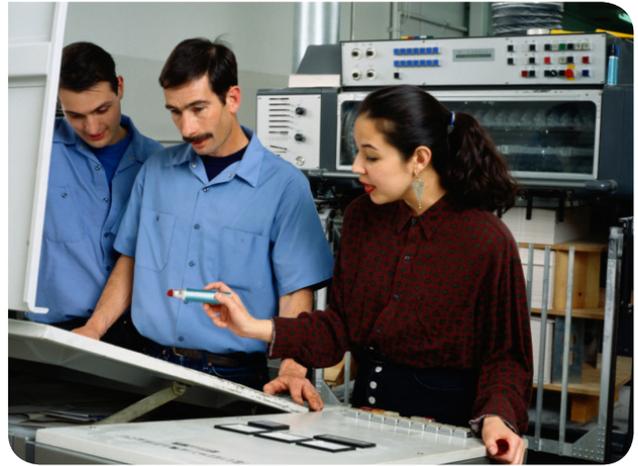


EDUCATION & BUSINESS TURKEY



EDUCATION AND BUSINESS COOPERATION STUDY

TURKEY

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List of Acronyms

AMLP	Active Labour Market Programme
B&E	Business and Education
BEGEV	Bursa Education Promotion Foundation
CoHE	Council of Higher Education
EQF	European Qualifications Framework
ESI	European Stability Initiative
ETF	European Training Foundation
ETU	Economics and Technology University
EU	European Union
EU 27	Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Ireland, Italy, Latvia, Lithuania, Luxemburg, Malta, the Netherlands, Poland, Portugal, Romania, Slovakia, Slovenia, Spain, Sweden and the United Kingdom.
GDP	Gross Domestic Product
HRD-VET (IKMEP)	Human Resources Development through Vocational Education and Training
IPA	Instrument for Pre-accession
ISKUR	Turkish Employment Agency
KEI	Knowledge Economic Index
LFPR	Labour Force Participation Rate
LFS	Labour Force Survey
MBA	Master of Business Administration
MoLSS	Ministry of Labour and Social Security
MoNE	Ministry of National Education
MYO	Turkish Higher Education Schools
NGO	Non-Governmental Organisation
OECD	Organisation for Economic Co-operation and Development
PPP	Public-private partnership
R&D	Research and Development
SVET (MEGEP)	Strengthening the VET system in Turkey project
TOBB	Union of Chambers and Commodity Exchange of Turkey
TURKSTAT	Turkish Statistical Institute
UNDP	United Nations Development Programme
USAID	United States Agency for International Development
VET	Vocational Education and Training
VQA (MYK)	Vocational Qualifications Authority
VTC	Vocational Training Centre
WEF	World Economic Forum

Foreword

The need to make education more responsive in terms of matching and anticipating the demands of the economy is essential for the partner countries neighbouring the EU. In addition to the challenges of recent decades where they have been involved in or initiated multiple transitions: political, economic, social, and demographic they have also been badly affected by the world economic downturn.

Knowledge available on the current forms and modes of co-operation 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 asked the ETF to carry out a study on education and business co-operation in its partner countries. The study includes education and business cooperation at secondary and initial VET levels as well as all forms of education and business cooperation in the higher education and post secondary non-tertiary education sector. The ETF cross country report builds on four regional studies in addition to the country specific studies on education and business cooperation in each of the partner countries. A similar study is currently underway in the Member States to capture developments between higher education institutions and public and private sector organisations.

This is the country specific contribution for Turkey. The study is based on desk and web research as well as the results of a focus group discussion held with stakeholders on 18 May in Ankara. The study covers vocational education and training as well as higher education with reference to professional education and training only and excludes collaboration in research.

The report was drafted after the focus group meeting led by ETF staff and validated by country representatives.

The four regional ETF studies will be available at the beginning of 2011. The cross country report including findings of all countries with which ETF cooperates, will be published in spring 2011.

A. Executive summary

The Turkish government is strengthening the country's human capital and a lot of effort has been invested in the reform of the education system including VET. The reforms in VET accelerated in the 2000s through EU-funded projects and education and business cooperation received a significant boost with the SVET and HRD-VET projects. Education and business cooperation has a quite long tradition in Turkey in particular in VET through apprenticeship and practical training in enterprise schemes. Cooperation is structured through legislation though it does not cover all schools and students due to limited capacities of schools and enterprises. In metropolitan and industrial areas and in booming sectors, education and business cooperation is widespread while underdeveloped areas fall behind.

