempus National Office	President
Dr. Ibrahim Masri	Palestine Polytechnic University	President
Mr. Robin Joulani	Metal Union	President
Mr. Ayman Sultan	Palestine Polytechnic University	Vice President
Dr. Maher Jabari	Palestine Polytechnic University	Synergy Centre Manager
Dr. Sharif Abu Karsh	Hebron University	Dean of Business Faculty
Mr. Tayseer Isaid	Hebron Chamber of Commerce	TVET Director
Dr. Samir Hazboun	Bethlehem Chamber of Commerce	President
Mr. Mousa Rabadi	Bethlehem University	ICP Director
Dr. Rashid Jayousi	Al Quds University	Director
Dr. Raed Qadi	AnNajah University President's	Assistant
Dr. Zaki Saleh	Arab American University	Vice President
Mr. Jamal Jawabreh	Palestinian Chambers of Commerce	General Manager
Mr. Akram Hijazi	Palestinian Chambers of Commerce	Manager
Mr. Osama Eshtayeh	MoEHE	TVET
Mr. Rabee Abu Shamleh	MoEHE	TVET
Mr. Watheq Hithnawi	Industrial School-Jenin	Director
Ms. Intisar Salman	Palestine Technical University	CED Director
Mr. Basem Qumsieh	PTC- Arroub	Director
Mr. Naser Ghanim	MoEHE	TVET
Mr. Robin Joulani	Metal Union	President
Eng. Imad Rjoob	Royal for Industry and Trade	Manager
Mr. Mohd Eideh	AGIP Conference	Coordinator
Eng. Hasan A. Jabbar	EDIP	Manager
Dr. Ashraf Mimi	QIF	Manager
Mr. Mahmoud Njourn	Ministry of Labour	TVET General Manager
Mr. Wasem Sultan	UGU Press	Manager