The business community is involved in the governance of the education and training system through participation in the Vocational Education Board, Provincial Employment and Education Boards, and Sectoral Committees of the Vocational Qualification Authority. Positive developments are also taking place in higher education through the involvement of the business and employers' community in governance, introducing incentives for faculty members to take initiatives in cooperation with the business world, joint labour market analyses, skills needs analyses and tracer studies, as well as the revision of curricula, in particular in higher vocational education schools. Several universities, both private and public have also established technoparks and some of the high-tech ventures in these parks have a strong connection with the university in terms of product development, research support and student internships, etc. Entrepreneurship has been included in the curricula at primary, secondary and tertiary level. Despite the progress made some challenges still prevail such as widening the access of all students to practical training in enterprises and ensuring adequate quality of internships, improving progression paths in apprenticeship, and ensuring sustainability of the reforms and funding. Recommendations include introducing an incentive system for employers, improving the management of business and education cooperation at local level, collecting appropriate data,

monitoring and evaluation system to assess education and business cooperation, exchange of good practice and information at local, central and cross-country level.

B. Context / Policy

The Turkish economy grew by 7.7% on average between 2002 and 2007 and its per capita income reached USD 10,285 (EUR 7,454) in 2008 from USD 3,529 in 2002. This was a solid growth performance based on structural reforms and macroeconomic stability, although Turkey failed to match its growth performance with similar employment creation and the country has suffered from the recent economic crisis. Another feature of economic growth has been increasing income inequality. Turkey has one of the most unequal income distributions in the world and there is also a good deal of regional income discrepancy in Turkey with the eastern parts poorer and underdeveloped (ETF, in progress)¹. The Helsinki European Council of December 1999 granted Turkey candidate country status. Accession negotiations with Turkey were opened in October 2005, although progress varies according to the area in question (European Commission, 2009).

The country has a rich entrepreneurial tradition although most business activities are concentrated in areas with low returns on investment including the informal sector. Agriculture still accounts for 25.3% of employment (TURKSTAT 2010). Micro-enterprises (employing up to 10 people) and self-employment account for the overwhelming majority of firms, making up most of total employment but less than 10% of total value added. Medium-sized enterprises (employing 10-249 people) are considered the most dynamic sector. There is some evidence that although registered, they only partially comply with the necessary regulations (e.g. they may employ people under sub-contracting outside their payroll or register only some workers in order to remain below the threshold set by the law for employment protection, etc.). In 2009, 44% of all workers in Turkey had no social security coverage in their main jobs with agriculture making up the bulk of informality: 86%. Eastern Turkey in particular, suffers from a prevalence of the informal sector and an absence of a dynamic enterprise sector (ibid.).

The UNDP Human Development Index puts Turkey at 79th position, behind the EU and the Western Balkans². Turkey performs well with regard to income (GDP component) but lags behind in combined gross enrolment ratios in education (UNDP 2009). According to the gender-related Human Development Index, Turkey ranks much lower due to huge gender gaps in literacy rates and combined enrolment ratios. In terms of preparedness for the knowledge economy, as scored by the World Bank, Turkey ranked 61st in 2009 behind some Gulf States and Brazil which have improved their positions recently (Knowledge Economy Index, 2009). The World Economic Forum's Global Competitiveness Index, which reflects recent progress, also ranked Turkey 61st, behind Tunisia, Malaysia, China and India. (WEF 2009).

Turkey has a young population and it will grow from 72.56 million now to 83.6 million in 2025³.

At 47.2% in April 2009 Turkey has the lowest labour force participation rate (LFPR) in the OECD region, 17.6 million of the labour force are men (72% of the labour force) and only 6.7 million are women. The labour force participation rate for men was 69.7% in April 2009, while the female rate was 25.5%, which is the lowest rate for female participation in similar income group countries in the world. The low activity rate (especially of women) can be explained by low educational attainment that limit job opportunities, and other socio-cultural constraints. According to 2009 labour force survey data, of the active population 3,471,000 people were unemployed (14% unemployment rate). The recent economic crisis has led to a rise in unemployment to 16% in mid-2009 compared to 10% in mid-2008 in Turkey⁴. (ETF, in progress).

The overall educational attainment levels of the working population are low compared to the EU or other candidate countries (e.g., nearly 60% of the labour force is composed of basic education

¹ The ETF is currently finalising a report on the Turkish labour market from a flexicurity perspective as one of the outcomes of the project "Flexicurity in different socio-economic context" implemented by the ETF in Turkey, Ukraine, Morocco and Kazakhstan. The report will be launched in Autumn 2010.

² The index measures development by combining indicators of life expectancy at birth, adult literacy rate, gross enrolment ratio and GDP per capita (PPP USD) into a composite Human Development Index (HDI). For more information, see <http://hdr.undp.org/en/humandev/hdi/>.

³ TURKSTAT, National Population Projections, 2010, http://www.turkstat.gov.tr/VeriBilgi.do?tb_id=39&ust_id=11

⁴ World Bank press release on 03.10.2009, see www.worldbank.org/eca/

graduates or people who dropped out from basic education). Problems related to access to education by gender, rural/urban residence and social background (such as enrolment, dropout and graduation rates) still exist (12.5% of the population — 4.7% of men and 20.1% of women — is illiterate). Net enrolment rates in primary education stagnated at a level of around 98.2% for boys and girls in 2009/10⁵. There is however a steady increase in net enrolments in secondary education from around 40% in 2000 to 65% (boys 67.6%, girls 62.2%) in 2009-2010. Last year a big increase of more than 20% of students was observed in VET, which makes up 43% of students that follow general secondary education. Although gross and net enrolment in higher education have been growing at an annual rate of 8% in the last five years, only 1 out of 6 students pass the university entrance examination and the net enrolment rate in higher education in 2008/09 was 27.7% (men 29.4%, women 25.9%)⁶. The growing participation in secondary education will create a strong pressure in the future to further expand higher education (ETF, in progress).

Despite a growth of vocational enrolment at secondary education level, the lack of prestige and lower quality associated with this sector means few students opt voluntarily for VET as an alternative to general education. For many young people VET is a “second” option after they fail to enrol in general education or university in case of **higher vocational schools** (MYO) students. Furthermore, once they join the vocational and technical streams, very few are able to change programme or continue studies in higher education (ibid.).

The Turkish government is boosting the country’s human capital by investing in education, including VET, to improve the employability of the population. Business and education cooperation received a significant boost with the VET reform projects implemented since 2000s in Turkey (SVET and HRD-VET projects, respectively MEGEP and IKMEP projects in Turkish). Enhancing the investment in human capital by increasing the quality of education and training, improving the links between education and labour market through a partnership approach has been one of the priorities of the Human Resources Development Operational Plan 2007-09 (the key strategic document for implementing the human resources development component of the Instrument for Pre-accession Assistance (IPA). Within the EU accession process, Turkey has recently prepared and adopted a “Lifelong Learning Strategy” document which was finalised by the Ministry of National Education in 2009. Broadly, the strategy includes 16 priorities as key issues for action including curriculum improvement and update according to the changing needs of the country, and opening pathways (trans-routes) between all types and levels of education and between education and the world of work. The latter puts a new emphasis on school to business life and business life to school transitions within the lifelong learning approach and encourages schools and businesses to cooperate and demonstrates its extension beyond vocational and technical education. In higher education, progress has been made with the introduction of a qualifications framework and learning outcome approach. The Bologna Process has been the top priority of the Council of Higher Education (CoHE) since Turkey’s involvement in the process from 2001. The CoHE has translated the eight reference levels of the EQF as general descriptors for higher education qualifications. Turkey’s research and development expenditure increased from 0.54% of GDP in 2001 to 0.72 % of GDP in 2007 with an EU27 average of 1.85 % in 2007 (Eurostat Newsletter, 2009).

Strengthening the Vocational Education and Training System in Turkey (SVET) project (2002-07) is designed to improve the quality and relevance of VET, in part through the modularisation of training (over 6,900 training modules have been developed) and the development of a national vocational qualification system (establishing a Vocational Qualification Agency and developing standards and certification requirements in selected occupations). Labour market needs analyses have driven the curricula reforms in VET and 58 new curricula for grades 9-12 are available for all vocational schools. The *HRD-VET* project (2008-10) sought to further modernise and improve the quality of vocational education and training by ensuring employment-oriented collaboration between the labour market and secondary and post-secondary vocational schools, in particular in eastern and south-eastern Turkey. Additional labour market needs analyses were carried out and new competency based modular curricula were developed at secondary and post-secondary level. Pilot schools were also provided with new equipment and technical training. Pilot Vocational Education Centres were supported with new modular programmes as well as new programmes in areas of management and entrepreneurship.

⁵ Ministry of National Education Statistics 2009-2010

⁶ Ministry of National Education Statistics 2009-2010, 2010

Although Turkey is at the early stages of developing and implementing a national qualifications framework, this has the potential to support young people (and other workers) and employers in matching qualified workers with available jobs. The major governance structure i.e. the VQA is still not fully operational but first occupational standards were published in the Official Gazette in 2009. As of September 2010, 110 occupational standards have been developed and will be taken into consideration by the Ministry of National Education when developing school curricula (according to the strategy, 15.07.2010 on improvement of vocational education and training developed by MoNE, MoLSS, ISKUR, VQA, Ministry of Industry and Trade, Higher Education Council and State Planning Organisation).

C. Structures / Methodologies / Approaches

Business and education co-operation has a long tradition in Turkey in the form of apprenticeship (as part of non-formal education) as well as practical training in the enterprises in formal VET. The legal basis dates back to 1986 and the Apprenticeship and Vocational Education Law No 3308 that was amended in 2001 and known since then as Vocational Education Law. It puts an obligation on enterprises with more than 20 employees to take on interns up to minimum 5% and maximum 10% of employees. The practical training in enterprises takes three days per week (while two days are spent at school for theoretical training) starting from grade 11th. Those businesses, which employ apprentices or students are legally required to have a master trainer, even if they only have one trainee. Moreover, if the business offers training to 10 or more apprentices (or students), then it will have to establish a Training Unit for this purpose. In case of tourism and trade students (under the Directorate General for Tourism and Trade) the established practice is of six months of theoretical training at school and six months of internship at the enterprises.

Apprenticeship is part of the education system but isolated from the formal system. Graduation from apprenticeship by taking a Mastership examination is a requirement to open a craft workplace. The system is managed by the Directorate General for Apprenticeship and Non-formal Education (Ministry of National Education) through 313 Vocational Training Centres (VTC). Apprentices are placed in workplaces where they work four days a week and receive one day training in the closest VTC. The centres give free training in 165 vocations and there are 178,000 apprentices in the system. Apprentices can start training after their graduation from primary education. Although the upper age limit has been removed, most of the apprentices are in the 14-20 age bracket. Only 10% of former apprentices are jobless and 90% start their own businesses. Given the huge number of students in the Turkish education system, the uptake of the apprenticeship system seems quite limited. Furthermore, the lack of pathways towards higher education after apprenticeship training may have a negative impact on the quality and limited coverage of apprenticeship training among other concerns.

In higher education business and education cooperation till now has been rather sporadic (WB, 2007). Traditionally universities have not seen their major role as providers of the highly skilled workforce for the labour market. However, this is changing now and the Turkish Higher Education Strategy 2007 sets the goals of increasing the employability of graduates and relevance of education to the labour market needs, and building strong bridges with the community. The latter may also refer to education and business cooperation although this is not explicitly mentioned in the strategy and it remains unclear how these goals will be achieved. With regard to the practical training/ internships in enterprises, the Higher Education Strategy mainly considers higher vocational schools (MYOs) and Bachelor's programmes at universities. Students fulfil this obligation with between 30 and 60 working days of practical training/ internships (usually during half-term and the summer holidays). Practical training in enterprises has a legal basis with regard to MYO students though those students are not included in the quotas set by Vocational Education Law. With regard to students in Bachelor programmes it is mainly organised at departmental level and on the initiative of faculty members.

The major platform for dialogue between employers/ social partners and education institutions are the Vocational Education Board at the central level and the Provincial Employment and Vocational Education Boards (unified and re-named in 2008 to bring them closer to both education and employment). The Vocational Education Board adopts resolutions for planning, development and evaluation of the vocational education in formal, apprenticeship and non-formal education schools and institutions of all types and levels, and implements vocational and technical education curricula. The Provincial Boards identify the measures to maintain and improve employment at provincial level;

assist in developing a provincial employment policy and enforce local policies; review annual labour training plans, monitor and evaluate the implementation of actions; determine the need for apprenticeship and vocational training at local level; and plan, improve and evaluate vocational training. Boards convene under the chairmanship of a governor and involve mayors, general secretaries of special provincial administration; provincial directors of education, industry and trade, and ISKUR; heads of provincial chambers of commerce and industry; representatives from each trade union confederation; employer's union confederations; confederations of disabled people; heads of provincial tradesmen and artisans unions; and academics in related areas. Business and employers' organisations are also part of Sector Committees established within the VQA. The inclusion of business and employers organisations and representatives in the Boards and Committees should increase the responsiveness of education and VET to the needs of enterprises and employers although no assessment is available.

The employers (and their representatives) show remarkable dedication to fulfilling their traditional role in training young people nonetheless the training/internship places in companies remain limited. According to some unofficial estimation almost 40% of VET students do not have a chance for practical training in enterprises. The situation is worse with regard to MYO students who are not included in the quotas and some employers are not fully aware of the capacities of the MYO graduates. School and business cooperation is formalised through cooperation protocols signed with companies at central level (Directorate General of Technical Education for Boys, Directorate General of Technical Education for Girls, Directorate General for Trade and Tourism, etc.). The department of health has signed 16 agreements and the Directorate General of Technical Education for Boys has signed 179 agreements since 1986, of which some 67 are currently being implemented, but many students still do not have access to training in enterprises. Data for other DGs were not available. Cooperation seems to be stronger in more developed and metropolitan areas and in so-called booming sectors (such as tourism, textiles, the leather industry, automobiles). Not all enterprises offer training places e.g. private hospitals. The involvement of small enterprises is limited as well. The scope of the cooperation protocols encompasses in-company training as well as company support for setting up workshops and laboratories for training students. While the cooperation protocols are mainly signed at central level, some local initiatives also exist. Moreover, anecdotal evidence indicates that much of the business and education cooperation implemented at local/school level are due to individual teacher initiatives (or vice versa, cooperation is hampered by teachers' resistance in particular in tertiary education). Students who could not undergo practical training in enterprises undergo practical training at schools complemented by an internship period of no less than 300 hours.

The role of mutual trust and spirit of cooperation, commonly referred to as social capital, demonstrated by enterprises was also highlighted as one of the reasons for the economic growth of Central Anatolia and the rise of so called *Anatolian tigers*. According to the report, the pattern of pooling resources for community purposes has been widespread in Central Anatolian locations characterized by economic growth. This has been evidenced in primary and secondary education with enterprises ensuring a regular supply of funds (ESI, 2005). Educational levels of the population in the region have also improved although the specific role of VET as a promoter of economic growth was not investigated in the above-mentioned study.

The Strategic Plan 2010-14 of the Ministry of National Education foresees encouraging the Chamber of Commerce, occupational associations and employer and employee associations to take initiatives and ensure more on-the-job training and establishing training units within enterprises. The private sector is to be encouraged to train the workforce according to labour market demand with simplified bureaucratic procedures and recognised certificates given at the end of training. The number of cooperation agreements signed with companies should increase as well. So far the Plan does not foresee incentives for the achievement of the objectives.

Higher vocational schools (MYOs) which in theory should respond to local and regional needs for education and training remain the weakest part of the education system although many initiatives are currently being implemented. Many MYOs are still poorly equipped. In some cases the MYOs have departments that regions do not need or they lack departments that are vital for the area. Professional organizations are rarely involved in designing or restructuring the curricula and many faculties do not have recent industrial experience (Mikhail, 2006).

However, positive developments are taking place in higher education. Firstly, sector boards (sector committees) are being set up at the university and department levels respectively to ensure the business and employers' advisory role in major decisions. Secondly, performance related financial

incentives (salary increases) are introduced to encourage faculty members to take initiative in cooperation with the business world. Finally, entrepreneurship has been included in the curricula. MYOs were also targeted in pilot VET reforms carried out within the HRD-VET project. There are positive examples of some Anatolian MYOs that have been very successful in implementing the education and business cooperation to the benefit of all parties involved. One example is Gazi University Post-Secondary Higher School Cubuk/ Ankara, which was established to meet local labour market and community needs with main stakeholders involved in the design of curricula and the curricula itself being flexible enough to adjust to changing needs. The school uses graduate employability as an indicator of school performance and this increased the attractiveness of the school for students as labour market opportunities are improved after graduation. Notwithstanding these achievements, some problems persist such as ensuring sustainable funding, improving access of graduates to higher education and improving access and quality of practical training in enterprises.

Several universities, both private and public, have established technoparks and some of the high-tech ventures in these parks have strong links with the university in terms of product development research support, student internships, etc. Such technoparks operate at Bilkent University, Middle East Technical University, Hacettepe University, and Istanbul Technical University. Industrial clusters for joint projects are also set up with the involvement of some MYO's.

Two specific examples of education and business cooperation in Turkey are the TOBB ETU and the Bahcesehir University – which apply a cooperative education (coop) model. TOBB Economics and Technology University (TOBB ETU) was founded in July 2003 by TOBB (Union of Chambers and Commodity Exchanges of Turkey) as a non-profit foundation university in Ankara. Education is based on a tri-semester system and alternative cycles of academic and practical learning for the sophomore, junior and senior level students. The model works by voluntarily paid employment for each student by the employers during their practical terms commensurate with the Turkish labour law. Cooperation protocols with more than 500 leading companies in Turkey have been signed and have provided some 1000 workplaces. The employment rate of former graduates is quite high with over 60% of graduates being hired by their previous companies.

In 2010 the Memorandum of Understanding for the “Specialised Career Development Centres Project (Skills 2010)” project was signed between the Ministry of Labour and Social Security, the Ministry of National Education, TOBB and the ETU. The project aims to equip 1 million citizens in 5 years (in particular unemployed people) with qualifications needed on the labour market, through investment in machinery and equipment in 111 schools, training some 6,000 trainers, practical training in enterprises financed partially by ISKUR and local labour market needs analyses organised by chambers of trade and industry.

Another example from Bilkent university concerns the involvement of enterprises in the Business Practice course whereby MBA students are required to either complete a management consulting project or a business plan for an organization (company, government branch, NGO, or non-profit enterprise). Participating organizations receive help with their business problems at a very low cost and can evaluate MBA students for possible employment. Companies are also members of the Advisory Board of the Bilkent Business School.

Another example of school and business cooperation is the integration of entrepreneurship into the curricula which is taking place in Turkey. Entrepreneurship is taught as an elective subject in primary, secondary and vocational education. Lifelong entrepreneurship education is also included in the national lifelong learning strategy and some activities are also carried out in higher education. Virtual companies are also being set up in vocational schools to support entrepreneurship training. However, Turkey still has to make progress towards a fully fledged entrepreneurship education system.

Finally, there are some other initiatives on the business side in the provision of VET such as Bursa Education Promotion Foundation (Begev), Coskunoz Training Foundation, Elginkan Foundation Vocational and Technical Training Centres. They mainly offer vocational training to high school graduates and unemployed people at their own premises and expense. “Vocational Education: a Crucial Matter for the Nation” project, initiated by Koç Holding in 2006 on the other hand supported some 8,000 vocational school students from 262 schools in 81 provinces with internship-aided scholarships along with mentoring and personal development opportunities.

Last but not least some VET programmes are provided in Turkey in the framework of ALMPs for unemployed. Currently only a small fraction of unemployed people benefits from such programmes. They are organized by the Turkish Employment Agency (ISKUR) but delivered by external providers,

usually different education institutions. Due to the expected immediate impact on improved labour market opportunities for the graduates, the relevance of training to the labour market needs is of utmost importance. Labour market needs analysis usually takes place at the planning stage (although the methodologies used may not be systematic). The courses are also assessed by the Provincial Employment and Education Boards. In 2009, internships were introduced as a new type of ALMPs but on a very limited scale.

Some modes of business and education cooperation such as on-the-job training of vocational teachers are highly appreciated although there is little quantitative evidence of the extent of such cooperation and its outcomes (e.g. how much internship adds to the employability of graduates compared to those who did not undergo practical training in the workplace). There is also little aggregate evidence on the quality of internship though individual students are supposed to be followed by their teachers while doing on-the-job-training.

There is also little quantitative evidence about the outcomes for employers of school and business cooperation, though there is a general agreement that practical training in enterprises exposes students to the newest technology and work practices, improves their employability and the relevance of their skills for enterprises. Some of the good MYOs mentioned above organise tracer studies and labour market analyses jointly with employers to promote good practice. There is some evidence that schools are also responsive to the requests of local enterprises with regard to some modifications in curricula. On the other hand, there is hardly any information available about the use of VET institutions by companies to train their own employees.

With regard to access to additional finance as an outcome of school and business cooperation there is little evidence thereof (apart from the costs borne by companies by providing practical training/internships). Most of the school facilities and equipment have been modernised in the framework of the above mentioned EU projects or financed from the Ministry of National Education budget. Some companies e.g. in the automobile industry have equipped school workshops with modern technology used in their own premises. The model of “revolving funds” (schools to generate income through producing and selling goods and services) has been introduced in Turkey. However, the question remains as to whether this model distorts competition, whether the border between education and business should be clearly defined and finally, whether revolving funds could help to increase co-operation between education and business.

D Challenges

In the past, the VET system suffered from a negative image of being considered an option for low achievers and significant efforts have only recently begun to turn VET into a modern, quality education system. The improvements take place unevenly and the issue of continuation and sustainability is often raised. The pressure on the VET system will also grow with the higher number of young people entering the education system at secondary and tertiary level, and the expansion of adult learning.

The awareness of social partners of the need to invest in education and training is a very important asset and they take this responsibility seriously. Social partners are actively engaged at national level in discussions about education strategies and their implementation. The social dialogue platforms have been set up and the legal framework for cooperation exists. There are some gaps, however. At secondary VET level these links are developed, although they are mostly the result of individual contacts more than institutional strategies. Business and school cooperation is still not widespread in higher education. The challenge is also to develop an attractive work placement and apprenticeship system closely related to the formal education system, and in building up assessment and certification practice.

The incentive system to support business and education cooperation is at a rudimentary stage of development. Enterprises are involved in education and business cooperation because firstly, with regard to apprenticeship and dual training they have a legal obligation to provide training places, and secondly due to the genuine interest (or sense of moral obligation) to contribute to the training of a highly qualified labour force. It has to be remembered, however, that this currently mainly concerns public enterprises, bigger private enterprises and more traditional craftsmen and artisan communities. Companies pay apprentices one third of the minimum wage while insurance and social contributions are paid by the state. As only a slight majority of vocational students have access to practical training

in enterprises, the key challenge is to ensure a larger number of in-company placements for students and teachers so that they can gain practical experience in line with the latest developments in a specific sector or industry.

Other problems include the lack of proper control over internships and their inadequate length in particular in case of higher education students, problems in matching VET profiles with regional needs (in the case of mismatch it means interns have to travel and face a lack of job opportunities after graduation). Furthermore, many of the above mentioned instruments and approaches are used on a pilot and project basis (e.g. skills needs analysis) and their mainstreaming remains a challenge.

Finally, the data that could be used to better plan, monitor and assess the education and business cooperation are not readily available. 'Strengthening the Statistical Capacity of Ministry of National Education' project funded by European Commission will be implemented to provide solutions to the problem of obtaining data.

E Recommendations

Firstly, as documented above, many of the processes and mechanisms have been initiated and should be further developed and streamlined. Other main recommendations are:

- Developing tax incentives scheme (or a fund) to encourage industry and business to provide support to secondary and post-secondary vocational schools and practical training/ internship places (with an option to target companies that would face difficulties in providing such places without the support).
- Strengthening the importance of school and business cooperation at local level. One way could be to appoint a person responsible for the cooperation at school level. Vocational School Boards may also play a role involving local business and employers' representatives.
- Encourage and support schools to provide training for company employees.
- Including MYO students in the quotas set for employers for providing practical training places as well as extending the internship period.
- Appoint bodies and create mechanisms for systematic skill needs assessments at national, regional and local levels and ensure that the results are used in a timely fashion.
- Develop proper data collection, monitoring and evaluation instruments to assess the outcomes of cooperation and performance of institutions and bodies with regard to education and business cooperation.
- Organise seminars/events at central/local level where schools and social partners could be invited to present their own experiences and best practice. Successful examples of education and business cooperation in other countries could also be looked at.

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